Strictly Private and Confidential

Southern Health and Social Care Trust

Screening of Concern

Under MHPS Framework

Concerns re Locum Consultant Urologist engaged via Agency

Clinical Manager: Mr Mark Haynes
Associate Medical Director

1. INTRODUCTION

Personal Information redacted by the USI is engaged as a Locum Consultant Urologist from 01/07/2020, via NC Healthcare Locum Agency. The contact in his agency is Rachael Rosso Personal Information redacted by USI His GMC Number is [redacted] His designated Body is RIG Locums LTD and Responsible Officer is Dr Personal Information redacted by USI

2. DETAILS OF THE CONCERN

Following a meeting on Wednesday 2nd September 2020 and Friday 4th September 2020, the following concerns were discussed with Personal Information redacted by the USI.

1) Personal Information redacted by the USI
Attended South Tyrone Hospital for flexible cystoscopy for haematuria, having had a CTU prior to attendance. CT reported left ureteric stones and hydronephrosis. Attendance letter comments that the CT Urogram showed '…no any malignancy proven in the upper part of her urinary tract' no comment is made on the presence of ureteric stones, and she was discharged back to the care of her GP.
Your response;

- Acknowledged that the scan report must have been looked at given comment in letter.
- Initially suggested that as you had not requested the scan you should not have been expected to look at and action the result.

Concerns;

- CT report apparently not read and incorrect information and advice given to patient and GP.
- No treatment considered for ureteric stones.
- Risk that had this scan result not been checked by me ureteric stones would have gone un managed risking future renal loss.
- Initial response re responsibility of accessing results relevant to the attendance below expectation of a consultant urologist.
- Reduced confidence in the urology service provided by Southern Trust when the mistake is notified to the patients GP.

Action undertaken;

- I have contacted the patient, apologised and organised appropriate management.

Action required;

- Written reflection on case for appraisal / revalidation.

2) Personal Information redacted by USI

Attended for flexible cystoscopy for investigation of haematuria. Letter states '…On the top of the bladder it is not possible to look carefully through because light source is very weak and it is not possible to see.'. No plan for FU is made.

Your response;

- Acknowledged that the letter is inadequate.
- Stated that you had read and corrected all letters, although apparent that this had not been done for this case.
- Initially suggested that appropriate outcome would be GA cystoscopy and biopsy of lesion at bladder base commented on in CT report.

Concerns;

- Attendance outcome letter demonstrating an apparent lack of consideration of further management requirements at time of procedure.
- Concern that despite your insistence that you had corrected all letters, this letter had not been amended, or a second letter containing appropriate arrangements sent, and remained as the only attendance letter visible on ECR.
- Receipt of this letter by GP will reduce confidence in patients receiving adequate care when attending the urology team.
- Your subsequent suggested plan of a GA cystoscopy to biopsy the CT finding at the base of the bladder failed to recognise that you had stated that the only area where inadequate views were obtained was the dome (top) of the bladder, and appearances of the base are therefore presumed to have been satisfactory. This would have exposed the patient to the risks of a potentially unnecessary general anaesthetic.
- Had this letter not come to my attention, a patient with haematuria who had undergone inadequate assessment would have been discharged when in a worst case scenario a bladder cancer could have been missed resulting in treatment delay.
- Both the initial outcome and subsequent plan when brought to your attention are below the standard of management expected of a consultant urologist.

Action undertaken;

- The patient has been contacted and review with me and repeat flexible cystoscopy at the time of attendance arranged.

Action required;

- Written reflection on case for appraisal / revalidation.
- Review of all consultation letters to ensure no further similar cases.

3) Personal Information redacted by USI

Emergency admission with renal failure, sepsis and ureteric and bladder stone on CT. Emergency theatre, despite abnormal retrograde (hydronephrosis), presence of only one stone in the bladder (noted on CT report in addition to the ureteric stone), eGFR 36 and sepsis no stent inserted. Patient required second GA to insert a stent. Regarding bladder stone not able to use the stone punch, decided not to get the laser to treat the bladder stone and finish procedure. Initially recorded on operation note that procedure couldn't be completed because '…the staff did not find appropriate stone punch to do it.'. Amended operation note when requested by nurse in charge.

Issue; Operation note suggests that the assumption was made that because a stone was seen in the bladder the ureteric stone had passed, despite the CT findings of 2 stones and only one stone being in the bladder. Decision to abandon procedure (not treat bladder stone) despite alternative equipment being available a concern. Failure to stent a patient with hydronephrosis, sepsis and renal failure a major concern and patient subsequently required a second GA to insert a stent.

Your response;

- Did not acknowledge that surgical management was substandard.
- On questioning admitted that you do display scan images in theatre at the time of treatment, despite the ability to do this being available.
- You concluded, and in discussion continued to be of the opinion that the presence of a stone in the bladder and a retrograde ureteropyelogram not demonstrating a stone (although clearly showing hydronephrosis), meant that the 22mm upper ureteric stone had passed.
- You abandoned the cystolitholapaxy because you could not treat it with the stone punch provided and when offered alternative, appropriate equipment elected to refuse and terminate the procedure stating that ''it was already late and it would have taken time to get laser'.
- You acknowledge what you had stated in the operation note and had subsequently amended the note.
- In discussion I have concerns that you failed to recognize that CT report had shown a stone in bladder and an upper ureteric stone, and therefore in a patient with hydronephrosis, sepsis and renal failure the ureteric stone should have been assumed to be present.

Concerns;

- Abandoned procedure (to treat bladder stone)and reasoning behind this is inadequate and below expectation of a consultant urologist.
- Entry in operation note inaccurate when compared with your explanation of decision making and attempts to 'blame' other members of the team for the abandoned procedure. Only amended upon request by the nurse in charge. Behaviour not in keeping with expectation of consultant urologist and not

consistent with effective team working. No insight into this entry being inaccurate or inappropriate in our discussions.

- Failure to recognise that CT had shown 2 stones, one in the ureter and one in the bladder, and that the presence of only one stone in the bladder should have led to an assumption that the 2nd ureteric stone remained present.
- Apparent lack of recognition of the poor sensitivity of Retrograde ureteropyelogram in identification of stones.
- Failure to de-obstruct a patient with hydronephrosis despite the presence of renal failure and sepsis. This is below the standard of care expected of a consultant urologist.
- Patient required a 2nd general anaesthetic exposing the patient to addition risks.

Action undertaken;

- The patient has been appropriately managed and has appropriate ongoing follow-up planned.

Action required;

- Written reflection on case for appraisal / revalidation.

4) Personal Information redacted by USI

Emergency admission with renal failure and bilateral ureteric obstruction. Unilateral ureteric stent in situ. Proceeded to emergency theatre for attempt at ureteric stent which failed. Transferred to Belfast City Hospital for nephrostomy and subsequent transfer back to Southern Trust. 2nd emergency theatre attendance for TURBT which was performed. EUA (Pelvic examination) performed at end of procedure identifying pelvic mass and vesicovaginal fistula. EUA not performed at initial GA cystoscopy. My recollection is that the EUA occurred on the 2nd operation only when I entered theatre and asked if it had been done and performed it. Your recollection is that you did it without any input from me.

Your response;

- Did not acknowledge that an EUA (pelvic examination) was indicated in a patient undergoing a GA cystoscopy and attempted stent for ureteric obstruction as a standard part of the procedure.
- Stated that the difficulty with performing the cystoscopy was due to a small capacity bladder.

Concerns;

- Omission of an EUA in the initial cystoscopy falls below expectations of a consultant urologist.
- Continued inability to recognise that the bladder capacity was not limited, but that a vesicovaginal fistula resulted in the bladder not filling.
- Diagnosis may have been made earlier had an AEUA identifying the VVF and pelvic mass been performed at the first operation

Action undertaken;

- The patient has been appropriately managed and has appropriate ongoing management planned.

Action required;

- Written reflection on case for appraisal / revalidation.

5) Personal Information redacted by USI

Emergency admission with sepsis and obstructed kidney, required emergency theatre for attempted ureteric stent insertion. Sent for theatre when emergency theatre available (after completion of general surgery case), patient arrived but at same time anaesthetic and nursing team called to resus and maternity to attend to 2 additional emergency situations. Patient sent back to ward. Procedure took place later that night once anaesthetic and nursing staff were available. Entry made in notes by you states '…they refused and sent the patient back to the ward.'

Your response;

- Acknowledge that your entry in the notes was made at the time.
- Stated that you put the entry in the notes to cover yourself in case the patient came to harm.
- Did not recognise or accept that your entry in the notes did not reflect the reality of the staffing difficulties faced by the team managing two life threatening emergencies in other areas in the hospital ie the staff did not 'refuse' anything.

Concerns;

- Entry in the notes was not an accurate reflection of the reasoning / decision making behind the delay in the patients emergency theatre procedure.
- Your response did not illustrate any insight into the impact of competing emergency workloads on the capacity to provide emergency treatments, in particular in the out of hours period.
- Your response did not illustrate to me any insight into what the impact of such an inaccurate entry in the notes would have on the individuals involved in the care of the patient.
- Overall concern from both the documented notes, and the discussion about your ability to effectively work as a consultant urologist within a team.

Action undertaken;

- None.

Action required;

- Written reflection on case for appraisal / revalidation.

6) Personal Information redacted by USI

Patient with small renal mass on surveillance who had undergone a CT in November 2019 showing an increase in size of the renal cancer. Passed through to MDM and a letter also sent to the GP suggesting a follow-up CT in a further 12 months (22months after CT Nov 2019).

Your response;

- Acknowledge that the patient was appropriately referred to the MDM.
- Did not recognise the difficulty posed with regards the letter suggesting a follow-up CT.

Concerns;

- The letter to the GP suggesting a followup CT in 12 months, and 22 months after the CT scan is not appropriate management of an enlarging renal cancer and should not have been sent (no action should have occurred until after the MDM meeting.
- Receipt of this letter by GP will reduce confidence in patients receiving adequate care when attending the urology team.

Action undertaken;

- Patient has been discussed at MDM and appropriate follow-up and management arranged.

Action required;

- Written reflection on case for appraisal / revalidation.

3. RESPONSE TO CONCERN(S)

All the detail of the above concerns were shared with Mr [Personal Information redacted by the USI] He was advised that clinically the standards of care provided fell below the level required of a consultant urologist, which exposed the individual patients to unnecessary risks. As a result of these concerns The Trust would not continue with the locum employment and his contract was terminated with his agency contract with immediate effect.

4. SCOPING OF CONCERN – CONCLUSION

In line with our procedures for managing concerns involving Agency Locum doctors, we have completed our preliminary enquiries and sought the opinion of the doctor. These concerns have resulted in an early termination of a locum agency contract with immediate effect. As our concerns are with regard to clinical decision making (which is below the standard expected of a consultant urologist) the detail of our concerns must be shared with Mr [Personal Information redacted by the USI]'s Agency and Responsible Officer.

We would ask that Mr [Personal Information redacted by the USI]s Responsible Officer **Dr** [Personal Information redacted by the USI] to urgently consider and investigate these findings to ensure no further risk to patient safety.

NC HEALTHCARE

DOCTORS ASSESSMENT FORM

PERSONAL INFORMATION

Doctor's Name	Personal Information redacted by the USI	**Hospital**	Craigavon Area Hospital
Speciality	Urology	**Grade**	Consultant
Period of Employment	Personal Information redacted by USI	**Unit**	Craigavon Area Hospital

The above named Doctor has recently been placed under your supervision for a locum position. As part of our follow up after care programme, we would greatly appreciate if you could provide us with a follow up assessment for the doctor's time spent at this hospital. Please could you complete and return this reference at your earliest convenience to assist this locum's ongoing development.

Please note that this information may be used as a reference for future locum placements.

Please tick the box which most reflects your view on the candidate.

CLINICAL	Excellent	Good	Average	Poor
History Taking			X	
Physical Examination			X	
Investigation and Diagnosis				X
Patient Management and Judgment				X
Clinical Skills				X

Please tick the box which most reflects your view on the candidate.

KNOWLEDGE	Excellent	Good	Average	Poor
Knowledge Basic Science			X	
Clinical Knowledge				X

Please tick the box which most reflects your view on the candidate.

ATTITUDE	Excellent	Good	Average	Poor
Reliability		X		
Leadership and Initiative				X
Administration			X	
Time Keeping		X		

Please tick the box which most reflects your view on the candidate.

RELATIONSHIPS	Excellent	Good	Average	Poor
Communication Skills			X	
Relationship with Patients			X	
Relationship with Colleagues			X	
Relationship with Other staff				X

NC Healthcare Ltd, Interchange House
Newport Pagnell, Milton Keynes, MK16 9PY
Tel: 01908 299 180 Fax: 01908 299 186

NC HEALTHCARE

Please tick the box which most reflects your view on the candidate.

PERSONAL ATTRIBUTES	Excellent	Good	Average	Poor
Appearance		X		
Professionalism and conduct			X	

FUTURE EMPLOYMENT

Would you be happy to receive this doctor again for a locum position? No

If so, do you know of any future dates, which this locum may be required? N/A

ADDITIONAL COMMENTS

Please feel free to make any additional comments, which you feel will be helpful to us i.e. training needs you have identified.

Please see enclosed details of concerns. In our experience Personal Information redacted by the [redacted] does not meet the standards required of a Consultant Urologist.

SIGNATURE SECTION

We would like to thank you for talking the time to complete this assessment form. It can be returned either by mail or fax to the address or number shown below.

Please feel free to contact us should there be any other information that you would like to bring to our attention, or indeed if you wish to talk further regarding this doctor or any other service which NC Healthcare can assist you with.

Consultant Name	Mark Haynes	**Signature**	Personal information redacted by USI [redacted] Personal information redacted by USI
Grade/ Speciality	CONSULTANT UROLOGIST	**Date**	24/09/2020

NC Healthcare Ltd, Interchange House
Newport Pagnell, Milton Keynes, MK16 9PY
Tel: 01908 299 180 Fax: 01908 299 186

CRAIGAVON AREA HOSPITAL
68 LURGAN ROAD
PORTADOWN, BT63 5QQ

UROLOGY DEPARTMENT

CONSULTANT: Mr MRA Young, Consultant Urologist
SECRETARY: Miss Paulette Dignam
TELEPHONE: Personal Information redacted by the USI
FAX: Personal Information redacted by the USI
E-MAIL: paulette.dignam Personal Information redacted by the USI

26th January 2013

RE: REPORT ON INCIDENT INVOLVING Personal Information redacted by the USI, THURSAY Irrelevant redacted by the USI AND FOLLOW UP ACTION FROM SAME EVENT.

MARTINA CORRIGAN
HEAD OF SERVICE (UROLOGY & ENT)
ADMIN FLOOR
CRAIGAVON AREA HOSPTIAL

Dear MARTINA

I am writing to you as Departmental Service Administrator with reference to an incident on Irrelevant redacted by the USI. It was brought to my attention at lunchtime, Irrelevant redacted by the USI, while in the Thorndale Unit, that Personal Information redacted by the USI had left the building with the intention of not returning for clinical duties that afternoon. Earlier that morning, I had a conversation with Personal Information redacted by the USI with regards to a change in planned clinical activities that afternoon; the change of plan related to the fact that several of the urology team were off sick and clinical duties had to be changed. Of the duties to be covered, Personal Information redacted by the USI agreed to undertake the haematuria clinic in the Thorndale Unit that afternoon. There appeared to be no problem with this arrangement.

When attending a meeting in the Thorndale Unit at lunchtime, I was informed that there was a change in plan and that the haematuria clinic was to be switched from one room to another within the Thorndale Unit. This, I am told, related to an infection control risk. It is not clear why Personal Information redacted by the USI took exception to the senior nurses' decision to switch rooms. The verbal exchange between Personal Information redacted by the USI and the senior nurse Personal Information redacted by the USI did not portray to me a clear reasoning on his behalf from what nurse Personal Information redacted by the USI told me about the conversation. In any case, he left the building; the temperament was such that it was not clear whether he was going to return.

At this point, I decided to leave the situation until it was clear whether he would return and as such, while I was in my office with Malcolm Clegg, Senior HR Officer, that I took the opportunity to ring Personal Information redacted by the USI on his mobile phone. An adequate reason for not being at his clinical station for duties that afternoon was not given and in fact I found that when I asked where he was at 2:10pm, he informed me that he was at home. It should be noted that at this stage Personal Information redacted by the USI had not informed me as his Line Manger that he would not be attending his clinical duties that afternoon nor had he made an arrangement for others to cover his activity. Mr Clegg overheard the full conversation to be had with Personal Information redacted by the USI. I terminated the conversation with Personal Information redacted by the USI noting that I would speak to him the following day. On completion of this phone conversation Mr Clegg and myself noted this rather unusual state of affairs and in fact neither of us had come across this situation before and we both concluded that it was completely unacceptable. Mr Clegg and myself then had a conversation with regards to his subsequent clinical activities for the Trust, being somewhat concerned about this bizarre reaction. Mr Clegg was to find out about his employment position.

On further investigation we find that although Personal Information redacted by the USI had been offered a clinical post as a speciality doctor, he had not signed his contract as we were awaiting references from previous employment, which would have governed his position on the pay scale. He had been enquiring specifically about this particular point and I understand both from the Trust's perspective and Personal Information redacted by the USI himself that contracts had not been exchanged because both parties were uncertain about this exact point.

On Personal Information redacted by USI, I understand that Personal Information redacted by the USI attended the ward as part of his previously arranged rota allocation to perform a ward round and associated duties. I personally was not on Trust duties that morning but did return at lunchtime. However during the morning I had contacted Mr Pahuja, Consultant Urologist, to whom Personal Information redacted by the USI was due to help for an afternoon theatre list. I informed Mr Pahuja that I felt it prudent and indeed requested him to perform all the duties for the theatre list himself which include the consenting of patients and the undertaking of the theatre list. I had asked that Personal Information redacted by the USI was not to undertake any of these duties. The reason was that I felt uncertain whether he was capable of doing so in light of the previous day's events. I would like to note that I was unaware that he had been assigned ward duties in the morning; this also would have been halted. There had been the expectation that he would have spoken to me before proceeding further. As it was, he had obviously spoken to Mr Pahuja, who had informed him of the afternoon's plans and at this point Personal Information redacted by the USI had phoned me. An ultimatum was given to me that he was going to go home again if not allowed to undertake the theatre list in the afternoon. At this point, I stopped Personal Information redacted by the USI conversation and informed him that he was not to be giving me an ultimatum and that I would meet him in my office in fifteen minutes.

When I arrived at my office, Personal Information redacted by the USI was already sitting in a seat. I asked him if it was his normal practice to enter an office of a senior member of staff without the senior member already being in the room. At this point he said that on this occasion he took the liberty. I then had a clear consultation with Personal Information redacted by the USI informing him that the activities of the day before were completely unacceptable. He had left patients at risk, had not informed me as his Line Manger and had not arranged cover. I offered him an opportunity to explain himself but he did not have a reason for his actions. I felt that I had no other position than to terminate his contract with our department. He appeared to accept this as there was no further rebut. We shook hands and he left the room.

Just prior to this meeting I had phoned you to define the Trust's position. I was informed that he had not signed any contract for his speciality doctor post and he was still under the remit of the Locum Agency. It was therefore in our power to terminate his contract as this was on a sessional basis in any case. The meeting with Malcolm Clegg the day before would have held the same conclusion that this behaviour was unacceptable to the level of dismissal.

I, as Lead Clinician, have informed my fellow colleagues in the department of this action and I have obtained unanimous agreement. I also had discussed my thoughts with my senior colleague, Mr O'Brien prior to the consultation. I feel this is a fair and accurate record of the course of events. I have asked for a copy to be sent to Robin Brown for his information as Urology Surgical Directorate Lead as well as to Malcolm Clegg, Human Resources.

Yours sincerely,

Mr M RA Young, MD FRCS (Urol)
Consultant Urologist

cc MR ROBIN BROWN
CONSULTANT SURGEON
DAISY HILL HOSPITAL
5 HOSPITAL ROAD
NEWRY
BT35 8DR

cc MR MALCOLM CLEGG
SENIOR HR OFFICER
TRUST HEADQUARTERS
CRAIGAVON AREA HOSPITAL

SOUTHERN HEALTH & SOCIAL CARE TRUST

JOB DESCRIPTION

JOB TITLE	Departmental Manager Support
BAND	3
DIRECTORATE	Acute
INITIAL LOCATION	Outpatients and Thorndale Departmental Craigavon Area Hospital
REPORTS TO	Sister
ACCOUNTABLE TO	Lead Nurse

JOB SUMMARY

The post holder will provide a contact point for operational issues not directly relating to patient care in the Departmental. She/He will play a central role, meeting the administrative needs of Departmental Managers and their deputies, to include staff rostering, completion of appropriate documentation for Human Resources purposes, equipment maintenance and some aspects of health and safety compliance.

The post holder will work closely with, and under the supervision and direction of, the Departmental Managers to ensure continuity in service provision and as such will need to exercise initiative, independent judgement and decision making within a variety of situations.

A key part of the role will be to set up, develop and maintain systems of effective communication to prevent duplication of work and to allow nursing staff to concentrate on patient care.

KEY DUTIES / RESPONSIBILITIES

1. Provide a full range of administrative support to the Departmental Managers, including support on issues such as complaints and clinical incidents. This will include taking notes at Complaint Meetings and collating reports/statements on behalf of Departmental Managers.

2. Appropriately open, sort and distribute mail, ensuring outgoing mail meets collection times.

3. Deal courteously with members of the public and the multidisciplinary team, both in person and on the telephone.

4. Complete appropriate documentation in relation to planned absence and payroll and process this accordingly.

5. Support the Departmental Managers in ensuring that information relating to sickness absence is processed appropriately and in a timely way.

6. Be responsible for collating staff rosters and ensuring sign off, submitting bank requests and ordering of bank and agency staff within the identified skill mix, under the supervision of Departmental Managers in order to ensure needs of the service (as identified by the Departmental Manager) are met.

7. Ensure that all mandatory training is arranged for staff and up-to-date records are maintained.

8. Ensure that information on KSF Development Reviews for staff within the Department is collated and provided to the Departmental Manager in a timely way.

9. Collate information on annual leave within the Department identifying to Departmental Managers in a timely way when Department may be potentially understaffed due to approved annual leave.

10. Collate data for audit purposes.

11. Assist, as required, in co-ordinating and participating in the induction of new staff to the Department.

12. Act as a point of contact in the Departments for all operational issues not directly relating to patient care, for example maintenance work, etc.

13. Liaise with the relevant Departments to ensure that equipment, furniture and fittings are maintained in appropriate working order.

14. Ensure correct ordering and authorization of requisitions.

15. Participate in non-clinical meetings in the absence of Departmental Managers (e.g. Domestic & Catering Service or Laundry Service meetings) in order to take notes and report back to Departmental Managers, as necessary.

16. Provide support to staff providing direct patient care by arranging interpreting services, transport etc.

17. Help ensure safe-keeping of patients' belongings and valuables, In accordance with agreed policy.

18. Keep notice boards and health information racks up to date.

19. Undertake any other duties as required under the direction of the Departmental Managers.

GENERAL REQUIREMENTS

The post holder will be required to:

1. Ensure the Trust's policy on equality of opportunity is promoted through his/her own actions and those of any staff for whom he/she has responsibility.

2. Co-operate fully with the implementation of the Trust's Health and Safety arrangements, reporting any accidents/incidents/equipment defects to his/her manager, and maintaining a clean, uncluttered and safe environment for patients/clients, members of the public and staff.

3. Adhere at all times to all Trust policies/codes of conduct, including for example:
    - Smoke Free policy
    - IT Security Policy and Code of Conduct
    - standards of attendance, appearance and behaviour

4. All employees of the trust are legally responsible for all records held, created or used as part of their business within the Trust including patients/clients, corporate and administrative records whether paper-based or electronic and also including emails. All such records are public records and are accessible to the general public, with limited exception, under the Freedom of Information act 2000 the Environmental Information Regulations 2004 and the Data Protection Acts 1998. Employees are required to be conversant with the Trusts policy and procedures on records management and to seek advice if in doubt.

5. Take responsibility for his/her own ongoing learning and development, including full participation in KSF Development Reviews/appraisals, in order to maximise his/her potential and continue to meet the demands of the post.

6. Represent the Trust's commitment to providing the highest possible standard of service to patients/clients and members of the public, by treating all those with whom he/she comes into contact in the course of work, in a pleasant, courteous and respectful manner.

This Job Description will be subject to review in the light of changing circumstances and is not intended to be rigid and inflexible but should be regarded as providing guidelines within which the individual works. Other duties of a similar nature and appropriate to the grade may be assigned from time to time.

It is a standard condition that all Trust staff may be required to serve at any location within the Trust's area, as needs of the service demand.

July 2016

SOUTHERN HEALTH & SOCIAL CARE TRUST

PERSONNEL SPECIFICATION

JOB TITLE: Departmental Manager Support Band 3

DIRECTORATE: Acute Services – Surgery and Elective Care Division

Notes to applicants:

1. *You must clearly demonstrate on your Expression of Interest Form how you meet the required criteria – failure to do so may result in you not being shortlisted. You should clearly demonstrate this for both the essential and desirable criteria.*
2. *Proof of qualifications and/or professional registration will be required if an offer of employment is made – if you are unable to provide this, the offer may be withdrawn.*

ESSENTIAL CRITERIA – *these are criteria all applicants MUST be able to demonstrate either at shortlisting or at interview. Applicants should therefore make it clear on their application form whether or not they meet these criteria. Failure to do so may result in you not being shortlisted. The stage in the process when the criteria will be measured is stated below;*

The following are essential criteria which will initially be measured at Shortlisting Stage although may also be further explored during the interview stage;

1. 4 GCSEs at Grades A-C including English Language and Maths or equivalent / higher qualification AND 1 years' experience in a clerical / administrative role
   OR
   2 years' experience in a clerical / administrative role

2. Experience in the use of Microsoft Office products including Word, or equivalent.

3. OCR / RSA / GCSE Stage 2 Wordprocessing / Typing (Parts 1 and 2) or equivalent qualification,

   OR
   a minimum of six months wordprocessing experience.

The following are essential criteria which will be measured during the interview stage.

4. Ability to work as part of a team.

5. Ability to use own initiative.

6. Good organisational skills with an ability to prioritise own workload.

7. Excellent interpersonal and communication skills to meet the needs of the post in full.

8. Ability to remain calm under pressure.

9. Flexible with regard to working arrangements.

As part of the Recruitment & Selection process it may be necessary for the Trust to carry out an Enhanced Disclosure Check through Access NI before any appointment to this post can be confirmed.

WE ARE AN EQUAL OPPORTUNITIES EMPLOYER

Successful applicants may be required to attend for a Health Assessment

All staff are required to comply with the Trusts Smoke Free Policy

Southern Health and Social Care Trust
Quality Care - for you, with you

Part A [redacted]

KSF PERSONAL DEVELOPMENT REVIEW FORM

Post Title, Pay Band: Departmental Manager Support Officer Band 3 **Staff Number:** Personal Information redacted by USI

Is Professional Registration up to date? _____

KEY ISSUES & OUTCOMES	COMMENTS
Have you read and understood your Post Outline? **Post Outlines can be accessed via Trust Intranet (KSF link)** **YES** ☑ **NO** ☐ **Have Post Outline levels been achieved:** **YES** ☑ **NO** ☐ **If no, record below what action to be taken:**	**Staff members comments on his/her performance over past year:** Personal Information redacted by the USI

Personal Information redacted by the USI

Line Manager's Feedback on staff members performance over past year:

Objectives for Next Year:

Personal Information redacted by the USI

Reviewee Staff Name (Print) Gemma Robinson Signature Personal Information redacted by the USI Date 19/4/19.

Reviewer Manager/Supervisor (Print) M. Corrigan Signature Date 19/4/19

Southern Health and Social Care Trust
Quality Care - for you, with you

Part B

ANNUAL PERSONAL DEVELOPMENT PLAN

For training requirements specific to your staff group refer to Trust Intranet Training Link

Staff Number: [redacted]

Training type	Identified learning need	Date Training Completed	Agreed Action
Corporate Mandatory Training ALL STAFF	Corporate Induction	13/03/13	
	Departmental Induction/Orientation	07/01/19	
	Fire Safety	25/09/18	
	Information Governance Awareness	02/08/17	
	Equality & Human Rights		
	Moving and Handling	15/02/17	
	Infection Prevention Control	18/10/17	
	Equality, Good Relations and Human Rights – Making A Difference	16/03/18	
Corporate Mandatory Training ROLE SPECIFIC	Safeguarding People, Children & Vulnerable Adults	07/07/17	
	Waste Management		
	Right Patient, Right Blood (Theory/Competency)		
	Control of Substances Hazardous to Health (COSHH)	15/11/17	
	Food Safety	02/05/18	
	Basic ICT		
	MAPA (level 3 or 4)		
	Professional Registration		
Essential for Post			
Best practice/ Development (Coaching/Mentoring) (Relevant to current job role)			

Reviewee Staff Name (Print) Gemma Robinson Signature [redacted] Date 19/4/19.

Reviewer Manager/Supervisor (Print) M. CORRIGAN Signature [redacted] Date 19/4/19.

Personal Information redacted by the USI

PLEASE SEND COMPLETED PART B TO: KSF DEPARTMENT, HILL BUILDING, ST LUKES HOSPITAL, LOUGHGALL ROAD, ARMAGH BT61 7NQ OR EMAIL TO: -

Training & E-Learning Completed

Fire training 14/11/12

Corporate induction training 13/03/13

Manual Handling 22/01/13

Fire training 23/10/13

[redacted] PADSW/l training 26/11/13 [redacted]

TMS training 29/11/13

PAD Admission training 29/11/13

Fire training 16/09/14

Data Protection & Records Management 26/11/14 (3yearly)

Data Quality 10/11/15

Fraud Awareness 10/11/15

Infection Prevention 06/11/15

[redacted] Fire training 06/11/15 [redacted]

IT Security 20/11/15

DSE 20/11/15

Fire training 15/11/16

[redacted] Manual Handling 15/02/17 [redacted]

E-procurement training 02/06/17

E-Roster training 09/06/17

[redacted]

Fire Extinguisher training 15/06/17

Safeguarding People 07/07/17

[redacted]

Information Governance Awareness 02/08/17 (formerly Data Protection)

Fire training 18/10/17

Infection Control 18/10/17

COSHH 15/11/17

E-procurement F2F training 08/02/18

Booking Interpreters f2f training 06/03/18

Equality, good relations & human rights 16/03/18

[redacted]

Basic Life Support f2f training 17/04/18

Food Safety Awareness 02/05/18

Fire Extinguisher training 21/06/18

Fire Training E-Learning 25/09/18

[redacted]

Fraud Awareness E-Learning 27/09/18

DSE E-Learning 12/10/18

IT Security 16/11/18

[redacted]

Best Practice for the Administration of Effective Meetings (½ day) 06/03/19

[redacted]

Robinson, Gemma L

From: Rainey, Louise
Sent: 12 March 2019 12:26
To: Robinson, Gemma L
Subject: RE ADMIN DEVELOPMENT PROGRAMME - MONDAY 24TH & TUESDAY 25TH JUNE 2019 - NAVAN ROOM, HILL BUILDING, ST LUKE'S SITE, ARMAGH
Attachments: [redacted] Admin Development Programme Flyer - no dates.pdf

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Gemma [redacted]

We have been holding your name on a waiting list for the **Admin Development Programme** and we are now able to offer you a place on the next available programme which is taking place on **Monday 24th & Tuesday 25th June 2019 from 9.30am-4.30pm in the Navan Room, Hill Building, St Luke's Hospital Site, Loughgall Road, Armagh. NB: This is a two day programme and you must be available to attend on both days.** See attached programme flyer.

I would be grateful if you could advise if you wish to accept this place by return e-mail at the earliest opportunity as there are a large number of applicants on the waiting list for this programme. [redacted]

If you do wish to attend, please confirm that you have your line manager's approval.

Many Thanks

Regards

Louise Rainey [redacted]

Louise Rainey
Learning & Development Administrator
Education, Learning & Development
Hill Building
St Luke's Site
Loughgall Road
ARMAGH BT61 7NQ

(: Personal Information redacted by USI (External) Personal Information redacted by USI (Internal, Personal Information redacted by USI (dialling from a legacy telephone)

#HAVEYOURSAY 2019 STAFF SURVEY: **4th MARCH – 12th APRIL**. Click image below for Frequently Asked Questions.

[redacted]

Robinson, Gemma L

From: Development, Learning
Sent: 20 February 2019 16:50
To: Robinson, Gemma L
Subject: RE: Training

Importance: High

Hi Gemma

Further to your e-mail below, your name has now been added to the waiting list for the Managing Difficult Situations Programme, as requested. Places are allocated in rank order from the waiting list created by the date and time of applicant's original request.

Programmes will be held throughout the new financial year. We will be in touch with you when a place becomes available.

Regards
Education, Learning & Development

From: Robinson, Gemma L
Sent: 20 February 2019 15:18
To: Development, Learning
Subject: Training

Hi,

Could you please send me dates so I could apply for the course below

Managing Difficult Situations

Gemma Robinson
Staff Number Personal Information redacted by USI
BAND 3
Departmental Manager Support Officer
Acute Services
Martina Corrigan-Line Manager
My line manager Martina Corrigan has consented to my attending this training EXT Personal Information redacted by USI (Internal)
Personal Information redacted by USI (External)

Many thanks
Gemma Robinson
Thorndale Unit
Extension Personal Information redacted by USI

Southern Health and Social Care Trust
Quality Care - for you, with you

Part A

KSF PERSONAL DEVELOPMENT REVIEW FORM

Post Title, Pay Band: Head of ENT, Urology, Ophthalmology & Outpatients – Band 8B **Staff Number:** [redacted]

Is Professional Registration up to date? _____KEY ISSUES & OUTCOMES	COMMENTS
Have you read and understood your Post Outline? **Post Outlines can be accessed via Trust Intranet (KSF link)** **YES** √ **NO** **Have Post Outline levels been achieved:** **YES** √ **NO** **If no, record below what action to be taken:**	**Staff members comments on his/her performance over past year:** I have been off for 18 weeks [redacted] so it took me a while to come back up to speed in my areas, particularly in respect of the RASC for Cataracts. I continue to work with all my Teams to develop and improve services and continue to be involved regionally for ENT (Head & Neck), Urology,(Professional Issues Group etc. and with Belfast Trust to develop Ophthalmology services to Banbridge and now moving forward working with Region on the RASC for ENT & Urology. I continue to work closely with all my teams in taking forward issues in relation to finance, Governance and performance. I continue to work closely with the three Lead Nurses for my respective areas. Line Manager's Feedback on staff member's performance over past year: as Martina has stated above she has been away from work. However she has taken no time to resume and take up the operational issues within her are of responsibility. Moving forward this year we have agreed a work plan for Martina's areas of responsibility which we agree is all deliverable Ronan Carroll

Objectives for Next Year:

- Stabilise 3 South

ENT

- Develop outreach Tracheostomy service throughout the hospital
- Continue to develop the ECHO project and widen it to other GP practices
- Provide off-site clinics on the bigger Health Centres
- Develop Specialist Clinics for Specialty Doctors, eg VHIT, Rhinology, Tracci training, Allergy
- Develop guidance for GP's and add to CCG
- Introduce E-Triage and help to streamline referrals.
- Develop and implement an 'Emergency/Hot Clinic" in Outpatients so as to remove Ward Attenders from 3 South
- Work with the Region on the Regional Assessment & Surgical Centres for ENT

UROLOGY

- Service Expansion to DHH to include additional Theatres and Nurse-led and Consultant Clinics
- Stone Treatment Increase Stone Treatments from 2 to 6 weekly sessions and the use of acute stone management will reduce demand for IP treatment
- Cancer CNS expansion - Increase x 1 CNS
- Non-cancer CNS expansion - Increase x 1 CNS
- RSAC - Work with the Region on the Regional Surgical & Assessment Centres for Urology

OPHTHALMOLOGY

- Ophthalmology Out patients expansion in Banbridge
- Complete the work for RASC Cataracts to STH

OUTPATIENTS

- Complete the accommodation paper and streamline the accommodation requests for Craigavon Area Hospital
- Move Thorndale Unit over to the management of main outpatients
- Work with lead nurse to ensure skill-mix is correct for all outpatients

Reviewee Staff Name (Print) ___Martina Corrigan_____ Signature _Personal Information redacted by the USI____28/6/19_____ Date _____

Reviewer Manager/Supervisor (Print) ____Ronan Carroll - Signature _Personal Information redacted by the USI Date 27/6/19_____

Part B ANNUAL PERSONAL DEVELOPMENT PLAN

For training requirements specific to your staff group refer to Trust Intranet Training Link

Staff Number: Personal information redacted by USI

		Date Training	
Corporate Mandatory Training ALL STAFF	**Corporate Induction**	Jan 2010	
	Departmental Induction/Orientation	Sept 2009	
	Fire Safety	Aug 2014	Needs refreshed for August 19
	Information Governance Awareness	Aug 2017	
	Equality & Human Rights	Aug 2017	
	Moving and Handling	Aug 2016	
	Infection Prevention Control	Jan 2017	
	Equality, Good Relations and Human Rights – Making A Difference		Still needs completed
Corporate Mandatory Training ROLE SPECIFIC	**Safeguarding People, Children & Vulnerable Adults**	August 2018	
	Waste Management	NA	
	Right Patient, Right Blood (Theory/Competency)	NA	
	Control of Substances Hazardous to Health (COSHH)	NA	
	Food Safety	NA	
	Basic ICT	Jan 2010	
	MAPA (level 3 or 4)	NA	
	Professional Registration	NA	
Essential for Post			
Best practice/ Development (Coaching/Mentoring) (Relevant to current job role)			

Reviewee Staff Name (Print) ___Martina Corrigan_____ Signature _ Personal information redacted by USI Date _28/06/19____

Reviewer Manager/Supervisor (Print) ___Ronan Carroll___ Signature 

Date _27/06/19____

PLEASE SEND COMPLETED PART B TO: KSF DEPARTMENT, HILL BUILDING, ST LUKES HOSPITAL, LOUGHGALL ROAD, ARMAGH BT61 7NQ OR EMAIL TO: - VOCATIONAL.ASSESSMENTCENTRE@SOUTHERNTRUST.HSCNI.NET

Southern Health and Social Care Trust
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Part A

KSF PERSONAL DEVELOPMENT REVIEW FORM

Post Title, Pay Band: Head of Service – 8B **Staff Number:** [redacted]

Is Professional Registration up to date? ____NA__

KEY ISSUES & OUTCOMES	COMMENTS
Have you read and understood your Post Outline? **Post Outlines can be accessed via Trust Intranet (KSF link)** **YES** **Have Post Outline levels been achieved:** **YES** **If no, record below what action to be taken:**	**Staff members comments on his/her performance over past year:** I continue to work with all my Teams to develop and improve services and continue to be involved regionally for ENT (reform), Urology, partial nephrectomy, addressing waiting times, Professional Issues Group etc. and with Belfast Trust to develop Ophthalmology services to Banbridge and Western Trust. I am work closely with all my teams in taking forward issues in relation to finance, Governance and performance. I continue to work closely with the three Lead Nurses for my respective areas. **Line Manager's Feedback on staff members performance over past year:**

Objectives for Next Year:

1. **Review of Outpatients to include roles and responsibilities, start and finish times of clinics and roll out of the Outpatient Rota on all sites.**
2. **Complete the work on the Stone Treatment project which should save on bed-days**
3. **Complete move of ophthalmology services to Banbridge**
4. **Continue with service development for all areas e.g. ENT – Head and Neck, Tracci training, Manipulation of Nasal Bones pathway, Urology, move to Daisy Hill and work towards the paediatric centralisation to Daisy Hill Hospital**

Reviewee Staff Name (Print) : Martina Corrigan Signature [redacted] Date 25/08/17

Reviewer Manager/Supervisor (Print) _____ _____ Date _____

Southern Health and Social Care Trust
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Part B

ANNUAL PERSONAL DEVELOPMENT PLAN

For training requirements specific to your staff group refer to Trust Intranet Training Link

Staff Number: _____

Training	Identified learning need	Date Training	
Corporate Mandatory Training ALL STAFF	Corporate Induction	Jan 2010	
	Departmental Induction/Orientation	Sept 2009	
	Fire Safety	Aug 2014	
	Record Keeping/Data Protection	Aug 2016	
	Moving and Handling	Aug 2016	
	Infection Prevention Control	Aug 2016	
Corporate Mandatory Training ROLE SPECIFIC	Safeguarding People, Children & Vulnerable Adults	Aug 2016 & Aug 2017	
	Waste Management	NA	
	Right Patient, Right Blood (Theory/Competency)	NA	
	Control of Substances Hazardous to Health (COSHH)	NA	
	Food Safety	NA	
	Basic ICT	NA	
	MAPA (level 3 or 4)	NA	
	Professional Registration	NA	
Essential for Post	Records Management	Aug 2016	
Best practice/ Development (Coaching/Mentoring) (Relevant to current job role)			

Reviewee Staff Name (Print) ___Martina Corrigan__ Signature [redacted] Date _25/08/17_____

Reviewer Manager/Supervisor (Print) _____ Signature _____ Date _____

PLEASE SEND COMPLETED PART B TO: KSF DEPARTMENT, HILL BUILDING, ST LUKES HOSPITAL, LOUGHGALL ROAD, ARMAGH BT61 7NQ

OR EMAIL TO: - KAREN.MCSTAY [redacted]

Received from Martina Corrigan on 07/07/2022. Annotated by the Urology Services Inquiry.

ISSUE	ACTIONS	WORKGROUP	TIMESCALE
EQUIPMENT Broken Equipment – letters to management over 1.5 years with virtually no response. 2 working rectoscopes by pulling all the instrumentation from two trays they could another two sets. Equipment too old, not on a service contract, pieces are vulnerable with a piece falling off intraop (Clinical incident completed – no response back) Same equipment, different suppliers STORZ and WOLF sets Can't tell the exact	Ownership of the problem Who actually owns the problem and who will take it forward? Service contract?? Guidelines on safety – does management agree with this Incident Reports – how are these brought back to the team. Does anything happen? Has there been any raised for this problem Baseline Audit required. Last one 4 – 5 years ago for urology initiative. Harvested the higher standard of equipment and investment made at that time for new equipment. Require a further audit Standardise equipment? Location of procedures – what site will procedures be carried out – what equipment needed for each site Service contracts for equipment Following eg 50 uses, should these be	Ronan Carroll Mary McGeough Martina Corrigan Mr Young Mr O'Brien Mr Akhtar Beatrice Moonan Theatre sister Sandra McLoughlin	Initial Meeting to take place by week ending 6 November. Audits etc to be completed by week ending 20 November Report back by end of end of November.

numbers of forceps for stents. Utererscopes – only have two – one is broken so only one available for procedures. Flexible uteroscope – only one 'old' scope. There should be 3-4 flexible and 4-6 rigid to meet urology service needs	serviced Decontamination of equipment and affects on equipment New technology for the future.		
WARD RECONFIGURATION	Where is the 3 month review What was to be gained from fragmenting the service between emergencies, longstay and shortstay? Would it have been better for urology to share as a specialty on one ward to bring the same number of bed reductions? Affects to patient care with patients have to move between wards so many times. Quality?? What do the urology team and nursing	Heather Trouton Martina Corrigan Noleen O'Donnell Catriona McGoldrick Nursing Staff Mr Young Mr O'Brien Mr Akhtar Sharon Glenny	3 Monthly review meeting organized for November 2009 Report of findings to Urologists by end of November

	staff see as the better “system” for caring for patients. Safety for patients Expectations on nursing staff, eg, emergency care ward and the movements of patients/patient flow. Are management aware of the concerns from clinical and nursing staff? Do they see the problem first hand? Emergency ward should be 100% emergency, not a mixture of elective and emergency. Patients could be moving 3 – 4 times during the course of their stay. Patients may only be staying on one ward for 6 hours! All wards should be equipped to deal with all types of patients, depending on where they will be staying. Was cutting beds to save money the most effective? What about clinical teams having to move around to see patients. Loss to patient care and quality of care		

	What is best for urology department? Need clear ideas and deadlines Having now sampled existing model		
Clinical Day Care Centre *IV Fluids and Antibiotics*	Business case to staff CDCC unit regularly for patients for IV fluids and antibiotics as admission avoidance to wards ??having junior anaesthetist to get peripheral venous access. Management keen for this to go ahead. Need to know which patients are suitable for this unit and how often they require treatment. Most days have access to beds and 2 side rooms. Side rooms used for intravesical chemotherapy. ??urology ambulatory day case	Shirley Tedford Martina Corrigan Sheila Mulligan In Liaison with three Urologists	Mid-December
Intravesical chemo	Janice has now moved across Cost centre required Supplies being order through 4 north	Shirley Tedford Martina Corrigan Janice	Mid- December
Trial Removal of	When in 2 south had bed capacity – now	Shirley Tedford	Mid-December

Catheter	don't Some done in the community if appropriate. Those that need brought back to CAH go to CDSW. Catheters removed, scanned, regs contacted and discharged home. Would like to move to ambulatory day area. Staff there qualified to do catheterization, bladder scans, etc. Patient who are going on end of urodynamics sessions for TRC/change of catheter could go to ambulatory area. Protocols to be written for this. Cant depend as much on community staff as have done in past. When patients attend A&E and sent out to community, this area will give a base to be referred on to.	Martina Corrigan Mairead Leonard Nicola McClenaghan In liaison with three Urologists	
Clean intermittent catheterization	There are some patients who need to come into hospital Propose that they come into ambulatory area rather than beds.	Shirley Tedford Martina Corrigan Martina (Community-based) Wendy(Community-based)	Mid-December

	Over 4 month period was a saving of 166 bed days Martina and Wendy need to be involved in this from community perspective CDCC – how much floor space will they have to actually cope with this demand? Shift from in-patient to day case to ambulatory care Pathway construction Is there enough resources to take this forward? Need to set out what the requirements are to make this work Need to establish what consultants happy to send to this area. Need to calculate the nursing hours to make it work and build a case around that.	Jerome Marley	
Urodynamic service	Asked to take this out of 2 south Medicine moving in this week. Cannot move into Thorndale until	Shirley Tedford Jenny McMahon Mr Young Mr O'Brien Mr Akhtar	Mid-December

	agreement from where slots into timetable for consultant support. What about in-patient urodynamics? Children after procedure? ??treatment room in 3 south for this? Need to know how many in-patients are affected. ??CDCC for this and arrangement made for these patients there – 2 medical ??STC – if room for equipment. Available Tuesday, Wednesday PM, Thursday and Friday ??Does urodynamics have to be carried out in Thorndale or is this an opportunity to look at changing location for the service entirely.	Martina Corrigan	
REVIEW BACKLOG	Consultant Review Backlog is: MY – CAH = 889 - ACH = 172 - BBH = 116 Total = 1177 AOB – CAH = 508 - ACH = 165	Sharon Glenny Martina Corrigan	End November for plan to be submitted.

	- BBH = 129 Total = 802 MA – CAH = 128 A lot of effort has been put in already from MA to reduce his backlog of reviews. Philip Rogers sessions now increased to have two dedicated sessions for review backlog work. Tues pm for AOB Fri pm for MY MY sessions already in place AOB sessions still to commence. Review backlog case submitted to SDU and allocation of funding given and this can only be drawn down as clinics happen. Options were discussed and Sharon will meet individually to agree a way forward in relation to backlog		
THORNDALE	Location – short on OP consulting rooms, 2 large procedure rooms which are excellent.	Martina Corrigan Sharon Glenny Judith Anderson	

	Emergency access difficult – traditionally 999 call. Now link corridor in place. No disabled parking. Staff now using car parks since paying car parks in place. Swing doors on unit, could do with automatic doors. Air conditioning for unit – Colin Spiers to carry out assessment Fax and photocopier – multifunctional devices – Siobhan Hanna Smell out of toilets – Health and Well being – Director of Estates Waiting Room Area – not enough space for all the patients and their families when attending clinic. Staff – more reception cover now. Need to think about what their duties actually are. Need constant support. No cover over lunch time. – Judith Medical support – not sufficient to cover all the clinics – Mr Young Thorndale staff – isolated. Access to	I	

	senior staff difficult. Need built into timetable. ICATS – set up pre-targets. WLI not sustainable long-term. Harder to continue with week on week. With lack of registrars will be hit harder than ever. LUTS – 1:2 reviews – chronicity of patients would lead to think that these are being seen more often. TRUS – demand from red flags is high, but should all patients be red flag for this service? Always requires additional clinics D4 never set up in the original SDM. Needs this for the patient journey Needs looked at under the guidelines of NICAN and need to conform to these. Biopsy infection rates – nothing done yet regarding this. Antibiotics have changed and there may be an increase in admission rates. Decontamination of probes has	LUTS (Workstream) Jenny McMahon Sharon Glenny Judith Anderson TRUS (Workstream) Martina Corrigan Sharon Glenny Kate O'Neill Alison Porter Judith Anderson Information Team	

	commenced in accordance with decontamination policy. Haematuria – need to think about what is red flag. Current waiting list is 7 weeks. Service needs overhauled. Do all patients need all of the investigations. There is regional and global variations. Need to think about what we want for our service. Link corridor – will this improve service. Who is the best person to do the cystoscopy? What about the decontamination of scopes? Where will this be done? Minimal data set for referral letters is not being met, but referral letters is not being returned. One member of Thorndale staff moves with the patients to have the 4 procedures carried out in DSU on Friday afternoon 1. Quantity required each week – actual referral letters received. Diagnosed by day 31 and treatment in 62 days. If need treatment in Belfast need diagnosed and staged by day 28. 2. Process to get done on one day	Haematuria (Workstream) Martina Corrigan Mary McGeough Alison Porter Jenny McMahon Sharon Glenny	

	Upper tract imaging for NICAN. Doesn't go down to level of detail to say IVP Andrology – ED, scrotal swellings and lumps Ideally split into purely ED clinic. Takes a few clinics before get to end point. At least 2 – 3 reviews for each. Lack of time for patients. Jerome more frustrated with his role. Need to look at what Jerome can do/able to do at the clinic. Is he covered to do the things he is or could do? If Jerome stand alone would double the amount of patients seen, but then space becomes a problem. Jerome doing bloods and injection therapies. From clinical governance can he do more? Non-ED patients – USS access, eg testes. Would be more ideal to have this at the time of clinic. Could be facilitated if split by referral criteria. 1. clarify the patient types attending the clinic 2. consequences to the clinic accommodation if this happens 3. what if the patient requires surgery – can Philip consent 4. Need protocols to drive the way forward	Andrology (Workstream) Mr Young Mr O'Brien Mr Akhtar Jerome Marley Philip Rogers Alexis Davidson Martina Corrigan Sharon Glenny	

	GPwSI – 10 patients was too many. Now reduced to 8 . Uro-Oncology clinic – should only be used for patients with stable prostate disease. Opportunity for patients on consultants review backlog to be referred into this clinic. Walk-ins/Virtual clinics – Not actually being recorded anyway, but an amount of time is being spent each day/time to deal with these patients. Patient advice line lost with ward reconfiguration – may have had an affect on the Thorndale staff. Patient Choice – offered where possible, however, on instances this can not be accommodated, eg, gentleman attending 2 types of clinic on one day. Future needs : MDM Regional Review – satellite clinics Female Urology – never got off the ground Day 4 TRUS – need to find a way to see these patients in the Thorndale Unit, regardless of funding	Philip Rogers Sharon Glenny Future Needs (Workstream) Mr Young Mr O'Brien Mr Akhtar Jenny McMahon Kate O'Neill Jerome Marley Philip Rogers	

		Martina Corrigan Sharon Glenny	
ONCOLOGY	MDT – CAPPS Thursday PM MDT meeting. Letter from H Mullen mid June requesting that Trusts move to Thurs PM MDT meeting. Start date 01.01.10 using link to Belfast or going to Belfast. Involves the whole urology team – all cons, radiologist, pathologist, nurse specialists, Jerome, Philip. Team approach to delivery all integrating to discuss cancer cases. All complex pathology will be discussed by video link with Belfast. Clinical Governance and quality/standards. Number of cases will require the whole afternoon. Each consultant would like to present their own cases. Will not detract from the Thurs morning x-ray meeting. May require 1.5 – 2 sessions per week for preparatory work and subsequent action Affects to out-reach clinics needs to be quantified and consideration given to locations of these in the future. In a 5 cons model, only 3 may still continue with oncology work – therefore outreach clinics still continue with	Resolution to accommodation and backfill to be found Mr Young Mr O'Brien Mr Akhtar Sharon Glenny Martina Corrigan Alison Porter Paula Tally	Meeting on 12th November

	remaining consultants. Each consultant must attend 66% of meetings in order to retain presenting rights. Existing Thurs PM sessions need to be reallocated to other clinical sessions if available? Or How do the existing sessions get covered, eg, locum? Or 2 consultants present to discuss on behalf all 3, and so that we continue with the outreach clinics		
CAPPS	Presence in theatre 2, ICATS room, DSU, STH, consultant rooms in all clinics is required. Hardware required to run the software. If not available through own IT department, could this be included in Regional review?	Let Martina know where equipment required and then raise with IT/Alison. For outreach can be raised with Connie Connolly. Mr Young Mr O'Brien Mr Akhtar Sharon Glenny Martina Corrigan Alison Porter Paula Tally	
Nurse Specialists	5 being made available across 3 areas for	Mr Young	

	oncology	Mr O'Brien Mr Akhtar Sharon Glenny Martina Corrigan Alison Porter Paula Tally Sandra Wadell Bid required from SHSCT	
RED FLAGS	1. Carry on as normal 2. Establish how many urgent cases need to be assessed (as opposed to non-cancer cases) Do you run the risk of swamping the system with "red flags". Need to have the capacity to deal with these, therefore need true figure. Any patient triaged as TRUSA or HAEM should automatically become a red flag patient? – not current practice. Only if GPs marked as RF or if consultant upgrades as RF do they form path of the cancer pathway.	Consensus that the patients who are triaged for TRUS and HAEM should be regarded as requiring an urgent appointment/RF. Quantum analysis is required. Further discussion on 12th November 2009. Also at departmental meeting. Mr Young Mr O'Brien Mr Akhtar Sharon Glenny Martina Corrigan Alison Porter	

TEAM JOB PLAN	Implement the recommendations of the Regional Urology review. Looking at demand into service and how can meet the demand. – this would require an additional cons urologist. Devoted to the consultant led service only. 3 urological centres with one at SHSCT, includes Southern Region of Western Trust. Overview: 20 per week after ROTT, 1040 per year. Conversion to review Chronicity Open registrations on PAS from 05 Consultant Initiated referral 52 week model 27 new and 95 review per week DTA from Opts, other sources, eg, A&E, private work, consultant referrals 42% in-patients 58% day cases 23 in-patients per week 22 day cases per week	Mr Young Mr O'Brien Mr Akhtar Sharon Glenny Martina Corrigan Heather Trouton Paula Tally	

	Looked at what would then be acceptable across a 5 consultant model – MY provided info. 9 ins and 4 day sessions per week 6 – 7 out-patient sessions per week 5 day case sessions per week (per MY model) Depends on how many junior doctors are available and location of clinics.		

Health and Social Care Board

Performance Management and Service Improvement Directorate

HSC Board Headquarters
12-22 Linenhall Street
Belfast
BT2 8BS

Tel : Personal Information redacted by USI
Fax :
Email:

Trust Directors of Acute Services

Our Ref: Personal Information redacted by USI
Date: 27 April 2010

Dear Colleagues

REGIONAL UROLOGY REVIEW

As you are aware, the Trust was represented on the Regional Urology Review which was completed in March 2009. The final report was presented to the Department in April 2009 and was endorsed by the Minister on 31 March 2010. I am aware an initial meeting of team East was held on 22 March and team North on the 1 April 2010 and team South is planned for the 13 May 2010.

Now that the Minister has endorsed the recommendations from the Review, it is imperative that the Trusts with lead responsibility for the development of the Business Case/Implementation Plan move quickly to develop the team model and agree the activity to be provided from the additional investment.

The Teams should base their implementation plan on each of the relevant Review recommendations; a full list of the recommendations is included in Appendix 1. I am aware that each of the teams has established project management arrangements to develop and agree the implementation plan for each team. It is also anticipated that these teams will agree the patient pathways, complete a baseline assessment of the current service, their current location and the activity available from the existing service model. The teams should aim to have completed the first draft of the Implementation Plan and submit this to the Board by Friday 11 June 2010.

It is planned that an overarching Implementation Project Board will be established comprising the Chair and Clinical Advisor from each of these project Teams, and key HSCB staff; to oversee the implementation of the Review. The first meeting of the Urology Project Implementation Board will be held on Thursday 1 July 2010 at 2.00pm in the Conference Room, Templeton House. The Project Team chair should send the team nominated representatives to Personal Information redacted by USI by Friday 7 May 2010. I have asked Beth Malloy, Assistant Director, Scheduled Services, Performance Management and Service Improvement, to chair the Project Implementation Board.

The Review estimated the cost of implementing the recommendations to be £3.5m, of this £637k has already been allocated to Belfast Trust, and the remaining balance of £2.9m is

available. Please see Appendix 2 which has notionally allocated this budget to each of the teams, and it is on this basis the Teams should work collectively across Trusts to develop the Implementation Plans. The plan should also include a proposal for the use of the non-recurrent 'slippage' funding available from the teams share of the recurring £2.9m, this should include what additional in-house sessions will be provide to maintain the waiting times as at 31 March 2010 and to deal with any backlog of patients waiting for urological diagnostic investigations or outpatient review.

As per the details outlined in the Review, the initial assumption regarding the activity associated with each of the additional Consultant appointments is included in Appendix 3. To assist the teams in the further discussion, the figures outlined in the Urology Review have been updated and are attached in Appendix 4.

The Implementation plan, proposed patient pathways and the non-recurrent funding proposal should be sent to Beth Malloy Personal Information redacted by USI by Friday 11 June 2010.

Yours sincerely

Personal information redacted by USI

HUGH MULLEN
Director of Performance Management and Service Improvement

Enc

cc Trust Directors of Performance
John Compton
Paul Cummings
Beth Malloy
Michael Bloomfield
Iain Deboys
Lyn Donnelly
Paul Cavanagh
Paul Turley
Bride Harkin

Appendix 1

1. UROLOGY REVIEW SUMMARY OF RECOMMENDATIONS

Section 2 – Introduction and Context

1. Unless Urological procedures (particularly operative 'M' code) constitute a substantial proportion of a surgeon's practice, (s)he should cease undertaking any such procedures. Any Surgeon continuing to provide such Urology services should do so within a formal link to a Urology Unit/Team.

2. Trusts should plan and consider the implications of any impending retirements in General Surgery, particularly with regard to the transfer of "N" Code work and the associated resources to the Urology Team.

3. A separate review of urinary continence services should be undertaken, with a view to developing an integrated service model in line with NICE Guidance.

Section 3 – Current Service Profile

4. Trusts must review the process for internal Consultant to Consultant referrals to Urology to ensure that there are no undue delays in the system.

5. Northern Ireland Cancer Network (NICaN) Urology Group in conjunction with Urology Teams and Primary Care should develop and implement (by September 2009) agreed referral guidelines and pathways for suspected Urological Cancers.

6. Deployment of new Consultant posts (both vacancies and additional posts arising from this review) should take into account areas of special interest that are deemed to be required in the service configuration model.

7. Urologists, in collaboration with General Surgery and A&E colleagues, should develop and implement clear protocols and care pathways for Urology patients requiring admission to an acute hospital which does not have an acute Urology Unit.

8. Urologists, in collaboration with A&E colleagues, should develop and implement protocols/care pathways for those patients requiring direct transfer and admission to an acute Urology Unit.

9. Trusts should ensure arrangements are in place to proactively manage and provide equitable care to those patients admitted under General Surgery in hospitals without Urology Units (e.g. Antrim, Daisy Hill, Erne). Arrangements should include 7 day week notification of admissions to the appropriate Urology Unit and provision of urology advice/care by telephone, electronically or in person, also 7 days a week.

10. In undertaking the ICATS review, there must be full engagement with secondary care Urology teams, current ICATS teams, as well as General Practitioners and LCGs. In considering areas of Urology suitable for further development they should look towards erectile dysfunction, benign prostatic disease, LUTS and continence services. The review should also take into account developments elsewhere within the UK and in particular developments within PCTs in relation to shifting care closer to home.

Section 4 – Capacity, Demand and Activity

11. Trusts (Urology departments) will be required to evidence (in their implementation plans) delivery of the key elements of the Elective Reform Programme.

Section 5 – Performance Measures

12. Trust Urology Teams must as a matter of urgency redesign and enhance capacity to provide single visit outpatient and assessment (diagnostic) services for suspected urological cancer patients.

13. Trusts should implement the key elements of the elective reform programme with regard to admission on the day of surgery, pre-operative assessment and increasing day surgery rates.

14. Trusts should participate in a benchmarking exercise of a set number of elective (procedure codes) and non-elective (diagnostic codes) patients by Consultant and by hospital with a view to agreeing a target length of stay for these groups of patients.

15. Trusts will be required to include in their implementation plans, an action plan for increasing the percentage of elective operations undertaken as day surgery, redesigning their day surgery theatre facilities and should work with Urology Team in other Trusts to agree procedures for which day care will be the norm for elective surgery.

16. Trusts should review their outpatient review practice, redesign other methods/staff (telephone follow-up/nurse) where appropriate and subject to casemix/complexity issues reduce new:review ratios to the level of peer colleagues.

17. Trusts must modernise and redesign outpatient clinic templates and admin/booking processes to ensure they maximise their capacity for new and review patients and to prevent backlogs occurring in the future.

Section 7 – Urological Cancers

18. The NICaN Group in conjunction with each Trust and Commissioners should develop and implement a clear action plan with timelines for the implementation of the new arrangements/enhanced services in working towards compliance with IOG.

19. By March 2010, at the latest, all radical pelvic surgery should be undertaken on a single site, in BCH, by a specialist team of surgeons. The transfer of this work should be phased to enable BCH to appoint appropriate staff and ensure infrastructure and systems are in place. A phased implementation plan should be agreed with all parties.

20. Trusts should ensure that surgeons carrying out small numbers (<5 per annum) of either radical pelvic operation, make arrangements to pass this work on to more specialised colleagues, as soon as is practicably possible, (whilst a single site service is being established).

Section 8 – Clinical Workforce Requirements

21. To deliver the level of activity from 2008/09 and address the issues around casemix and complexity it is recommended that the number of Consultant Urologists is increased to 23 wte.

22. Urology Teams must ensure that current capacity is optimised to deliver the number FCEs by Consultant as per BAUS guidelines (subject to casemix and complexity). This may require access to additional operating sessions up to at least 4 per week (42 weeks per year) and an amendment to job plans.

23. At least 5 Clinical Nurse Specialists (cancer) should be appointed (and trained). The deployment of these staff within particular teams will need to be decided and Trusts will be required to develop detailed job plans with caseload, activity and measurable outcomes agreed prior to implementation. A further review and benchmarking of cancer CNS's should be undertaken in mid 2010.

Section 9 – Service Configuration Model

24. Urology services in Northern Ireland should be reconfigured into a 3 team model, to achieve long term stability and viability.

25. Teams North and East (Northern, Western, Belfast and South Eastern Trusts) should ensure that prior to the creation of the new Teams, there are clear, unambiguous and agreed arrangements in place with regard to Consultant on-call and out of hours arrangements.

26. Each Trust must work in partnership with the other Trust/s within the new team structure to determine and agree the new arrangements for service delivery, including inter alia, governance, employment and contractual arrangements for clinical staff, locations, frequency and prioritisation of outreach services, areas of Consultant specialist interest based on capacity and expertise required and catchment populations to be served.

Appendix 2

Estimated Team Costs for the Implementation of Adult Urology Review Recommendations.

	Team South	Team North	Team East	Total	No	Unit Cost	Total
Staffing Costs							
Consultant Urologist – additional wte team allocation	2 wte	1 wte	3 wte	6	6		
Consultant Urologists wte	£208,000	£104,000	£312,000	£624,000		£104,000	£624,000
Consultant Anaesthetist @ 0.6 wte per Con. Urologist	£124,800	£62,400	£187,200	£374,400	3.6	£104,000	£374,400
Consultant Radiologist @ 0.3 wte per Con. Urologist	£62,400	£31,200	£93,600	£187,200	1.8	£104,000	£187,200
Band 5 Radiographer @ 6 per wte Con Radiologist	£100,782	£50,391	£151,173	£302,346	10.8	£27,995	£302,346
Band 5 Theatre Nursing @ 1.8 wte per Con. Urologist	£100,782	£50,391	£151,173	£302,346	10.8	£27,995	£302,346
Band 3 Nursing @ 0.46 wte per Con. Urologist	£17,870	£8,935	£26,805	£53,610	2.7	£19,856	£53,611
Band 7 Specialist Nursing *1	£103,605	£0	£103,605	£207,210	5	£41,442	£207,210
Band 5 Nursing @ 0.64 wte (day surgery)	£5,972	£2,986	£8,958	£17,916	0.64	£27,995	£17,917
Band 4 Personal Secretary @ 0.5 wte per consultant urologists	£23,265	£11,633	£34,897	£69,795	3	£23,265	£69,795

Band 3 Admin support to radiologists at 0.5 wte per Radiologist	6,618	3,309	9,927	£19,854	1	£19,856	£19,856
Band 3 Admin Support to Specialist Nurses @ 0.5 wte per Nurse *2	£31,438	£0	£28,129	£59,567	3	£19,856	£59,568
Band 4 Medical Records support 0.5 per unit *3	£11,632	£23,265	£23,265	£58,162	2.5	£23,265	£58,162
Band 7 MLSO – Bio-medical Science *4			£41,442	£41,442	1	£41,442	£41,442
Staffing Costs Sub Total	**£797,164**	**£348,510**	**£1,172,174**	**£2,317,848**			**£2,317,853**
Support Costs							
Surgical G&S @ £94,500 per Con. Urologist	189,000	94,500	283,500	£567,000	X 6	£94,500	£567,000
Theatre Goods/Disposables @ £50,000 per Con.Urologist	100,000	50,000	150,000	£300,000	X 6	£50,000	£300,000
Radiology G&S per Con. Urologist	5,000	2,500	7,500	£15,000	X 6	£2,500	£15,000
CSSD @ £32,000 per Con. Urologist	64,000	32,000	96,000	£192,000	X 6	£32,000	£192,000
Outpatients Clinics @ 2 per Con. Urologist	40,000	20,000	60,000	£120,000	X 12	£10,000	£120,000
Support Costs Sub Total	**£398,000**	**£199,000**	**£597,000**	**£1,194,000**			
Sub Total	**£1,195,164**	**£547,510**	**£1,769,174**	**£3,511,848**			**£3,511,853**
Less funding in 2008/09			**£637,076**	**£637,076**			**-£637,076**
FINAL TOTAL	**£1,195,164**	**£547,510**	**£1,132,098**	**£2,874,772**			**£2,874,777**

Please note this analysis is based on the team figures included in the Review shown in Appendix 7 page 60.

*1 – this is based on the existing CNS nurse establishment and the sub specialty consultants within each of the teams. The remaining 1 CNS has been allocated to Team East for the Radical Pelvic Surgery undertaken at the Cancer Centre.

	Existing Establishment	Number of consultants with a sub-specialty interest	Additional CNS
Team South	0	2	2
Team North	2	2	0.5
Team East	2	4	2.5

*2 – 0.5 allocated to each Team as per the Specialist Nurse

*3 – 0.5 allocated to each Trust Unit within each Team

*4 – 1 wte allocated to Belfast – for increased demand for pathology

Please note this is the notional funding for each team and is subject to the agreed Commissioning arrangements of the Board

Appendix 3

The exact details of the additional activity associate with the additional Consultant appointments will require agreement with the Board Commissioning teams. As outlined in the Review, it is assumed that the additional activity will be as follows:

Ref: Review Page 40-41
Outpatients: 1176 – 1680 per Consultant
Inpatient and Daycase FCE: 1000 - 1250 per Consultant

Existing 17 Consultants in post
Outpatients 19,992 to 28,560
IP/DC FCEs – 17,000 to 21,250

New 6 Consultant Appointments
Outpatients 7,056 to 10,080
IP/DC FCEs – 6,000 to 7,500

Regional Total
Outpatients 27,048 to 38,640
IP/DC FCEs – 23,000 to 28,750

Please note:
This analysis does not take into account the improvements expected from the introduction and full implementation of the ICATS for urology, as outlined on page 19 of the Review. The additional activity from the CNS has still to be quantified. In addition, the quantification of the service improvements, to be gained from the implementation of the Review recommendations, still to be agreed with the each Trust (for each of the team) and the Board are not included.

Health and Social Care Board

Review of Adult Urology Services in Northern Ireland

A modernisation and investment plan

March 2009

Ministerial Foreword

The health service in Northern Ireland has been able to make remarkable progress in improving access to services and sustaining the quality of those services. That work, as part of the current programme of modernisation and reform of health and social care services is ensuring that many more patients are gaining timely access to the services they need than was the case only a few short years ago. I am determined that this progress should continue.

However, whilst reducing waiting times generally there have been some concerns about the capability of our urology services as they are currently arranged, to continue to deliver care of the highest standard while striving to meet increasing demand. The capacity within the HSC to deal with an increasing demand for urology services was the principal reason why this review was commissioned.

The review considers workforce planning, training and development needs and future resourcing and proposes a model of service delivery which I am confident will produce a reformed service fit for purpose, with high quality services provided in the right place at the right time by appropriately trained and skilled staff.

Ensuring that the patients who need our health and social care services remain at the centre of everything we do is of course a fundamental step of developing and improving service provision. I hope that many of you, especially those with experience of the service, will respond with comments and suggestions which will inform the future development of this important
Speciality.

Michael McGimpsey
Minister for Health, Social Services and Public Safety

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Appendices

Tables

Figures

1. SUMMARY OF RECOMMENDATIONS

Section 2 – Introduction and Context

For the purposes of this review all Urology services and Urological related procedures should be taken in the context of Adult Urology only.

1. Unless Urological procedures (particularly operative 'M' code) constitute a substantial proportion of a surgeon's practice, (s)he should cease undertaking any such procedures. Any Surgeon continuing to provide such Urology services should do so within a formal link to a Urology Unit/Team.

2. Trusts should plan and consider the implications of any impending retirements in General Surgery, particularly with regard to the transfer of "N" Code work and the associated resources to the Urology Team.

3. A separate review of urinary continence services should be undertaken, with a view to developing an integrated service model in line with NICE Guidance.

Section 3 – Current Service Profile

4. Trusts must review the process for internal Consultant to Consultant referrals to Urology to ensure that there are no undue delays in the system.

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2. INTRODUCTION AND CONTEXT

Introduction

2.1 A regional review of Adult Urology Services was undertaken in response to service concerns regarding the ability to manage growing demand, meet Cancer and elective waiting times, maintain quality standards and provide high quality elective and emergency services.

2.2 A multi-disciplinary and multi-organisational Steering Group was established under the Chairmanship of Mr H. Mullen, Director of Performance and Provider Development and this group met on five occasions between September 2008-March 2009. Membership of the group is included in Appendix 1.

2.3 An External Advisor, Mr Mark Fordham, a Consultant Urologist, Royal Liverpool and Broadgreen University Hospital Trust, was appointed and attended all Steering Group meetings and a number of other sub group sessions.

2.4 Terms of Reference were agreed (Appendix 2), with the overall purpose of the review being to;

Develop a modern, fit for purpose in 21century, reformed service model for Adult Urology Services which takes account of relevant guidelines (NICE, Good Practice, Royal College, BAUS, BAUN). The future model should ensure quality services are provided in the right place, at the right time by the most appropriate clinician through the entire pathway from primary care to intermediate to secondary and tertiary care.

2.5 A literature search of guidance and policy documents was undertaken. This included consideration of reports on previous reviews in Northern Ireland. A list of the key documents considered during this review is included as Appendix 3. Sections in italics within this report are direct quotes from these documents.

2.6 During the course of the review, a significant number of discussion papers, detailed information and datasets were collated, copies of which are not included in this report but are available on request.

Context

2.7 The speciality of Urology predominately covers the assessment, diagnosis and treatment of Urogenital Conditions involving diseases of the Kidney, Bladder, Prostate, Penis, Testis and Scrotum. Bladder dysfunction, Male and Female Continence Surgery and Paediatric Peno-Scrotal Conditions make up the rest.

2.8 Thirty years ago the field of Urology was one of the many that was the province of the General Surgeon. Since that time, Urology has developed and evolved as a separate surgical specialty. Higher specialist training in General Surgery no longer covers Urology, which now has its own training programme.

2.9 Prior to 1992, fully trained dedicated Urologists were based only at the Belfast City (BCH) and Royal Victoria (RVH) Hospitals providing a unified service to these two sites and a referral service for the rest of Northern Ireland. In 1992, Urologists were

appointed at Craigavon, Mater and Altnagelvin Hospitals. By 1999 there were ten full time Urologists in post, providing services on the above sites along with Lagan Valley and Coleraine Hospitals. In addition to these ten Urologists, there were two Consultant General Surgeons (one based in Mater, one based in Ulster) who were accredited as Urologists and whose workload was increasingly in the field of Urology. Since 2002, further appointments were made in the Belfast Hospitals, Altnagelvin and Craigavon Hospitals, along with the development of a Urology Service based in Causeway Hospital. At the time of this review 2008/2009, there is a funded establishment of 17 wte Consultant Urologists, which is in line with the recommendations of the 2000 Northern Ireland Review. However, the 2000 Review envisaged the Northern Board area Urology Services being based in Antrim Area Hospital rather than at Causeway Hospital.

2.10 Urology work can be divided into two categories;

- Medical and surgical treatment of the urinary tract, (kidneys, bladder, ureters, urethra, prostate), with these surgical procedures known as 'M'code (OPCS 4.4)
- Medical and surgical treatment of the genital and reproductive system (peno-scrotal), with these surgical procedures known as 'N'code (OPCS 4.4)

2.11 Both categories comprise elective and non-elective and cancer and non-cancer elements, albeit there are much fewer non elective and cancer cases in the 'N' code category.

2.12 In recent years, with the retirement of General Surgeons who historically undertook a substantial amount of Urology work, the number of General Surgeons who undertake urinary tract operative procedures (M Code) has significantly reduced. A small number continue to undertake diagnostic cystoscopies, which to varying degrees represents a substantial proportion of their workload. Should any subsequent treatment be required, the patient is referred into the Urology Team. A General Surgeon in the Northern Trust continues to undertake Inpatient and Day Case "M" code work in the Mid-Ulster Hospital.

Recommendation

1.	Unless Urological procedures (particularly operative 'M' code) constitute a substantial proportion of a surgeon's practice, (s)he should cease undertaking any such procedures. Any Surgeon continuing to provide such Urology services should do so within a formal link to a Urology Unit/Team.

2.13 Peno-scrotal operative procedures ('N' Code) continue to be undertaken by many General Surgeons predominately based outside of Belfast. This position is not surprising given the current number of urologists in the Southern, Western and Northern Trust areas.

2.14 Table 1 below identifies the type, volume and surgical speciality for N Code work.

Table 1 - Analysis of 'N' Code (Male Genital) Surgical Operations and Procedures Undertaken by Urologists and General Surgeons (2007/08)

Trust	Total Activity	General Surgeons	Urologists	% of 'N' Code undertaken by Urologists	Number / % undertaken as day case		V	C	H
NHSCT	807	767	40	5%	701	87%	517	129	35
SHSCT	612	521	91	15%	493	81%	314	135	36
WHSCT	614	544	70	11%	528	86%	318	143	38
SEHSCT	1244	650	594	48%	1148	92%	860	147	45
BHSCT	674	103	571	85%	407	60%	209	164	49
Total	**3951**	**2585**	**1366**	**35%**	**3277**	**83%**	2218	718	203

V Vasectomy
C Circumcision
H Hydrocele

2.15 Consultant General Surgeons have gained substantial experience and expertise in these procedures over the years and it is not envisaged that Trust's should make any immediate plans to pass this work onto Urologists. However, it is likely that future appointees to Consultant General Surgeon Posts, will have had little experience in undertaking such procedures and therefore Trust's will need to plan and consider the implications of impending retirements in General Surgery.

Recommendation

2. Trusts should plan and consider the implications of any impending retirements in General Surgery, particularly with regard to the transfer of "N" Code work and the associated resources to the Urology Team.

2.16 Gynaecology is another specialty which undertakes urinary tract diagnostic and operative 'M' code procedures and medical treatments for female bladder dysfunction (non cancer) and incontinence. The surgical specialty of Uro-Gynaecology has developed in the last decade, with most Trusts now having trained surgeons in post, for whom, such surgical procedures, represent a significant proportion of their surgical workload.

2.17 More complex surgical procedures are referred to Urologists and this aspect of Urology is termed as female/functional Urology. The demand for these specialist surgical services is increasing and there is a need, in some cases, to have joint working e.g. complex cancer Gynaecological Surgery and complex Urological Surgery.

2.18 Female continence (stress and urge incontinence) services (non surgical) are provided in Primary Care, Community Services and in Gynaecology Secondary Care. However, *there is evidence of large undeclared demand for continence services which is held in check by the embarrassment factor* (Action On Urology). Current services in NI are fragmented, disparate and are not managed in accordance with NICE Guidelines –Urinary Incontinence: The Management of Urinary Incontinence in Women (2006).

2.19 The referral review exercise undertaken as part of the review demonstrated that GP's are not generally referring these patients into urology and as 80-90% of such patients will not require surgical intervention, it was agreed that this service would not be considered as part of this review. However, it is clear from developments

elsewhere in the UK, that continence services can be significantly enhanced and redesigned within a multidisciplinary team model (GP's, Urologists, Gynaecologists, Physiotherapists and Nurse Practitioners) and is very suitable for development in a non secondary care environment.

Recommendation

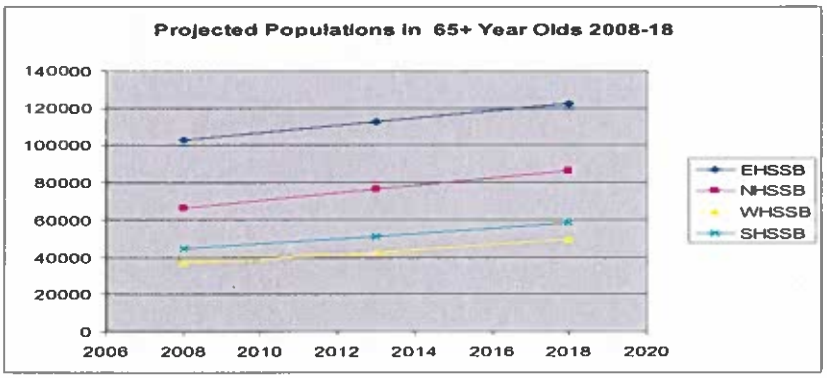
3.	A separate review of urinary continence services should be undertaken, with a view to developing an integrated service model in line with NICE Guidance.

Demography

2.20 The current population in Northern Ireland is 1.76 million with a projected rise to 1.89 million by 2018. The greatest increase will be seen in the 65+ year age group from 249,663 in 2008 to 316,548 (+27%) in 2018. This is particularly relevant for Urology as it is the ageing population that makes the heaviest demands upon Urology care (cancer and non cancer).

Figure 1

Demography 65+ years (Health and Social Services Boards)



Source NISRA

Total	249,663	282,877	316,548

3. CURRENT SERVICE PROFILE

Location of Urology Services

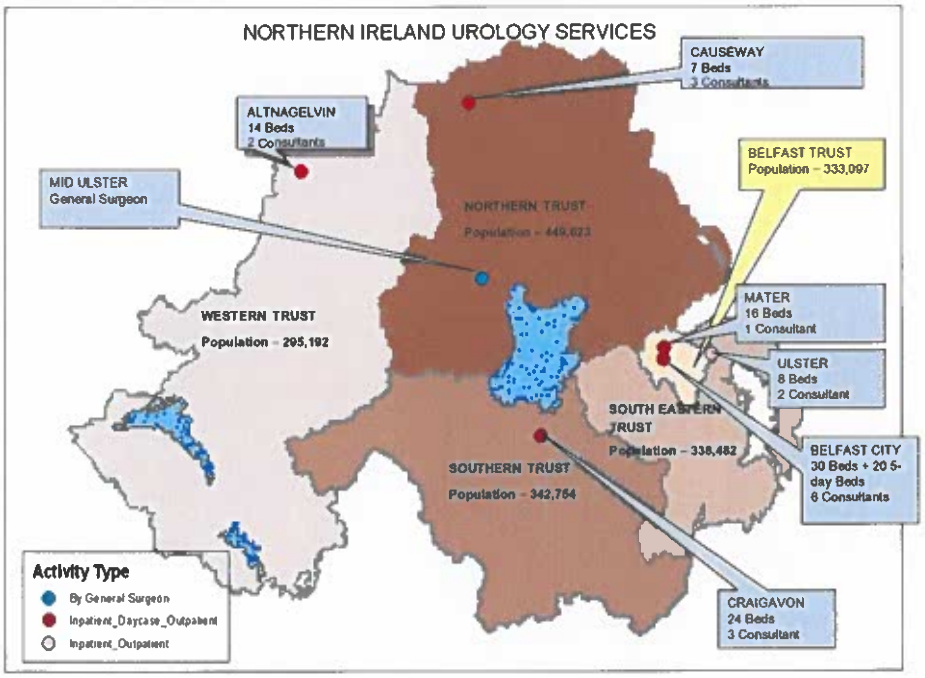
3.1 Consultant led Adult Urology Services are provided in each of the five Trusts. Table 2 below outlines the number of Consultants, Specialist Nurses and Main Hospital bases.

Table 2 – Consultant/Nurse Staffing and Inpatient Units

	Northern	Southern	South Eastern	Western	Belfast	Total
Consultants	3	3	2	2	7	17
Specialist Nurses	3	2	1	3 (2.6 WTE)	3	12 (11.6 WTE)
Hospital Base	Causeway	Craigavon	Ulster	Altnagelvin	BCH/ Mater	

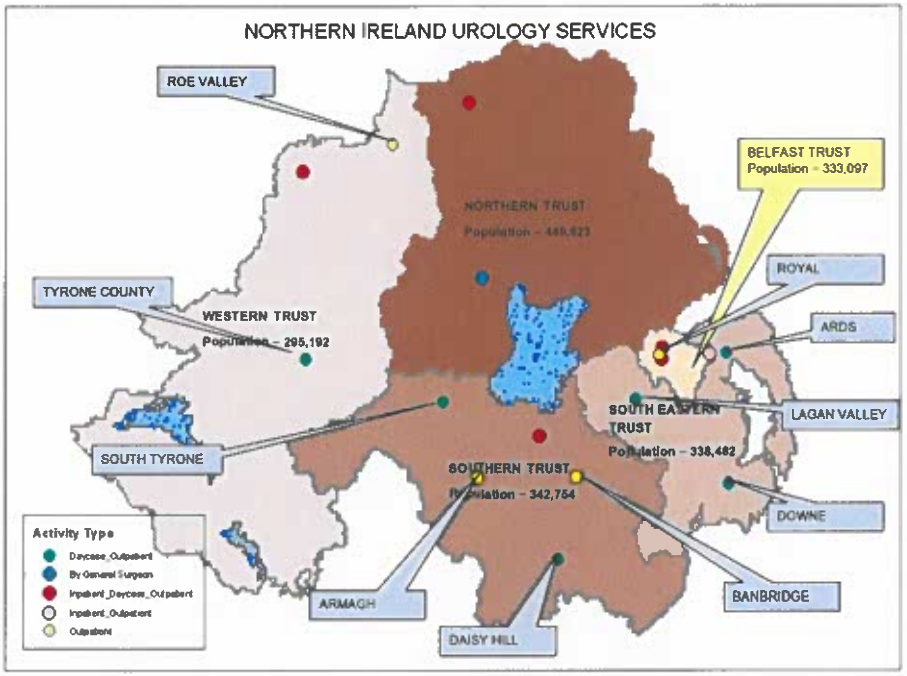
3.2 Figure 2 depicts the five Trusts, their respective resident population, and location and number of Inpatient beds.

Figure 2 – Urology Services – Inpatient Services



3.3 Figure 3 layers on the additional sites within each Trust which provide a range of Outpatient, and Day Surgical Services.

Figure 3 – Urology Services – Outpatients, Day Surgery



3.4 Figures 2 and 3 identified the resident populations for each of the 5 Trusts, however, the actual catchment populations significantly differ when adult only services and patient flows are considered. Table 3 indentifies the inpatient and day case population served by each Trust/Consultant.

Table 3 – Catchment populations served by each Trust

	Consultant urological surgeons number	Inpatient catchment population	Inpatient catchment population per consultant	Daycase catchment population	Daycase catchment population per consultant
BHSCT	7	873,000	124,700	646,000	92,300
NHSCT	3	218,000	72,700	245,000	82,000
SEHSCT	2	130,000	65,000	321,000	160,000
SHSCT	3	305,000	102,000	287,000	96,000
WHSCT	2	236,000	118,000	262,000	131,000
Total	**17**	**1,762,000**	**103,000**	**1,762,000**	**103,000**

3.5 This analysis demonstrates a significant flow of inpatient/day case work (and therefore outpatient/assessment and diagnostic workup) from the Northern Trust area to Belfast. It also demonstrates that although South Eastern Trust services a significant catchment population for day case work (and outpatient, assessment and diagnostics) it serves a smaller proportion of its population with inpatient care. This is due to the fact that a significant volume of outpatients, diagnostics and day surgery is undertaken in the Lagan Valley Hospital by a Consultant Urologist outreached from Belfast. Any subsequent inpatient treatment is then carried out in BCH.

Outpatient (new) Services

3.6 A referral review exercise was held in December 2008, at which a number of primary and secondary care clinicians (5 General Practitioners and 5 Consultant Urologists) and Trust Managers undertook a quantitative and qualitative analysis of all new outpatient referrals received (368) in Urology for a full week in November 2008.

Table 4 - Analysis of Urology Referral Letters

Gender	Belfast	Northern	Western	Southern	SE	Regional
Male	111	39	34	42	55	**281**
Female	33	13	10	11	18	**85**
Blank	0	1	1	0	0	**2**
Total	**144**	**53**	**45**	**53**	**73**	**368**

Age Range	Belfast	Northern	Western	Southern	SE	Regional
0-14	2	0	0	1	0	**3**
15-30	17	4	5	3	7	**36**
31-40	19	4	5	8	4	**40**
41-50	29	9	4	7	5	**54**
51-60	18	13	9	6	4	**50**
60+	59	22	22	28	9	**140**
Blank	0	1	0	0	44*	**45**
Total	**144**	**53**	**45**	**53**	**73**	**368**

Urgency	Belfast	Northern	Western	Southern	SE	Regional
Red Flag	6	2	3	3	4	**18**
Urgent	30	11	10	10	12	**73**
Routine	108	40	32	40	57	**277**
Blank	0	0	0	0	0	**0**
Total	**144**	**53**	**45**	**53**	**73**	**368**

Named Cons	Belfast	Northern	Western	Southern	SE	Regional
Y	35	13	6	12	15	**81**
N	109	40	39	41	58	**287**
Total	**144**	**53**	**45**	**53**	**73**	**368**

Ref Source	Belfast	Northern	Western	Southern	SE	Regional
Non-GP ref's	15	12	1	5	14	**47**
GP Ref's	129	41	43	48	59	**320**
Blank	0	0	1	0	0	**1**
Total	**144**	**53**	**45**	**53**	**73**	**368**

* 44 out of 73 referrals in SET had DOB deleted-therefore not possible to record age range.

** Data on percentages is **Appendix 4**

3.7 Regionally 76% of the referrals were male, which was to be expected. 87% of the referrals were from GPs with the remaining 13% spread across Consultant to Consultant (internal and external), A&E referrals and other sources. 78% of the referrals were referred into Urology as a specialty, with only 22% having a named Consultant. Regionally (excluding SET) 63% of the referrals related to the over 50's age range. Referrals marked by GPs as red flag or urgent represents 25%.

3.8 A breakdown of the referrals by presenting symptoms/conditions is in Table 5 below. Data on percentages is included in Appendix 5. Clinicians have indicated that this outcome is fairly representative of the nature and type of referrals they receive.

Table 5 - Analysis of presenting symptoms/conditions

Presenting Symptom/Condition		Belfast		Northern		Western		Southern		SE		Regional	
Haematuria (ALL)		**19**		**10**		**10**		**5**		**12**		**56**	
	frank		*11*		*3*		*4*		*2*		*6*		*26*
	microscopic		*6*		*5*		*6*		*2*		*6*		*25*
	blank		*2*		*2*		*0*		*1*		*0*		*5*
Prostate/raised PSA		**14**		**7**		**8**		**9**		**12**		**50**	
Other		**21**		**4**		**5**		**8**		**8**		**46**	
Ncode procedure (All)		**21**		**2**		**1**		**3**		**14**		**41**	
	vasectomy		*11*		*0*		*1*		*1*		*4*		*17*
	foreskin		*1*		*0*		*0*		*2*		*7*		*10*
	epididymal cyst		*3*		*2*		*0*		*0*		*3*		*8*
	hydrocele		*4*		*0*		*0*		*0*		*0*		*4*
	varicocele		*1*		*0*		*0*		*0*		*0*		*1*
	blank		*1*		*0*		*0*		*0*		*0*		*1*
Recurrent UTI's		**17**		**9**		**4**		**6**		**4**		**40**	
LUTS		**11**		**7**		**2**		**5**		**7**		**32**	
Prostate/BPH/prostatitis		**11**		**5**		**4**		**6**		**2**		**28**	
Renal stones/colic/loin pain		**11**		**5**		**1**		**2**		**4**		**23**	
Testicular/ Scrotal lumps or swelling		**8**		**0**		**5**		**0**		**8**		**21**	
Andrology (ALL)		**7**		**2**		**3**		**6**		**2**		**20**	
	erectile dysfunction		*2*		*2*		*0*		*3*		*1*		*8*
	Peyronie's disease		*2*		*0*		*2*		*0*		*0*		*4*
	blood in ejaculate		*3*		*0*		*0*		*0*		*0*		*3*
	ulcer/lesion on gland		*0*		*0*		*1*		*1*		*0*		*2*
	balanitis/discharge		*0*		*0*		*0*		*2*		*0*		*2*
	Blank		*0*		*0*		*0*		*0*		*1*		*1*
Unknown		**3**		**1**		**1**		**2**		**0**		**7**	
Ca Bladder/Kidney		**1**		**1**		**0**		**1**		**0**		**3**	
Blank		**0**		**0**		**1**		**0**		**0**		**1**	
Total		**144**		**53**		**45**		**53**		**73**		**368**	

3.9 The categorisation of patients by presenting symptoms/condition is a useful process and the outcomes of this exercise should assist Urology teams in determining the nature and frequency of assessment and diagnostic clinics. There was an overlap in symptoms for some patients e.g. many patients with enlarged prostate, known benign prostatic hyperplasia (BPH) or prostatitis have a range of lower urinary tract symptoms (LUTS). However, for the purposes of this exercise, if prostatic disease was identified on the referral letter, these patients were recorded as such, whereas patients presenting with just LUTS were categorised as such. Where LUTS

services are in place, both of these groups of patients are seen and treated within the same pathway.

3.10 General comments;

- A small number of the referrals (<10) were not for a new outpatient appointment but were asking for a review appointment, which was overdue, to be expedited. In addition, a small number of referrals (<10) were for patients who had been discharged from outpatients due to not responding to a booking letter or had DNA'd and who had subsequently visited their GP and asked for another referral to be processed.

- In overall terms, the quality and appropriateness of the referrals was deemed to be good. Internal referrals (A&E, inpatient etc) were often handwritten and were not as structured as GP referral letters.

- The exercise included looking at the time between the date recorded on the referral letter and the hospital date stamp indicating receipt. A significant variance between these two dates was noted in internal referrals (Consultant to Consultant). There did not appear to be any significant delays with regard to GP referrals.

Recommendation

4.	Trusts must review the process for internal Consultant to Consultant referrals to Urology to ensure that there are no undue delays in the system.

- Consultants indicated that they would routinely upgrade a significant number of routine and urgent referrals (GP) to urgent or red flag. This is particularly relevant when considering the service capacity requirements to assess and investigate potential cancers within cancer standard timescales. This has been confirmed in a recent Cancer Registry, full year analysis of the cancer waiting times database, with a total of 700 red flag GP referrals and 875 referrals which Consultants upgraded to red flag at triage recorded.

- It has been noted that the development of agreed referral guidelines/criteria for suspected Urological cancers is a priority piece of work for the recently formed NICaN Group and this should work should be advanced as soon as possible.

Recommendation

5.	NICaN Urology Group in conjunction with Urology Teams and Primary Care should develop and implement (by September 2009) agreed referral guidelines and pathways for suspected Urological Cancers.

Areas of Urology

3.11 As a specialty, Urology can be sub-divided into a number of special interest areas, most of which also comprise elements of general or 'core' Urology work.

3.12 **Core Urology** includes the assessment, diagnosis, medical treatment and (non complex and/or endoscopic) surgical treatment of diseases/conditions of the kidney,

bladder, prostate, penis and scrotum. LUTS, BPH, haematuria, simple stones, erectile dysfunction (ED) and 'N' code work are considered to be core Urology. Urologists in NI, regardless of special interest area, all provide core Urology services. Over 80% of all 'M' and 'N' code inpatient and daycase procedures are peno-scrotal, cystoscopy, TURBT (trans urethral resection of bladder tumour), TURP (trans urethral resection of prostate) and urethral catheterisation.

3.13 **Uro-Oncology.** Around 40% of Urology work is cancer related and most of the assessment, diagnostics and medical/ simple surgical treatments are appropriately undertaken at local level. Less than 10% of Urological cancers require radical/complex surgery. (see section 7).Specialist cancer services are based in BCH, where there are three designated 'cancer' Urologists. One Urologist in Altnagelvin and one/two in Craigavon would also be considered to have a special interest in cancer.

3.14 **Stones/Endourology** includes the management and treatment of renal and ureteric calculi. This involves open surgery, endoscopic intervention or stone fragmentation using multimodal techniques such as laser, lithoclast with or without US (ultrasound) and ESWL (Extracorporeal shock wave lithotripsy). Craigavon has the only fixed-site lithotripter, with BCH and Causeway serviced by a mobile facility on a sessional basis. With regard to special interest Urologists, there are currently two in Belfast Trust and one in each of the other four Trusts.

3.15 **Andrology** includes the treatment of erectile dysfunction, particularly post prostate surgery, penile curvatures and deformities (Peyronie's disease) and other conditions of the male reproductive organs. Currently all Consultants provide andrology services within their commitment to core Urology. The service would benefit from having a specialist Urologist to manage and treat the more complex cases, including penile prostheses work.

3.16 **Reconstruction,** which is often combined with the functional side of Urology, includes reconstruction of urinary continence in men, bladder reconstruction after oncological surgery and in a neuropathic bladder, e.g. spina bifida, spinal cord injury, bladder reconstruction in congenital and developmental LUT pathology (adolescent), urethral reconstruction for strictures and reconstruction prior to transplantation. There are currently two Consultants (one on long term sick leave) in Belfast who specialise in this area, working closely with the Uro-oncology team and with supra regional support provided by University College Hospital London.

3.17 **Female/functional** relates to the management and treatment of incontinence and bladder dysfunction in women, which on some occasions overlaps with reconstruction surgery. Some of this work is undertaken by Urologists however, the majority is undertaken by Uro-Gynaecologists as outlined in section 2. There is a shared view among Urologists that each Urology team should have at least one Urologist with a special interest in female/ functional Urology, and who for this aspect of their work, should work within a multidisciplinary team of Gynaecologists, physiotherapists and nurse practitioners in providing care for urinary incontinence, prolapse and fistula repair.

Recommendation

6.	Deployment of new Consultant posts (both vacancies and additional posts arising from this review) should take into account areas of special interest that are deemed to be required in the service configuration model

Non-Elective Services

3.18 There are approximately 2,500 non-elective FCE's (coded as Urology on admission or discharge) per annum (approximately 7 a day) with little variation in these numbers from year to year.

3.19 In broad terms, non-elective admissions fall into the following categories;

- Testicular torsion/infections
- Renal colic/Acute kidney obstruction
- Infection—recurrent UTI's/ pyelonephritis
- Urinary retention /haematuria

3.20 The majority of admissions fall into urinary retention and renal colic which do not usually require an immediate surgical operation, neither does treatment of infections. Testicular torsion and acute kidney obstruction require emergency (often surgical) intervention.

3.21 There are currently 15 hospitals in NI with A&E Departments (varying opening times) and acute medical and surgical facilities. With the implementation of DBS (Developing Better Services) this position will change in future years. However, for the purposes of this review the profile of services and location of non-elective Urology patients is assumed to be as is at present.

3.22 The majority of non-elective admissions are admitted to the 'presenting' acute hospital and unless it is BCH or CAH are admitted (out of hours) under General Surgery, until transfer to the care/specialty of Urology, if appropriate, on the next working day.

3.23 Even in a redesigned Urology service it is not envisaged that these arrangements will change for the foreseeable future, as it would not be viable to provide 24/7 onsite Urology cover in all 15 hospitals. However, the requirement to have clearly defined protocols and pathways in place for the management of these admissions has been identified.

Recommendations

7.	Urologists, in collaboration with General Surgery and A&E colleagues, should develop and implement clear protocols and care pathways for Urology patients requiring admission to an acute hospital which does not have an acute Urology Unit.

8.	Urologists, in collaboration with A&E colleagues, should develop and implement protocols/care pathways for those patients requiring direct transfer and admission to an acute Urology Unit.

9.	Trusts should ensure arrangements are in place to proactively manage and provide equitable care to those patients admitted under General Surgery in hospitals without Urology Units (e.g. Antrim, Daisy Hill, Erne). Arrangements should include 7 day week notification of admissions to the appropriate Urology Unit and provision of Urology advice/care by telephone, electronically or in person, also 7 days a week.

ICATS (Integrated Clinical Assessment and Treatment Services)

3.24 ICATS was launched in NI in 2005/06, as one element of the Department's Outpatient Reform Programme and in response to very lengthy waiting times for first outpatient appointments.

3.25 ICATS were designed to provide services, in a variety of primary and secondary care settings by integrated multidisciplinary teams of health service professionals, including GPs with a special interest, specialist nurses and allied health professionals. One of the fundamental elements was that many patients didn't need to be seen or assessed by a hospital Consultant at an outpatient clinic and that quick triage of referral letters and assessment and diagnostics by the most appropriate health care professional within ICATS teams, with onward referral to secondary care, only if required, would divert large numbers of outpatient referrals from hospital consultants. Another fundamental design principle was that non urgent referrals would, in the first instance, go to ICATS to be triaged and that all subsequent flows to secondary care consultants would be from the ICATS team.

3.26 It was agreed that, to begin with, ICATS would be implemented in a small number of core specialities (4) and these were identified based on those specialities with the highest volumes and longest waiting times in 2005/06. Urology was one of the 4 initial specialties identified. Across all ICATS specialties £2m was allocated in 2006/07, increasing to £9m recurrently from 2007/08.

3.27 The design of ICATS included 5 possible next steps/pathways for patients referred into the service-

- to diagnostics,
- for direct treatment on an inpatient/day case list,
- for return to primary care with advice on further management,
- to tier 2 outpatient services (non Consultant assessment and treatment) or
- to hospital (Consultant) outpatients.

3.28 For a variety of reasons, the development of Urology ICATS has been difficult, slower than planned and somewhat fragmented with regard to service model design, which differs significantly in each of the Board areas.

3.29 Table 6 below outlines the progress to date in Urology ICATS.

Table 6 - Urology ICATS - Current Position

Board Area	Current Position	Ring fenced funding/ Investment Made	Comments
NHSSB	Hospital based (Causeway) Nurse specialists undertaking mostly cystoscopies. Consultant led referral triage.	£642K	Original intention to expand nurse service to LUTS/haematuria/prostate clinics and review/follow-up clinics.
SHSSB	GPSI and specialist nurse Tier 2 clinics for haematuria, prostate, LUTS, stones, andrology. ICATS in separate building on Craigavon Area Hospital site. Consultant led referral triage.	£240K	Oncology review and urodynamics clinics being established.
WHSSB	Nurse led clinics (LUTS, prostate) and single visit haematuria clinics with nurse specialists/staff grade in place for some years. Predominately hospital based (Altnagelvin). Consultant led referral triage.	£211K	ICATS plan now approved – expanding diagnostic, LUTS services and involving GPSI'S in referral triage process in order to improve links with primary care and improve referral information and patterns.
EHSSB	SET – plan approved by EHSSB late 2008. Nurse specialist undertaking cystoscopies for some time outwith any ICATS model. BELFAST – no progress but nurse led services in place for some time and single visit haematuria clinic established late 2008. Consultant led referral triage in both SET +Belfast	£350K	GPSI'S appointed some time ago but posts not yet activated.

3.30 It is clear that Urology services have been developing non Consultant delivered outpatient, assessment and diagnostic services, such as haematuria, LUTS, ED, prostate, stones etc for some years prior to the launch of ICATS. These services were/are largely provided by nurse specialists, staff grades and radiology staff in a hospital environment.

3.31 Consultant Urologists unanimously consider that referral triage should be led by Consultants. With over 40% of referrals being cancer related (and with many not red flagged or marked urgent) they believe that they are best placed and skilled to undertake the triage process. They also believe that despite the volume of referrals, this is not a particularly time consuming process.

3.32 They indicate that they are fully committed to developing further non Consultant assessment, diagnostic and some treatment services and supportive of *providing appropriate, safe and sustainable, cost effective care closer to home, so that urology services are delivered in the right setting, with the right equipment, performed by the appropriate skilled person* (NHS, Providing Care for Patients with Urology Conditions- Guidance).

3.33 This approach was evident during the referral review exercise in December 2008, with Consultants readily indicating that patients should be booked straight into diagnostics or nurse led clinics such as LUTS, prostate, haematuria.

3.34 Consultant Urologists are very clear that the need to ensure that whoever the specialist practitioner is and wherever they work, they should be part of, or affiliated to, the local Urology team, led by a Consultant Urologist.

3.35 In light of the already changing shape of Urology services and the further developments that will arise out of this review, it is appropriate and timely to take stock of ICATS, its design principles and future development and investment. A review of all ICATS Services is planned for the first quarter of 2009/10 year and the outcomes of this review should guide the future direction of travel for ICATS services within Urology .

Recommendation

10.	In undertaking the ICATS review, there must be full engagement with secondary care Urology teams, current ICATS teams, as well as General Practitioners and LCGs. In considering areas of Urology suitable for further development they should look towards erectile dysfunction, benign prostatic disease, LUTS and continence services. The review should also take into account developments elsewhere within the UK and in particular developments within PCTs in relation to shifting care closer to home.

Links with Renal Transplantation

3.36 Renal transplantation is the definitive preferred treatment for end-stage renal failure. Kidneys for transplantation become available from either deceased or live donors. In 2006 the DOH commissioned a Taskforce to investigate and make recommendations to increase the level of organ donation. In 2008/09 the DHSSPS set a target for access to live renal transplantation and investment has been made to increase the live donor programme at Belfast City Hospital.

3.37 There are currently two wte transplant surgeons in post, a long-term locum transplant surgeon and in addition there is 0.2 wte input from an Urologist. The Urologist only undertakes live donor kidney retrieval using laparoscopic techniques, which is an essential quality component for the live donor programme.

3.38 Taskforce recommendations would suggest that cadaveric retrievals and transplantations should be increased to 50 per year (currently approximately 30) and within Priorities for Action there is a target for an additional 20 live donor retrievals and transplantations per year by March 2011. With the increase in laparoscopic live donor retrieval, additional input from Urologists may be needed and the current review of the renal transplantation service will need to take account of this requirement, along with the Urology input required if any reconstruction of the urinary drainage system is needed before transplantation.

4. CAPACITY, DEMAND AND ACTIVITY

4.1 Urology is a specialty that is categorised by high numbers of referrals for relatively simple initial diagnostics (often to exclude pathology) or surgical procedures. In addition, around 40% of Urology is cancer related and as more elderly patients are referred and treated, there is a need for follow-up services and patient surveillance.

4.2 The increasing demand for Urology services in Northern Ireland is similar to that being experienced in the rest of the UK.

4.3 The Action On Urology Team (March 2005) reported that:

Demand for Urology services is rising rapidly and the pattern of disease is changing.

- *There is an overall rise in demand from an ageing population especially the over 50's who make the heaviest demands upon Urology care.*
- *Prostate disease incidence is rising rapidly and PSA requests are generating further demand.*
- *Haematuria/bladder disease demand is also rising, stimulated by the combined availability of dipsticks and flexible cystoscopes.*
- *Work is shifting away from surgery towards diagnostics and medical treatment.*

4.4 In addition, there has been an increased "medicalisation" of Urology as the pharmacology of the urinary tract has become better understood and the increasing availability and ever improving range of drugs.

Activity/Demand/Capacity Analysis

4.5 During the review detailed analysis was undertaken by SDU and the Boards, and the following represents the most accurate information available at this time.

Outpatients

4.6 New outpatient referrals and attendances (activity) have been increasing year on year. Not all referrals result in attendance as many are removed for "reasons other than treatment" (ROTT) and are appropriately discharged from the system without having been seen.

4.7 The most recent analysis undertaken is estimating an 18% increase in predicted (GP) demand from 2007 to 2008 (2008 ROTT rates applied). This does not however represent a 'true' picture as during this period two Trusts changed their recording/management of activity from General Surgery to Urology. It has been difficult to quantify, with a degree of accuracy, the impact of these changes on the information, as increases, (albeit smaller), in General Surgery are also being estimated. Notwithstanding the above difficulty, it has been accepted that there is a significant increase in demand, which is likely to be between 10 and 15%. It has also been concluded that this increase is likely to be as a result of those factors outlined at the beginning of this section i.e. ageing population, patient expectation and demand with the increased emphasis on men's health, changing pattern of disease, availability of assessment and diagnostic modalities to exclude pathology, along with decreasing waiting times and previously unmet need.

4.8 A regional referrals management review, led by SDU Primary Care advisors is due to commence in April 2009.

Table 7 - Urology – Service and Budget Agreement Levels and Activity

	SBA [1]	07/08 Outturn[2+4]	Projected 08/09 Outturn [3+4]
Elective Inpatients	4,155	4,937 + 295(IS)	5,823+606(IS)
Non-elective Inpatients	2,109	2,369	2,496
Daycases	8,715	12,416 + 462 (IS)	13,252+1028(IS)
New Outpatients	5,824	7,593 + 571 (IS)	9,984 +519(IS)
Review Outpatients	12,566	15,967	19,224

(1) Information from 4 Boards SBAs
(2) 2007/08 outturn from PAS (includes in-house additional activity)
(3) Projected 2008/09 outturn (including in-house additional activity) based on November 2008 position
(4) IS information provided by EHSSB

4.9 In 2008, the Boards completed a detailed capacity and demand model across a number of specialities, inclusive of Urology. A number of assumptions/estimates were applied and both the recurrent gap against SBA and non-recurrent (backlog) was identified. The recurrent gap does not take account of growth in demand. The backlog (non-recurrent) gap relates to the in-year activity required due to the need to reduce waiting times for inpatient/day cases and outpatients to 13 and 9 weeks respectively by March 2009.

4.10 It has been agreed that the maximum elective access waiting times for 2009/10 will remain at 13 and 9 weeks and with a year of steady state, Trusts and Commissioners will therefore be better placed to assess both the 'real' demand and capacity to treat.

4.11 As part of this review EHSSB undertook further analysis of demand and capacity within urology and identified a significant recurrent gap, against SBA volumes.

Conclusion

4.12 Both the demand and activity in Urology is significantly greater than the current SBA volumes. Some of this is non-recurrent backlog created by the reducing waiting times since 2005/06 and the remainder is recurrent based on 2007/08 demand. Significant non-recurrent funding has been allocated in recent years to ensure Trusts were able to undertake this activity and to meet the elective access waiting times and cancer access standards. Within Trusts large numbers of additional clinics and theatre sessions have been funded non-recurrently and there has also been significant use of the independent sector.

4.13 Both increased and additional capacity to assess and treat patients is urgently required in Urology. However, additional recurrent investment in capacity (resources-human and physical) which is required in this speciality and is detailed later in this report is not the only solution. Trusts will also be required to ensure optimum use and efficiency of their existing capacity and will need to be creative in developing new ways of working and re-designing and modernising services to increase the capacity already in the system and to manage the increasing demand into secondary care.

4.14 The IEAP (Integrated Elective Access Protocol) provides detailed guidance on tried and tested systems and processes which ensure effective and efficient delivery of elective services, along with improvements to the patient experience. The Scheduled Care Reform Programme (2008-10) includes significant developments such as, pre-op assessment, admission on day of surgery, increasing day surgery rates, reducing cancelled operations, optimising the use and productivity of theatres, booking systems and a management of referral demand exercise. All of these will build/create additional capacity within the system.

Recommendation

11.	Trusts (Urology departments) will be required to evidence (in their implementation plans) delivery of the key elements of the Elective Reform Programme.

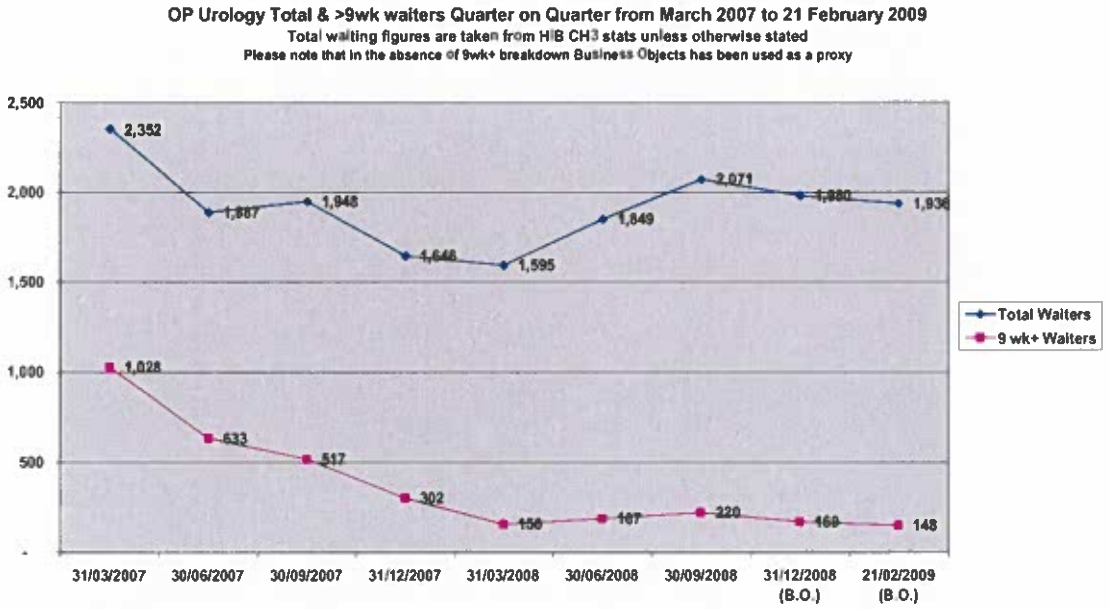
5. PERFORMANCE MEASURES

Elective access waiting times

5.1 There have been significant reductions in waiting times since 2005, in line with PFA (Priorities for action) targets and as a result of the elective reform and modernisation programme.

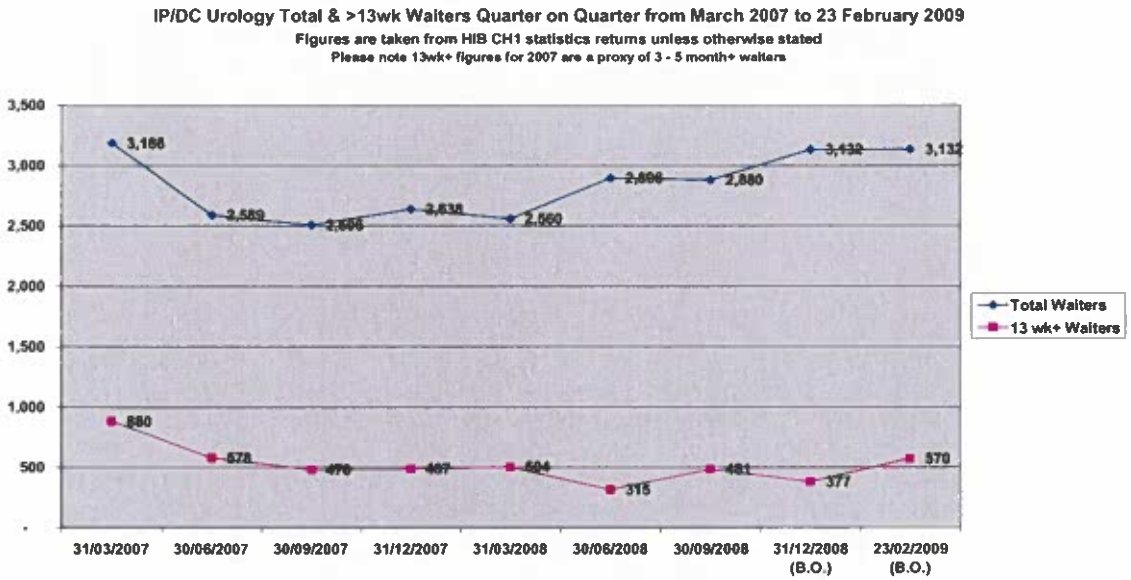
PFA 2008/2009: By March 2009, no patient should wait longer than 9 weeks for first outpatient appointment and/or diagnostics
By March 2009, no patient should wait longer than 13 weeks for Inpatient or daycase treatment.

Figure 4



(B.O. – refers to Business Objects)

Figure 5



5.2 As at February 2009, all Trusts, with the exception of Belfast, are indicating that they will meet the target waiting times for outpatients, diagnostics, Inpatients and daycases. Belfast Trust is reporting in excess of 100 anticipated breaches in Inpatient/daycase work.

Urology Cancer Performance

5.3 The Cancer Access Standards were introduced from April 2007. These introduced waiting times standards for suspected cancer patients both urgently referred by the General Practitioner or those referrals triaged by the Consultant as suspected cancer. It also set standards for those patients diagnosed with cancer and how long they should wait for treatment.

5.4 The 2008/09 Cancer Access Standards were defined as below:

- 98% of patients diagnosed with cancer from decision to treat, should begin their treatment within a maximum of 31 days
- 95% of patients urgently referred with a suspected cancer should begin their first definitive treatment within a maximum of 62 days.

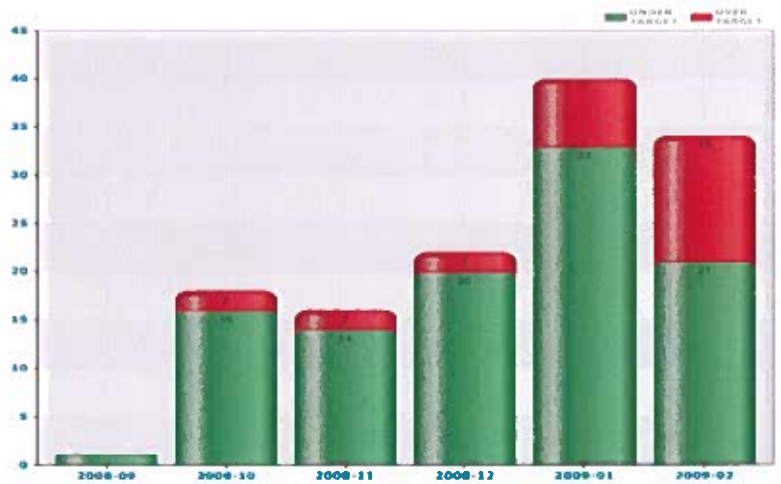
* decision to treat is the date on which the patient and clinician agree the treatment plan.

5.5 It is recognised that a considerable amount of the actions required to achieve the cancer access standards are associated with service improvement. These include the identification and agreement of the suspected cancer patient pathway, the introduction of robust administrative systems or processes and the proactive management of patients.

5.6 The recent cancer access standard performance in relation to the 62 day standard shows that up to 24 February 2009, across all Trusts, the number of Urological cancer patients achieving the 62 day standard is at 62%. This shows that of the 34 confirmed cancers treated up to this date, 13 of these had not been treated within 62 days.

Figure 6

62 Day Completed Waits (Actual) for All Trust, All Hospital Site, Urological Cancer Site

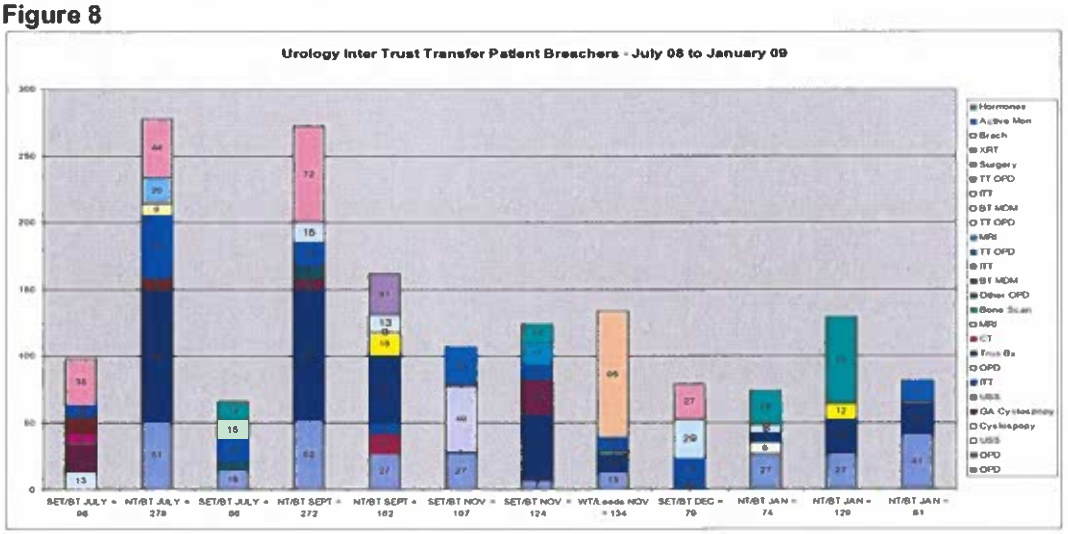


5.7 For the same period in February, the performance in relation to the 31 day standard shows that, only 87% of those Urological cancer patients (63 of 71 patients) were treated within 31 days of the decision to treat. From a sample of 9 patients that breached the 31 day standard in January 2009, they waited on average 50 days from their decision to treat to their first treatment.

Figure 7

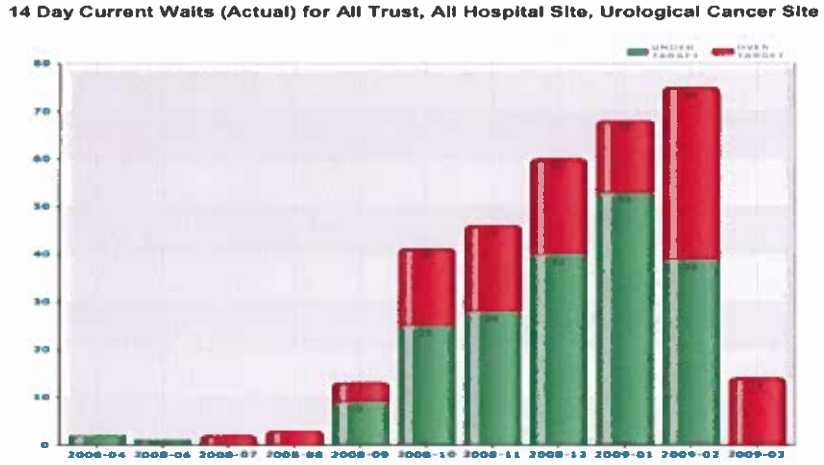
5.8 It is accepted that those patients who transfer from one Trust to another for treatment are more likely to breach the target, than those who remain within the one Trust for their complete pathway. These patients are referred to as Inter Trust Transfer (ITT) patients. These ITT patients that breach the target are analysed in more detail. The detail for the period July 2008 to January 2009 is shown on Figure 8 below. This shows that of the suspected 'red flag' cancer patients referred who breached the 62 day target, 12 of these were ITT patients and they waited from 66 to 278 days from referral to their first treatment. It is accepted as a regional standard, for all tumour sites that if the patient is to be transferred for treatment, all diagnostic investigations should be completed and the patient should be ready for transfer by day 28 of the 62 day pathway. From this evidence it shows that this is not happening in the majority of cases.

Figure 8



5.9 Whilst this analysis only refers to ITT patients, it is probably representative of the pathway for those patients that breach the target and remain only within the one Trust. For example, for the 'front end' of the patient pathway, the number of days the patient can wait for their initial outpatient appointment and subsequent investigation can be over 150 days. This has improved in recent months, but to achieve the 28 day standard this should be completed within approximately 21 days. This is further evidenced by the analysis of the 14 day waiting times for suspected Urological cancers referrals; this showed that of the referrals seen in February only 52% were seen within 14 days. As highlighted any delay at the front end of the pathway will have an impact on the Trusts ability to achieve the treatment times and the 62 day standard.

Figure 9



5.10 Whilst it is clear that some element of redesign of the pathway is required, the evidence appears to indicate that for the number of suspected 'red flag' cancer referrals received or triaged by the Consultants, additional capacity at the front end to complete timely investigations is required. For example, the introduction of one-stop clinics for investigations such as haematuria can have an impact and reduce the number of days the patient waits for investigations as well as reducing the number of times that the patient has to attend the hospital. This needs to be matched with sufficient Consultant capacity for treatments, including theatre capacity, Oncologists for oncology and radiotherapy.

5.11 All Trusts have reported that Urology is the key tumour site which they are at most risk with and their achievement of the cancer access standards by March 2009. In addition, at a recent ITT Executive Directors Services Steering Group the Belfast Trust reported they estimate 15 to 20 urological patients will breach the cancer access standards. Some of this is due to the late transfer of patients, but also due to a lack of available Consultants and theatre capacity. If the number of patients forecasted breach the target, this will mean that as a region NI will not achieve the cancer access standard.

Recommendation

12.	Trust Urology Teams must as a matter of urgency redesign and enhance capacity to provide single visit outpatient and assessment (diagnostic) services for suspected urological cancer patients.

NHS Better Care, Better Value Indicators

5.12 A number of better care, better value Indicators are useful performance measures to apply to Urology in assessing levels of efficiency, productivity and patient experience.

5.13 Length of stay (LOS) is one of the greatest variables between Trusts, hospitals and individual Consultants. By reviewing and improving admission and discharge processes, Trusts can improve the patient experience by reducing the number of days spent in hospital, and save bed days thus increasing capacity and saving money.

5.14 Some hospitals would expect to have longer than average LOS if they undertake more complex operations, treat patients with greater co-morbidity and patients with higher levels of social deprivation.

Table 8
Urology Episodic Average Length of Stay (06/07, 07/08, 08/09 - Apr 08 to Nov 08)

	Elective			Non Elective		
	FY2006/2007	FY2007/2008	FY2008/2009*	FY2006/2007	FY2007/2008	FY2008/2009*
Regional average LOS in days	3.7	3.4	3.2	4.8	4.7	4.6

	Elective			Non Elective		
Trust	FY2006/2007	FY2007/2008	FY2008/2009*	FY2006/2007	FY2007/2008	FY2008/2009*
Belfast Health and Social Care Trust	3.9	3.4	3.3	5.5	4.9	5.0
Northern Health and Social Care Trust	2.3	2.9	2.5	4.3	5.4	5.6
South Eastern Health and Social Care Trust	3.8	3.9	3.3	3.9	4.4	3.4
Southern Health and Social Care Trust	3.7	4.0	3.5	4.5	4.8	4.9
Western Health and Social Care Trust	3.6	2.8	3.1	3.9	3.8	3.7
Average LOS in days	3.7	3.4	3.2	4.8	4.7	4.6

	Elective			Non Elective		
Site	FY2006/2007	FY2007/2008	FY2008/2009*	FY2006/2007	FY2007/2008	FY2008/2009*
Altnagelvin Hospitals	3.6	2.8	3.1	3.9	3.8	3.7
Belfast City Hospital	4.1	3.5	3.4	5.5	4.7	5.0
Causeway	2.3	2.9	2.5	4.3	5.4	5.6
Craigavon Area Hospital	3.7	4.0	3.5	4.5	4.8	4.9
Down and Lisburn	1.0	0.0	1.2	0.0	0.0	0.0
Mater Infirmorum Hospital	3.2	2.7	2.5	5.9	6.4	5.0
The Royal Group of Hospitals	0.0	0.0	0.0	0.0	0.0	0.0
Ulster Community and Hospitals	3.8	4.0	3.5	3.9	4.4	3.4
Average LOS in days	3.7	3.4	3.2	4.8	4.7	4.6

*Information for 08/09 is cumulative from 01/04/08 to 30/11/08

5.15 All Trusts have longer average LOS for non elective patients than elective. The Southern Trust has the longest average LOS for elective patients and for elective and non-elective combined. Northern Trust has the shortest elective LOS which reflects their lower levels of major surgery.

5.16 Hospital Episode Statistics (HES) data, which combines elective and non-elective LOS, indicates a reduction in England over a three year period from an average of 3.8 days in 2005/2006 to 3.3 days in 2007/2008. Only South Eastern and Western Trusts have an average (combined) LOS of less than 4 days.

Recommendations

13.	Trusts should implement the key elements of the elective reform programme with regard to admission on the day of surgery, pre-operative assessment and increasing day surgery rates.

14.	Trusts should participate in a benchmarking exercise of a set number of elective (procedure codes) and non-elective (diagnostic codes) patients by Consultant and by hospital with a view to agreeing a target length of stay for these groups of patients.

Day Surgery

5.17 *For any surgical operation there is a large variation in performance throughout the UK with regard to time spent in hospital. Some units favour certain procedures to be performed on a day case basis while others, for the same procedure may regard an overnight stay as the norm. (BADS Directory of Procedures 2007)*

5.18 Hospitals are increasingly focussing on the short stay elective pathway. Carrying out elective procedures as day cases, where clinical circumstances and specialist equipment and training allows, saves money on bed occupancy and nursing care, as well as improving patient experience and outcomes.

5.19 The Audit Commission has identified 25 operations across a number of surgical specialties which could be carried out as day cases and has set a target of an average day case rate of 75% across the 25 procedures. This target has now been adopted within Priorities for Action, to be achieved by March 2011. Three of the procedures specifically relate to Urology (orchidopexy, circumcision, transurethral resection of bladder tumour). BADS (British Association of Day Surgery) identifies another 28 Urology operations (M and N code) which could be done as day surgery. The BADS Directory also suggests a % rate that can be achieved, which is 90% for the majority of the operations.

5.20 Table 9 below identifies the day case rates (% of all elective work undertaken as day case) in Urology by Trust and by hospital. It excludes Independent Sector activity and cystoscopies (M45) and prostrate TRUS, +/- biopsy (M70), both of which are not considered to be 'true' surgical operations and could equally be treated and coded as an outpatient with procedure case.

Table 9 Urology Day Case Rates excluding M45 and M70.3 & Y53.2 (06/07, 07/08, 08/09 - Apr 08 to Nov 08)
Independent Sector Activity has been excluded

	FY2006/2007	FY2007/2008	FY2008/2009*
Regional Total	50.0	48.4	48.7

Trust	FY2006/2007	FY2007/2008	FY2008/2009*
Belfast Health and Social Care Trust	47.1	42.9	46.4
Northern Health and Social Care Trust	31.1	32.6	27.9
South Eastern Health and Social Care Trust	78.0	74.0	69.9
Southern Health and Social Care Trust	43.7	45.4	49.1
Western Health and Social Care Trust	47.1	51.3	42.2

Site	FY2006/2007	FY2007/2008	FY2008/2009*
Altnagelvin Hospitals	47.1	51.3	42.2
Belfast City Hospital	49.9	45.5	48.9
Causeway	31.1	32.6	27.9
Craigavon Area Hospital	43.7	45.4	49.1
Down and Lisburn	98.8	100.0	89.3
Mater Infirmorum Hospital	4.9	4.2	6.9
The Royal Group of Hospitals	100.0	100.0	100.0
Ulster Community and Hospitals	76.6	71.2	66.3

5.21 There is a significant variation in day case rates across the Trusts/hospitals, ranging from 30% in Northern to 70% in South Eastern. Some of this can be explained due to the variation in 'N' code work undertaken by Urologists as opposed to General Surgeons (see Chapter 2). Trusts have also reported that on some sites access to dedicated day surgery facilities is limited and that this hampers the development of short stay elective pathways.

5.22 The CSR (Comprehensive Spending Review) is driving Trusts to reduce inpatient costs and to redesign/remodel their bed stock. This along with day surgery targets in Priorities for Action and the HSC Board's Elective Reform Programme will require Urology services to be creative in the development of day and short stay surgery, ensuring the provision of a safe model of care that provides a quality service to patients.

5.23 Trusts will need to consider procedures currently undertaken using theatre/day surgery facilities and the appropriateness of transferring this work to procedure/treatment rooms, thereby freeing up valuable theatre space to accommodate increased day surgery. Some operations will require specialised equipment and training for clinicians and some require longer recovery or observation times and so are only possible as a true day case if performed on morning sessions. Therefore, the development and expansion of day surgery may require reconfiguration of day surgery/main theatre lists, redesign of clinical pathways and investment in appropriate equipment/technology.

Recommendation

15.	Trusts will be required to include in their implementation plans, an action plan for increasing the percentage of elective operations undertaken as day surgery, redesigning their day surgery theatre facilities and should work with Urology Team in other Trusts to agree procedures for which day care will be the norm for elective surgery.

Outpatients

Table 10

Urology Outpatient Attendances - Consultant Led (06/07, 07/08, 08/09 - Apr 08 to Nov 08) - New : Review ratios

Independent Sector has been excluded

	FY2006/2007	FY2007/2008	FY2008/2009*
Regional new to review ratio	1.93	2.04	1.93

Trust	FY2006/2007	FY2007/2008	FY2008/2009*
Belfast Health and Social Care Trust	1.68	2.14	1.97
Northern Health and Social Care Trust	1.97	1.74	1.46
South Eastern Health and Social Care Trust	1.15	1.10	1.09
Southern Health and Social Care Trust	4.04	3.27	3.85
Western Health and Social Care Trust	2.34	2.21	2.78
Average new to review ratio	1.93	2.04	1.93

Site	FY2006/2007	FY2007/2008	FY2008/2009*
Altnagelvin Hospitals	2.34	2.21	2.78
Belfast City Hospital	1.84	2.90	2.44
Causeway	1.97	1.74	1.46
Craigavon Area Hospital	4.04	3.27	3.84
Down and Lisburn	1.06	1.18	1.24
Mater Infirmorum Hospital	1.63	1.11	1.47
The Royal Group of Hospitals	0.83	0.91	0.88
Ulster Community and Hospitals	1.19	1.07	1.01
Average new to review ratio	1.93	2.04	1.93

*Information for 08/09 is cumulative from 01/04/08 to 30/11/08

5.24 Regionally, there is an average new: review ratio of 1:2, with little variation from year to year. English HES data for 2006/07 reports a 1:2.4 new: review ratio. Variations are to be expected between hospitals and individual Consultants when case mix and complexity are taken into account e.g. BCH, due to a more complex case mix and Lagan Valley/RGH due to the fact that only day surgery is undertaken on these sites.

5.25 Craigavon Hospital is an outlier with regard to review ratios, with Altnagelvin Hospital having the second highest ratio.

5.26 It is disappointing to note that at the time of this review Trusts have reported a total of 9,386 patients for whom the (intended) date of their review has past (some by many months). This is referred to as a review backlog and if most of these patients had been seen within the same 2008/09 timeframe for the data above, then the new: review ratios would have been higher, particularly in Belfast and Southern Trusts. (Backlog; Belfast 5,599, Southern 2,309, Northern 668, South Eastern 431, Western 379). All Trusts have submitted action plans to address the review backlog that has arisen across a number of specialties.

Recommendations

16. Trusts should review their outpatient review practice, redesign other methods/staff where appropriate and subject to casemix/complexity issues reduce new:review ratios to the level of peer colleagues.

17.	Trusts must modernise and redesign outpatient clinic templates and admin/booking processes to ensure they maximise their capacity for new and review patients and to prevent backlogs occurring in the future.

6. CHALLENGES AND OPPORTUNITIES

6.1 At an early stage in the Review, an extensive round of meetings/discussion sessions were held with the various stakeholder organisations and staff to scope the challenges and opportunities of service delivery.

Challenges

6.2 A number of key themes were articulated and are summarised below:

- Increasing demand and workload pressures which were understood to be as a result of an ageing population along with people living longer, increased cancer detection and shorter waiting times arising from the elective access targets and cancer access standards, which is generating a previously unmet need in assessment and diagnostics.

- Capacity pressures (staffing), with a workforce struggling to cope with the increasing workload and meet the current targets and quality/clinical standards. This has resulted in significant reliance on independent sector and large numbers of additional clinics and theatre sessions being held internally. Both of these have been funded non-recurrently, year on year and are not sustainable in the future.

- Capacity pressures (infrastructure), on some sites, with regard to access to theatres and day surgery sessions which again results in transfer of work to independent sector. Access to elective Urology beds, in times of emergency admissions pressures, was also an issue for some sites.

- The challenges presented by the operation of 2 to 3 person Consultant teams outside of Belfast and the impact this has on on-call/cross cover arrangements, attraction and retention of clinical staff and the opportunity to develop sub specially interests and expertise. The size of the team is directly linked to its catchment population and the viability and sustainability of Urology services is dependent on a critical mass of work, of sufficient variety of conditions and treatments, to attract both training and substantive posts. The arrangements for the management and admission of acute Urological patients, particularly out of hours, in some Trusts, and the impact that the lack of such a service has on other sites was also raised as an issue.

- Impact of junior doctors hours, EWTD (European Working Time Directive) and in particular, changes to the training programme have resulted in a reduction in "the medical workforce", a shift from Consultant led services to Consultant delivered services and additional requirements on Consultants to directly provide and supervise training opportunities.

- Challenges around the cancer agenda and in particular, compliance with IOG (Improving Outcomes Guidance) and preparing for the Peer Review Exercise in 2010.

- Concerns were expressed about how service development tends to take place within and is restricted by Trust/Organisational boundaries. Also about inconsistent access/pathways for patients.

Opportunities

6.3 Within the various service and staff groups there was a strong desire and commitment to making significant improvements to Urology services in Northern Ireland.

6.4 There was general acceptance that additional investment was not the only solution: Making better use of the existing resources was also necessary and that the review of Urology services created significant opportunities to develop and re-design services, provide high quality, timely and cost effective services to patients and the community and to support and develop the individual and teams within this important specialty.

6.5 There was also a strong sense of wanting to do things differently and of the need to change and adapt to a changing landscape in terms of public expectations, targets and standards, changing pattern of disease and treatment, new technologies and techniques and employment and training legislation and entitlement.

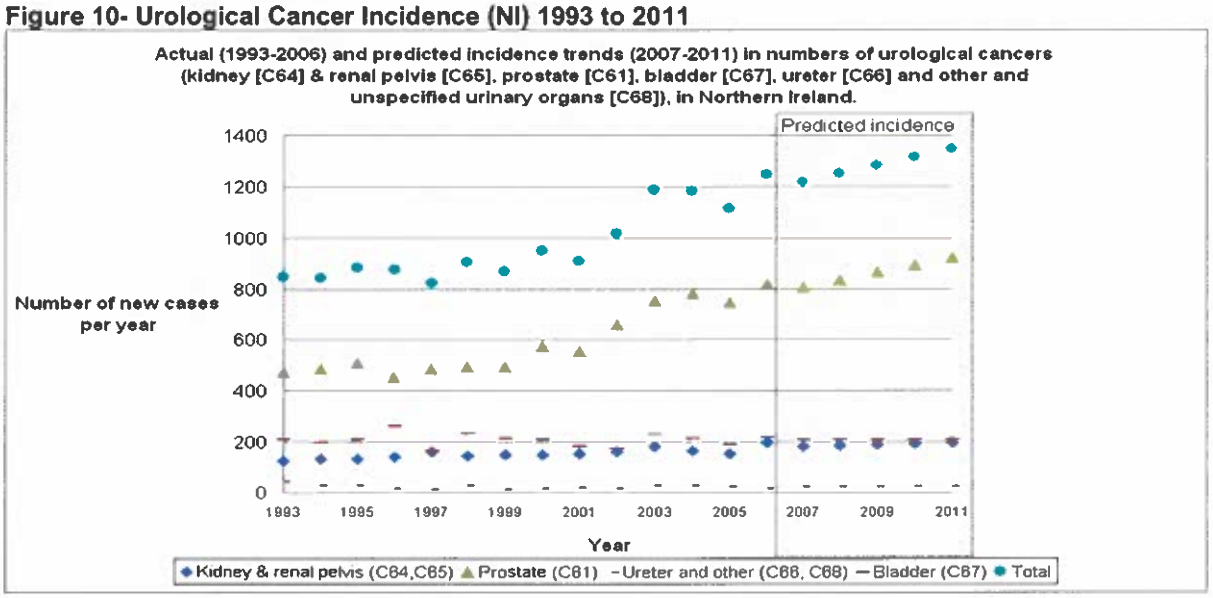
7. UROLOGICAL CANCERS

7.1 Around 40% of Urology work is cancer related and in addition to intensive assessment, diagnostics and treatment requirements, there is also a requirement for considerable patient follow-up, support and surveillance services. Cancer becomes more common with increasing age with almost 2 out of every 3 cancers diagnosed in people aged 65 and over.

7.2 Cancer of the prostate, testis, penis, kidney and bladder as a group has the highest volume of cancer incidence than any other specialty, with 1,246 incidence recorded on the cancer registry for 2007. The next highest is breast, followed by colorectal and lung.

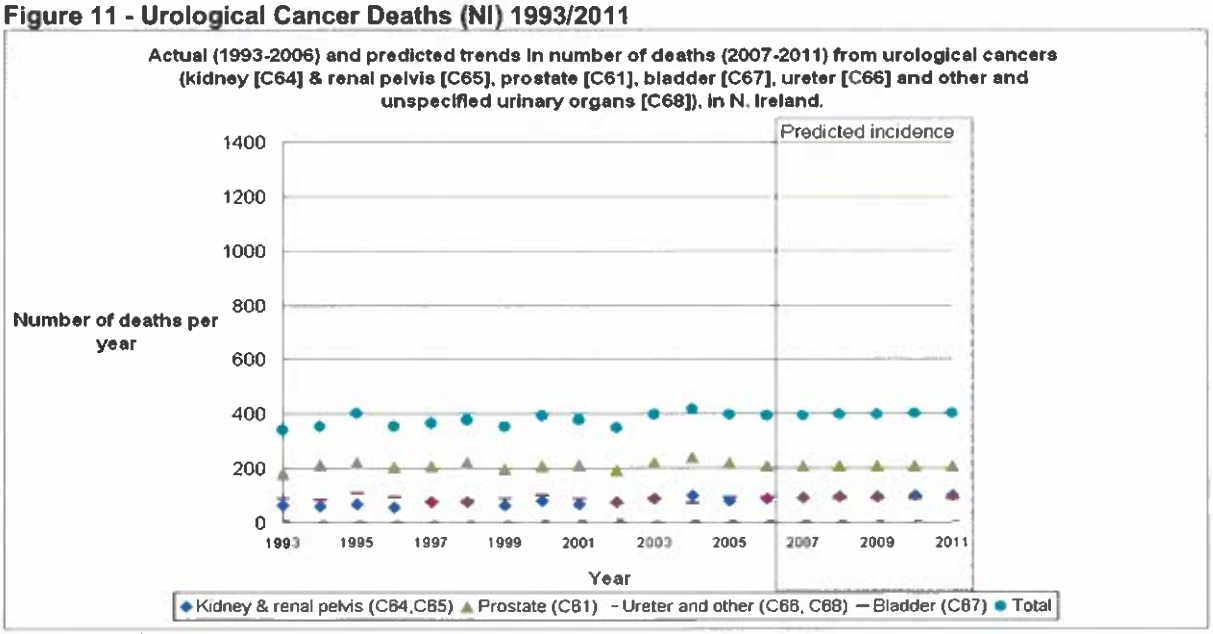
Cancer Incidence and Mortality

Figure 10- Urological Cancer Incidence (NI) 1993 to 2011



Source: NI Cancer Registry

Figure 11 - Urological Cancer Deaths (NI) 1993/2011



Source: NI Cancer Registry

7.3 Bladder and ureter incidence has been and is likely to remain stable (approximately 230).

7.4 Kidney cancer incidence has increased by almost 50% between 1993 and 2006 (196 in 2006), with a corresponding rise in deaths. By 2011, there could be further slight increases.

7.5 Prostate cancer incidence increased by 70% between 1993 and 2006 (817 in 2006). By 2011, it is predicted to increase by a further 20% compared with current incidence, but the number of deaths remains stable.

7.6 Prostate cancer is the second most frequently diagnosed cancer among men of all ages; testicular cancer, although relatively infrequent, is nevertheless the most common cancer in men under 45 years of age. Cancer of the penis, by contrast, is rare. Cancers of the kidney and bladder are roughly twice as common among men.

7.7 The main presenting symptoms of primary urological tumours fall into 3 groups:

- Lower urinary tract symptoms
- Haematuria and
- Suspicious lumps.

7.8 Haematuria is the most common symptom of both bladder and kidney cancer, although kidney cancer is often asymptomatic until it reaches a later stage.

7.9 Early, asymptomatic prostate cancer is being diagnosed more in recent years due to increase use of PSA testing and men's health awareness programmes.

Guidance and Standards

7.10 The NI Report "Cancer Services: Investing in the Future" (The Campbell Report) published in 1996 recommended that delivery of cancer services should be at three levels: Primary Care, Cancer Units and the Cancer Centre. The 2000 Review of Urological Services in Northern Ireland endorsed the principles of the Campbell Report and took account of them in their recommendations.

7.11 In 2002, NICE published guidance on cancer services-"Improving Outcomes in Urological Cancers-The Manual" (IOG).

7.12 The key recommendations from IOG are in Appendix 6. The recommendations relate to the requirement to have dedicated, specialist, multidisciplinary Urological cancer teams, making major improvements in information and support for patients and carers, with nurse specialist having a key role in these services, and having specific arrangements in place to undertake radical surgery for prostate and bladder cancer.

7.13 In 2008, under the auspices of NICaN (Northern Ireland Cancer Network) a new Urological tumour group was set up and has to date met on three occasions. Mr H Mullen chairs this group with Mr P Keane, Consultant Urologist, Belfast Trust, serving as the lead clinician. Mr Keane is also a member of the Review Steering

Group (as a NICAN lead) along with Dr D Hughes, NICaN Medical Director and Mrs B Tourish, NICaN, Clinical Network Co-ordinator.

7.14 The NICaN Group has agreed priority areas of work, based on IOG, including the development and implementation of formal dedicated MDTs / MDMs, implementing referral guidelines and agreed pathways for diagnostics and treatment of each of the cancers, developing patient information and guidance and ensuring suitable arrangements are in place prior to the Peer Review planned for 2010.

Recommendation

18. The NICaN Group in conjunction with each Trust and Commissioners should develop and implement a clear action plan with timelines for the implementation of the new arrangements/enhanced services in working towards compliance with IOG.

7.15 A key element of IOG is the requirement to undertake radical pelvic surgery on a single site, serving a population of 1 million or more, in which a specialist team carries out a cumulative total of at least 50 such operations (prostatectomy (M61)and cystectomy (M34) per annum.

7.16 Tables 11 and 12 outline the number of radical pelvic operations carried out in 2006/07 and 2007/08 by Trust and Consultant.

Table 11 – Radical Pelvic Surgery 2006/07

Trust	Consultant	M34 Bladder	M61 Prostate	Total
BHSCT	Cons A	3	11	*14*
	Cons B	8	14	*22*
	Cons C	9	11	*20*
	Cons D	5	0	*5*
Total		**25**	**36**	***61***
SHSCT	Cons A	3	1	*4*
	Cons B	8	5	*13*
	Cons C	2	5	*7*
Total		**13**	**11**	***24***
WHSCT	Cons A	3	17	*20*
Total		**3**	**17**	***17***
Grand Total		**41**	**64**	***105***

Table 12 – Radical Pelvic Surgery 2007/08

Trust	Consultant	M34 Bladder	M61 Prostate	Total
BHSCT	Cons A	6	12	*18*
	Cons B	7	18	*25*
	Cons C	20	12	*32*
	Cons D	3	0	*3*
	Cons E	1	0	*1*
Total		**37**	**42**	***79***
SHSCT	Cons A	0	1	*1*
	Cons B	3	1	*4*
	Cons C	5	3	*8*
	Cons D	0	3	*3*
Total		**8**	**8**	***16***
WHSCT	Cons A	0	7	*7*
Total		**0**	**7**	***7***
Grand Total		**45**	**57**	***102***

7.17 The Northern and South Eastern Trust do not undertake such operations and patients requiring/choosing radical surgery are referred to BCH.

7.18 In 2007/08 77% of radical pelvic operations were undertaken in Belfast Trust (BCH). Neither the Southern or Western Trust (separately or together) undertake the required number (50) of such operations. Four of the existing Consultants undertake small (<5) numbers of each of the procedures. With a total of just over 100 procedures a year, a population less than 2 million and, with the potential for this activity to reduce with the implementation of a brachytherapy service in the next year, a single site for radical pelvic surgery is considered to be the appropriate way forward if IOG compliance is to be achieved.

Recommendations

19.	By March 2010, at the latest, all radical pelvic surgery should be undertaken on a single site, in BCH, by a specialist team of surgeons. The transfer of this work should be phased to enable BCH to appoint appropriate staff and ensure infrastructure and systems are in place. A phased implementation plan should be agreed with all parties.

20.	Trusts should ensure that surgeons carrying out small numbers (<5 per annum) of either radical pelvic operation, make arrangements to pass this work on to more specialised colleagues, as soon as is practicably possible, (whilst a single site service is being established).

8. CLINICAL WORKFORCE REQUIREMENTS

Consultant staffing

8.1 In 1996, BAUS (British Association of Urological Surgeons) recommended a Consultant: Population ratio of 1:80,000 by 2007. In 1999 the ratio in Northern Ireland was 1:167,000 population reducing to 1:103,000 population at the time of the review in 2009, with a funded establishment of 17 wte Consultants.

8.2 In the 2000 "Report of a working group on Urological Services in Northern Ireland" a ratio of 1:100,000 population was recommended due to Northern Ireland's younger age profile. BAUS had indicated that the demand for Urological Services is related to the age structure of the population and specifically with the proportion of 65 years.

8.3 In 1996, the percentage of those aged 65 years and over in Northern Ireland was 12.85% and at this time was considerably lower than in England (15.8%) and Wales (15.2%). By 2007 Northern Ireland's percentage of over 65 had risen to 14.1% and is predicted to rise further to 16.7% by 2018.

8.4 A total population of 1.76 million in 2008 and a Consultant to population ratio of 1:80,000, would equate to a funded establishment of 22 wte Consultant Urologists.

8.5 The NI Urology SAC (Specialist Advisory Committee), in estimating the number of higher specialist trainees required by 2018, have used a Consultant Urologist workforce of 38 wte by 2018. In projecting future staffing, SAC took account of "Developing a Modern Surgical Workforce" published by the Royal College of Surgeons in England (2005) and subsequent interim review of October 2006. The Royal College suggests that for a population of 1 million the requirement will be 8-9 specialist surgeons and 8-10 generalists.

8.6 Based on an average age of retirement of 60 years of age, the anticipated retirements in Urology between 2009 - 2018 is four. Taking this into account along with the Royal Colleges projected future staffing requirements, SAC have recommended an increase in the number of higher specialist trainees from the current 8 at ST3+ (year 3 and above) to up to 15 by 2018.

8.7 SAC have confirmed that they are content, at this time, with the Consultant to population ratio proposals within this review i.e. 1:80,000.

Consultant Programme

8.8 Guidelines for a Consultant job plan (agreed by the Royal College of Surgeons and adopted by the Association of Surgeons of Great Britain and Ireland) are based on a commitment of 10 notional half days.

8.9 The traditional Consultant contract has 6 + 1 (special interest) fixed sessions with 3 flexible sessions. BAUS Council recommend a 5 + 1 fixed session contract with 4 flexible sessions for Consultant Urologists.

"A Quality Urologist Service for Patients in the New Millennium - Guidelines on Workload, Manpower and Standards of Care" (BAUS 2000) recommends a typical job plan as outlined below:

Operating Theatre	3 NHD
Outpatient Clinics	2 NHD
Specialist Interest	1 NHD
Ward Round plus on-call	1 NHD
Post Graduate Education:	1NHD

To Include:

- Audit, teaching
- Pathology and X-ray meetings
- Clinical Governance
- Quality Assurance
- Mortality and Morbidity meetings

Flexible commitment	2 NHD

On-call rota 1:5

- *Special interest sessions may be used to provide additional operating, specific outpatient clinics, uro dynamics, lithotripsy or to supervise the research activities of the Department.*
- *Involvement in clinical management, audit and clinical governance will occupy significant clinical time and provision must be made for these activities within the job plan, as should participation in MDM's for all Urologists.*
- *Flexible sessions cover duties, which may be performed at different times, over different weeks and even sometimes outside standard working hours. These will include clinic administration, travel, inter-departmental referral and continuing clinical responsibility. They will also include time spent after operating sessions and clinics "tidying the desk", talking to patients relatives, visiting patients on the ward prior to operation, reviewing patient notes, results and ensuring that these are made known to patients and to the relevant medical practitioners.*

Workloads

8.10 Both BAUS and The Royal College of Surgeons outline similar workloads/activity that can be expected from a Consultant's working week, based on a 42 week working year.

8.11 **Outpatients (new and review) -** A Consultant working alone should see between 1176 and 1680 patients per annum. *Consultants with a major sub specialty interest e.g. oncology, will see significantly fewer patients due to case complexity and a need to allocate more time to each patient. Teaching, particularly under graduates and house officers, will also reduce the number of cases per clinic.*

8.12 To allow sufficient time for proper assessment and counselling, it is accepted practice to allow approximately 20 minutes for a new patient consultation and 10 minutes for a follow-up consultation. Therefore in a standard clinic an Urologist, working on his own should see 7 new patients and 7 follow-up patients. This can be

adjusted locally depending on case complexity up to a maximum of 20 patients (new and review) per clinic.

8.13 **In patient/day case activity -** *The average Consultant Urological Surgeon, and his team, should be performing between a 1000 and 1250 inpatient and day patient FCEs per annum. The exact number will depend on sub specialty interest, case mix, the number of operating sessions in the job plan and whether the Urologist has an obligation to train a specialist registrar. For example, some specialists in oncology, who perform lengthy complex procedures, would be expected to have fewer FCEs than their generalist counterparts.*

8.14 The activity analysis outlined in section 4 of the report outlines projected activity of 21,571 episodes in 2008/09. This figures includes in-house additional activity provided by Trusts but excludes activity sent out to the Independent Sector. With no further reduction in elective waiting times in 2009/10, it will be possible to make a more robust assessment of recurrent demand during the year.

8.15 The activity delivered by Trusts in 2008/09 equates to 21.5 wte consultant staff, taking account of the average workload figures above. However, due to complexity/casemix issues not all Consultants will perform the average number of FCEs. For example, with the creation of single site for radical pelvic surgery there will be a requirement for an additional Uro-oncology Consultant at the BCH.

Recommendation

21.	To deliver the level of activity from 2008/09 and address the issues around casemix and complexity it is recommended that the number of Consultant Urologists is increased to 23 wte.

8.16 This level of investment in staffing infrastructure will allow Urology services to be recurrently provided at 2008/09 outturn levels. In terms of future proofing, Trusts will be required to look at further efficiencies within existing capacity with a view to increasing the average workload per Consultant to the higher level in the context of changing demographics with an older population which will place additional demands on Urology services over the coming years. This is particularly relevant to the Northern and Southern Trusts where Consultant workloads are significantly below their peer colleagues and BAUS guidelines.

Recommendation

22.	Urology Teams must ensure that current capacity is optimised to deliver the number FCEs by Consultant as per BAUS guidelines (subject to casemix and complexity). This may require access to additional operating sessions up to at least 4 per week (42 weeks per year) and an amendment to job plans.

Nurse Staffing

8.17 The additional nursing and support staff requirements to support the additional clinics and theatre sessions that will be implemented with the appointment of new Consultants are included in the estimated costing in Appendix 7.

8.18 To ensure high quality nursing services and effective and efficient use of highly specialised equipment and instruments it is essential that nurses working in Urology wards, theatres and other departments are fully trained and competent in the field of Urology.

8.19 Specialist nurses and practitioners have a key and expanding role to play in a modern Urology Service. There are many examples of nurses, within and outwith ICATS teams, undertaking assessment, diagnostic, treatment and follow-up of areas of Urology such as erectile dysfunction, LUTS (Lower Urinary Tract Symptoms), haematuria clinics, stones etc.

8.20 Specialist (Uro-Oncology) nurses must be dedicated, fully participating members of any cancer MDT, actively represent the patient's interests at MDM's and have a key role to play in carrying out detailed assessment of patients needs in order to provide, or coordinate good care. They have a particular role to play at "results" clinics and in assisting patients and carers in making informed decisions and choices regarding treatment options, the management of and living with the symptoms and consequences of their cancer and the treatments/interventions.

8.21 Under the auspices of NICaN, in collaboration with the senior nurses for cancer services across the Northern Ireland and English networks, a number of cancer site specific, clinical nurse specialist benchmarking censuses have been completed. There are a total of 12 specialist nurses in Urology in Northern Ireland at this time. However, few of these staff are solely dedicated to cancer care and therefore an estimate of the wte (whole time equivalent) has been made. In November 2008 there were estimated to be 4 wte oncology nurse specialists -1.5 in BCH, 2 in Altnagelvin and .5 in the Ulster.

8.22 Table 13 below outlines the results of a benchmarking exercise completed in November 2008, in which each of the cancer networks identified the incidence of cancer and calculated an average caseload per Clinical Nurse Specialist (CNS).

Table 13 - CNS caseload benchmarking data

	Lung	Breast	Urology	Colo-rectal	Gynae	Upper GI	Haem	Skin	Head & Neck	Brain
Cancer incidence	845	1,031	1,246	995	450	562	411	208	127	109
Total no CNS in post 2008	7.5	14	4	3	2	1	3	3	2	1
NI mean caseload	112	73	311	331	225	562	137		63	109
England mean caseload	122	81	131	89	77	98	70		66	81
Additional nos needed	3	2	5	4	4	3.5	5	1	2.5	1
Future NI mean caseload	80	64	138	142	75	125	52		51	54.5

8.23 There are higher numbers of Urological cancer incidences than in any other speciality and these CNSs have the third highest (upper GI is the highest at 562) mean caseload at 311, which is more than double the English mean caseload.

8.24 This shortfall will need to be addressed if significant improvements are to be made in the cancer pathways, waiting times, support and follow-up for Urology patients in Northern Ireland.

Recommendation

23.	At least 5 Clinical Nurse Specialists (cancer) should be appointed (and trained). The deployment of these staff within particular teams will need to be decided and Trusts will be required to develop detailed job plans with caseload, activity and measurable outcomes agreed prior to implementation. A further review and benchmarking of cancer CNSs should be undertaken in mid 2010.

Radiology Staffing

8.25 The assessment and diagnostics of Urological diseases/conditions involves intensive and high volumes of radiology services across a broad range of modalities-ultrasound (KUB, TRUS), IVP, CT and MRI scans, along with the provision of an interventional radiology service. As Urology services are redesigned and streamlined, radiology services will be required to respond and adapt to the new service models and pathways and in particular accommodate more single visit haematuria, LUTS, prostate and stones clinic.

8.26 In addition to any further investment, radiology services will be required to ensure optimum and enhanced use of current available capacity by modernising and reforming the systems and processes currently in place.

8.27 In recognition of the significant capacity gap in Urology to meet the growing demand, a number of additional Consultants will be appointed and a significant number of additional patients will need to be assessed and treated internally. Additional radiology staffing to support these appointments (included in the estimated costs in Appendix 7) has been calculated using the Adenbrookes formula of .3 wte Consultant Radiologist per wte Consultant Urologist and a ratio of 6 wte band 5 Radiographers per wte Radiologist.

Pathology and Radiotherapy Services

8.28 It is recognised with the volumes of Urological cancers, the Urology service is a high user of both pathology and radiotherapy services. However, given the work being undertaken by NICaN, within the Cancer Services Framework and the supporting cancer investment plan, and the Pathology Services Review, published in December 2007, it was agreed that the current Urology review would not include a detailed assessment of these services. Investment in an additional band 7, BMS is however included in the estimated costs in appendix 7, in recognition of the increased diagnostic workload associated with growing PSA work and the centralisation of radical pelvic surgery on the BCH site.

9. SERVICE CONFIGURATION MODEL

9.1 In section 6 the key challenges currently being faced by the service were outlined. In summary, these related to the capacity to deliver a modern, quality service and the ability to achieve and sustain long term stability and viability, with a stable workforce that can continue to attract the necessary expertise across all of the professions.

9.2 It has been recognised that investment in additional capacity and staff will not on its own resolve the challenges relating to long term service stability. This will require a reconfiguration of teams/services into more sustainable units thus enabling the service to make the best use of any investment made.

9.3 A number of models (6) for future service delivery were developed. These ranged from 5 teams in NI, with each Trust having its own discrete urology service and its staffing and workload based on its current catchment population, to 2 teams in NI.

9.4 A sub group of clinicians, Trust and Board Managers developed criteria and a weighted scoring system against which each of the models could be assessed. The 5 criteria (Appendix 8) were:

- Service stability/sustainability (population, team size, dedicated skilled radiology and nursing staff, rotas and EWTD.
- Feasibility (ease and speed of implementation).
- Compliance with DHSSPS policy/strategy, commissioner intent/support, compatibility with Trusts strategic development plans and impact on other services.
- Inpatient accessibility.
- Organisational complexity.

9.5 At the Steering Group meeting on 20 January 2009, each of the 6 models was evaluated against the agreed criteria. Model 3 (Appendix 9) was agreed as the preferred model and was deemed to be the most appropriate way forward for urology services.

Recommendation

24.	Urology services in Northern Ireland should be reconfigured into a 3 team model, to achieve long term stability and viability.

9.6 Model 3 comprises 3 teams, which for ease of description are called Team North, Team South and Team East. Table 14 below outlines the main elements of each of these teams.

Teams	Geographical Area/ Catchment Population	Consultant Staffing/Suggested Special Interest Areas**	Arrangements for Elective and Non Elective Services
Team North	Upper2/3rd of Northern* and Western integrate to form one Team/Network. Catchment population circa 480,000	Six wte All core Urology Uro-oncology – 2 Stones/endourology – 2* Functional/female Urology – 1 Andrology – 1	One on-call rota (1:6). One local MDT/MDM.*** Main acute elective and non elective inpatient unit in Altnagelvin Approximately 7 elective beds in Causeway(Selected minor/intermediate cases) Day surgery – Altnagelvin, Causeway, Tyrone County Outpatients – Altnagelvin, Causeway, Tyrone County, Roe Valley May wish to consider outreach outpatient and/or day case diagnostics in Mid-Ulster *Mobile ESWL (Lithotripter) on Causeway site
Team South	Lower 1/3rd Western (Fermanagh) and all of Southern integrate to form one Team/Network. Catchment population circa 410,000	Five wte All core Urology Uro-oncology – 2 Stones/endourology – 2* Functional/female Urology – 1	One on-call rota (1:5). One local MDT/MDM.*** Main acute elective and non elective inpatient unit in Craigavon Day surgery – Craigavon, South Tyrone, Daisy Hill Outpatients – Craigavon, South Tyrone, Daisy Hill, Banbridge, Armagh May wish to consider outreach outpatients and/or day case diagnostics in Erne/ Enniskillen *Static/fixed ESWL (lithotripter) on Craigavon site.
Team East	SET + Belfast integrate to form one Team/Network-continue to provide service to patients from Southern sector of Northern Trust (Newtownabbey, Carrickfergus, Larne, ?Antrim). Catchment population circa 870,000 Complex cancer catchment 1.76m	Twelve Wte All core Urology Uro-oncology/cancer centre – 4 Stones/endourology – 3* Functional/female Urology – 2 Reconstruction – 3	One on-call rota (1:12) (may wish to consider 2nd tier on-call). One local MDT/MDM plus regional/specialist MDM.*** Main acute elective and non elective unit in BCH, with elective also in Mater and Ulster Day surgery – BCH, Mater, Lagan Valley, Ards, Downe Outpatients – BCH, Ulster, Mater, Royal, MPH, Ards, Lagan Valley, Downe Should provide outreach outpatient, day case diagnostics and day surgery in Antrim and/or Whiteabbey/Larne *Mobile ESWL lithotripter on BCH site.

Table 14 Elements and Arrangements in Three Team Model

*Population estimates for local District Council areas in Appendix 10. Precise catchment 'lines' on map to be clarified.

** Suggested special interest areas derived from discussions with clinicians and from BAUS guidelines.

*** MDM reconfiguration has been approved by NICaN Group

9.7 In response to concerns expressed at the Steering Group Meeting in January 2009, Speciality Advisor (local and 'Island of Ireland') advice was sought around the issue of a single handed Consultant doing on-call from home covering elective and non elective patients on different sites. The advice has confirmed that such arrangements are possible and that a similar situation exists in other specialties e.g. Trauma and Orthopaedics.

9.8 Urologists have advised that there are very few occasions when a Consultant's presence is required, out of hours, to deal with an elective post operative complication/event. Equally, as described in the previous section of this report, the vast majority of non elective admissions, out of hours, do not require a Consultant's intervention. However, surgeons undertaking elective inpatient surgery on a site other than the main acute unit should use morning lists so as to further ameliorate the impact of out of hour's events. They can minimise the impact further through careful choice of the nature and type of surgery undertaken.

Recommendations

25.	Teams North and East (Northern, Western, Belfast and South Eastern Trusts) should ensure that prior to the creation of the new Teams, there are clear, unambiguous and agreed arrangements in place with regard to Consultant on-call and out of hours arrangements.

26	Each Trust must work in partnership with the other Trust/s within the new team structure to determine and agree the new arrangements for service delivery, including inter alia, governance, employment and contractual arrangements for clinical staff, locations, frequency and prioritisation of outreach services, areas of Consultant specialist interest based on capacity and expertise required and catchment populations to be served.

10. IMPLEMENTATION ISSUES

10.1 To implement the review recommendations a recurrent (full year) investment of £2.875m has been estimated (Appendix 7). Commissioners will need to consider the method of allocating funding to support the full implementation of the recommendations, particularly with regard to aligning the allocation to the additional Consultant distribution profile.

10.2 Trusts and Commissioners will need to take forward discussions with General Practitioners around referral pathways and patient flows in the context of the proposed three team model.

10.3 Trusts will be required to submit detailed business cases prior to funding being released.

10.4 Trusts and Commissioners will need to agree timescales and the measurable outcomes in terms of additional activity, improved performance, a phased reduction in Independent Sector usage and service reform and modernisation plans.

10.5 The implementation of the recommendations of the review may/ will require capital investment to put in place additional physical infrastructure such and to fund equipment associated with technologically driven sub-specialty areas. e.g. endo-urology, reconstruction, laser surgery. Where capital requirements are identified, Trusts should process these bids through their normal capital and business planning cycle.

10.6 The new Teams (Trust partnerships) will be required to submit project plans for implementation of the new arrangements which is envisaged to be on a phased and managed basis. The new Health and Social Care Board will establish an Implementation Board to oversee the process.

GLOSSARY OF TERMS/ABBREVIATIONS

BADS- British Association of Day Surgery

BPH – Benign Prostatic Hyperplasia
A non –cancerous condition in which an overgrowth of *prostate* tissue pushes against the *urethra* and the bladder, restricting or blocking the normal flow of urine. Also known as benign prostatic hypertrophy. This condition is increasingly common in older men.

Biopsy
Removal of a sample of tissue or cells from the body to assist in diagnosis of a disease.

Bladder reconstruction
A surgical procedure to form a storage place for urine following a *cystectomy*. Usually, a piece of bowel is removed and is formed into a balloon-shaped sac, which is stitched to the *ureters* and the top of the urethra. This allows urine to be passed in the usual way.

Brachytherapy
Radiotherapy delivered within an organ such as the prostate.

CNS
Clinical Nurse Specialist

Cystectomy
Surgery to remove all or part of the bladder.

Cystoscope
A thin, lighted instrument used to look inside the bladder and remove tissue samples or small tumours.

Cystoscopy
Examination of the bladder and *urethra* using a *cystoscope*.

ED
Erectile dysfunction

EWTD
European Working Time Directive

Genital
Referring to the external sex or reproductive organs.

Haematuria
The presence of blood in the urine. Macroscopic haematuria is visible to the naked eye, whilst microscopic haematuria is only visible with the aid of a microscope.

HES/Hospital Episode Statistics
HES is the national statistical data warehouse for England of the care provided by NHS hospitals and NHS hospital patients treated elsewhere.

Incontinence
Inability to control the flow of urine from the bladder (urinary) or the escape of stool from the rectum (faecal)

IVP – Intravenous Pyelogram
An x-ray examination of the kidneys, ureters and urinary bladder that uses iodinated contrast material injected into veins.

KUB
Kidney, Ureter, Bladder (Ultrasound)

Laparascopic surgery
Surgery performed using a laparascope; a special type of endoscope inserted through a small incision in the abdominal wall.

LUTS
Lower Urinary Tract Symptoms

MRI - Magnetic resonance imaging
A non-invasive method of imaging which allows the form and metabolism of tissues and organs to be visualised (also known as nuclear magnetic resonance).

MDMs
Mutli-disciplinary meetings

MDTs
Mutli-disciplinary teams

NICaN
Northern Ireland Cancer Network

Oncology
The study of the biology and physical and chemical features of cancers. Also the study of the causes and treatment of cancers.

Prostatectomy
Surgery to remove part, or all of the *prostate gland*. Radical prostatectomy is the removal of the entire *prostate gland* and some of the surrounding tissue.

Prostate gland
A small gland found only in men which surrounds part of the urethra. The prostate produces semen and a protein called *prostate specific antigen (PSA)* which turns the semen into liquid. The gland is surrounded by a sheet of muscle and a fibrous capsule. The growth of prostate cells and the way the prostate gland works is dependent on the male hormone *testosterone*.

PSA – Prostate Specific Antigen
A protein produced by the *prostate gland* which turns semen into liquid. Men with prostate cancer tend to have higher levels of PSA in their blood (although up to 30% of men with prostate cancer have normal PSA levels). However, PSA levels may also be increased by conditions other than cancer and levels tend to increase naturally with age.

Radical treatment
Treatment given with curative, rather than *palliative* intent.

Radiologist
A doctor who specialises in creating and interpreting pictures of areas inside the body. The pictures are produced with x-rays, sound waves, or other types of energy.

Radiotherapy
The use of radiation, usually x-rays or gamma rays, to kill tumour cells. Conventional external beam radiotherapy also affects some normal tissue outside the target area. Conformal radiotherapy aims to reduce the amount of normal tissue that is irradiated by shaping the x-ray beam more precisely. The beam can be altered by placing metal blocks in its path or by using a device called a multi-leaf collimator. This consists of a number of layers of metal sheets which are attached to the radiotherapy machine; each layer can be adjusted to alter the shape and intensity of the beam.

Renal
Of or pertaining to the Kidneys.

Resection
The surgical removal of all or part of an organ.

Scrotum
The external sac that contains the testicles.

Testicle or testis (plural testes)
Egg shaped glands found inside the scrotum which produce sperm and male hormones.

TRUS Tran-rectal ultrasound (TRUS)
An *ultrasound* examination of the prostate using a probe inserted into the rectum.

Trans-uretharal resection (TUR)
Surgery performed with a special instrument inserted through the urethra.

Trans-urethral resection of the prostate (TURP)
Surgery to remove tissue from the prostate using an instrument inserted through the urethra. Used to remove part of the tumour which is blocking the urethra.

Ultrasound
High-frequency sound waves used to create images of structures and organs within the body.

Ureters
Tubes which carry urine from the kidneys to the bladder.

Urethra
The tube leading from the bladder through which urine leaves the body.

Urogenital system
The organs concerned in the production and excretion of urine, together with the organs of reproduction.

Urologist
A doctor who specialises in diseases of the urinary organs in females and urinary and sex organs in males.

Urology
A branch of medicine concerned with the diagnosis and treatment of diseases of the urinary organs in females and the urogenital system in males.

Uro-oncologist
A doctor who specialises in the treatment of cancers of the urinary organs in females and urinary and sex organs in males.

Vasectomy
Surgery to cut or tie off the two tubes that carry sperm out of the *testicles*.

WTE
Whole Time Equivalent

APPENDICES

Appendix 1

Regional Urology Steering Group

Membership

Mr Hugh Mullen (Chair)	SDU, Director of Performance and Provider Development
Mr Mark Fordham	External Advisor, Consultant Urologist
Ms Catherine McNicholl	SDU, Programme Director (Project Manager)
Mr Paul Cunningham	SDU, Performance Manager
Dr Hubert Curran	SDU, Primary Care Advisor
Dr Windsor Murdock	SDU, Primary Care Advisor
Dr Miriam McCarthy	DHSS&PS, Director Secondary Care
Dr Dermot Hughes	NICaN, Medical Director
Mr Patrick Keane	Belfast Trust, Lead Clinician NICaN Urology Group
Dr Diane Corrigan	SHSSB, Consultant Public Health
Dr Janet Little	EHSSB, Acting Director Public Health
Dr Christine McMaster	EHSSB, Specialist Registrar, Public Health
Dr Adrian Mairs	NHSSB, Consultant Public Health
Mr Alan Marsden	NHSSB, Elective Care Commissioning Manager.
Dr Bill McConnell	WHSSB, Director Public Health
Mrs Rosa McCandless	WHSSB, Information Manager
Mrs Karen Hargan	Western Trust, Assistant Director Surgery/Acute Services
Mr Colin Mulholland	Western Trust, Consultant Urologist
Ms Carmel Leonard	Western Trust, Lead Nurse Surgery
Mr Paul Downey	Northern Trust, Consultant Urologist
Mr Martin Sloan	Northern Trust, Director Elective and

	Acute Services
Dr Brian Armstrong	Belfast Trust, Co-Director Specialist Services
Mr Chris Hagan	Belfast Trust, Consultant Urologist
Mr Brian Duggan	Belfast Trust, Consultant Urologist
Mr Brian Best	South Eastern Trust, Consultant Urologist
Mr John McKnight	South Eastern Trust, Consultant Urologist
Mrs Diane Keown	South Eastern Trust, Assistant Director Surgery.
Ms Joy Youart	Southern Trust, Acting Director Acute Services
Mr Michael Young	Southern Trust, Consultant Urologist
Mrs Jenny McMahon	Southern Trust, Nurse Specialist.

Appendix 2

Regional Review of Adult Urology Services

Terms of Reference

Overall Purpose

To develop a modern, fit for purpose in the 21st century, reformed service model for Adult Urology services which takes account of relevant Guidelines (NICE, Good Practice, Royal College, BAUS, BAUN). The future model should ensure quality services are provided in the right place, at the right time by the most appropriate clinician, through the entire pathway from Primary Care to Intermediate to Secondary and Tertiary Care.

It is anticipated that the Review Report will be available for submission to the Department in December 08, subject to Steering Group approval. A multi-disciplinary, key stakeholder Steering Group, chaired by Mr Hugh Mullen will meet to consider and approve the review findings and proposals.

The Review will include the following;

1. Baseline assessment of current service model identifying what is provided where, by whom, performance against access standards and the current profile of investment.

2. Expand on the current capacity/demand modelling exercise to take account of case mix with a view to identifying capacity gaps and informing future investment plans.

3. Develop a service model with agreed patient pathways which informs the distribution of services. The model will also outline proposals for optimising safe, effective and efficient Urology services which meet both access and quality standards/outcomes. The following aspects of the service will be considered;

    - Management of referrals and diagnostics including urodynamics.
    - Development and use of ICATS services
    - Management of acute urological admissions
    - Core Urology (secondary care) Services
    - Andrology Services
    - Interventional Uro-Radiology
    - Endourology/Stone Service
    - Uro-oncology Services
    - Relationship with Uro-gynaecology Services
    - Reconstruction and Neurourology Service
    - Acute Urological management of nephrology patient

4. Make recommendations, as appropriate, on the relationship with the Transplant service and waiting time targets for live donor transplantations.

5. Review workforce planning and training / development needs of the service group and ensure any proposals take account of the need to comply with EWTD (European Working Time Directive.

Appendix 3

UROLOGY REPORTS/ REVIEWS

Northern Ireland Review Reports

Report of the EHSSB Sub Group on Urological Cancer	Sept 1997
Report of the Working Group on Urology Services in Northern Ireland	May 2000
Update on Urology Cancer Services in the EHSSB	Oct 2001
External Review of Urology Services for Craigavon Area Hospital Group	Aug 2004
Draft Service Framework for Cancer Prevention, Treatment and Care – (Urology section)	Version 7 June 2008

National Reports

BAUS – A Quality Urological Service for Patients in the New Millennium	Oct 2000
BAUS – The Provision of Urology Services in the UK	Feb 2002
NICE – (Guidance on Cancer Services) Improving outcomes in Urological Cancers	Sept 2002
Modernisation Agency – Action on Urology – Good Practice Guide	Mar 2005
Providing Care for Patients with Urological Conditions: guidance and resources for commissioners (NHS)	2008
NICE – Urinary Incontinence: the management of urinary incontinence in women	2006
NICE – Prostate Cancer: diagnosis and treatment	2008
NICE – (Urological) Referral guidelines for suspected cancer	2005

Appendix 4

GP REFERRAL EXERCISE - PERCENTAGES

Gender	Belfast	Northern	Western	Southern	SE	Regional Average
Male	77	74	76	79	75	76
Female	23	25	22	21	25	23
Blank	0	2	2	0	0	1
Total	**100**	**100**	**100**	**100**	**100**	**100**
Age Range	**Belfast**	**Northern**	**Western**	**Southern**	**SE**	**Regional Average**
0-14	1	0	0	2	0	1
15-30	12	8	11	6	10	10
31-40	13	8	11	15	5	11
41-50	20	17	9	13	7	15
51-60	13	25	20	11	5	14
60+	41	42	49	53	12	38
Blank	0	2	0	0	60*	12
Total	**100**	**100**	**100**	**100**	**100**	**100**
Urgency	**Belfast**	**Northern**	**Western**	**Southern**	**SE**	**Regional Average**
Red Flag	4	4	7	6	5	5
Urgent	21	21	22	19	16	20
Routine	75	75	71	75	78	75
Blank	0	0	0	0	0	0
Total	**100**	**100**	**100**	**100**	**100**	**100**
Named Cons	**Belfast**	**Northern**	**Western**	**Southern**	**SE**	**Regional Average**
Y	24	25	13	23	21	22
N	76	75	87	77	79	78
Total	**100**	**100**	**100**	**100**	**100**	**100**
Ref Source	**Belfast**	**Northern**	**Western**	**Southern**	**SE**	**Regional Average**
Non-GP ref's	10	23	2	9	19	13
GP Ref's	90	77	96	91	81	87
Blank	0	0	2	0	0	0
Total	**100**	**100**	**100**	**100**	**100**	**100**

* 44 out of 73 referrals in SET had DOB deleted-therefore not possible to record age range.

Appendix 5

GP REFERRAL EXERCISE – PRESENTING SYMPTOMS (PERCENTAGES)

Presenting Symptom/Condition		Belfast		Northern		Western		Southern		SE		Regional	
Haematuria (ALL)		**13**		**19**		**22**		**9**		**16**		**15**	
	frank		*58*		*30*		*40*		*40*		*50*		*46*
	microscopic		*32*		*50*		*60*		*40*		*50*		*45*
	blank		*11*		*20*		*0*		*20*		*0*		*9*
Prostate/raised PSA		**10**		**13**		**18**		**17**		**16**		**14**	
Other		**15**		**8**		**11**		**15**		**11**		**13**	
Ncode procedure (All)		**15**		**4**		**2**		**6**		**19**		**11**	
	vasectomy		*52*		*0*		*100*		*33*		*29*		*41*
	foreskin		*5*		*0*		*0*		*67*		*50*		*24*
	epididymal cyst		*14*		*100*		*0*		*0*		*21*		*20*
	hydrocele		*19*		*0*		*0*		*0*		*0*		*10*
	varicocele		*5*		*0*		*0*		*0*		*0*		*2*
	blank		*5*		*0*		*0*		*0*		*0*		*2*
Recurrent UTI's		**12**		**17**		**9**		**11**		**5**		**11**	
LUTS		**8**		**13**		**4**		**9**		**10**		**9**	
Prostate/BPH/prostatitis		**8**		**9**		**9**		**11**		**3**		**8**	
Renal stones/colic/loin pain		**8**		**9**		**2**		**4**		**5**		**6**	
Testicular/ Scrotal lumps or swelling		**6**		**0**		**11**		**0**		**11**		**6**	
Andrology (ALL)		**5**		**4**		**7**		**11**		**3**		**5**	
	erectile dysfunction		*29*		*100*		*0*		*50*		*50*		*40*
	peyronie's disease		*29*		*0*		*67*		*0*		*0*		*20*
	blood in ejaculate		*43*		*0*		*0*		*0*		*0*		*15*
	ulcer/lesion on gland		*0*		*0*		*33*		*17*		*0*		*10*
	balanitis/discharge		*0*		*0*		*0*		*33*		*0*		*10*
	blank		*0*		*0*		*0*		*0*		*50*		*5*
Unknown		**2**		**2**		**2**		**4**		**0**		**2**	
Ca Bladder/Kidney		**1**		**2**		**0**		**2**		**0**		**1**	
Blank		**0**		**0**		**2**		**0**		**0**		**0**	
Total		**100**		**100**		**100**		**100**		**100**		**100**	

Appendix 6

NICE – Improving outcomes in Urological Cancers (IOG) – The Manual (2002)

Key Recommendations

The key recommendations highlight the main organisational issues specific to urological cancers that are central to implementing the guidance. As such, they may involve major changes to current practice.

- All patients with Urological cancers should be managed by multidisciplinary Urological cancer teams. These teams should function in the context of dedicated specialist services, with working arrangements and protocols agreed throughout each cancer network. Patients should be specifically assured of:
    - Streamlined services, designed to minimise delays;
    - Balanced information about management options for their condition;
    - Improved management for progressive and recurrent disease.
- Members of Urological cancer teams should have specialised skills appropriate for their roles at each level of the service. Within each network, multidisciplinary teams should be formed in local hospitals (cancer units); at cancer centres, with the possibility in larger networks of additional specialist teams serving populations of at least one million; and at supra-network level to provide specialist management for some male genital cancers.
- Radical surgery for prostate and bladder cancer should be provided by teams typically serving populations of one million or more and carrying out a cumulative total of at least 50 such operations per annum. Whilst these teams are being established, surgeons carrying out small numbers (five or fewer per annum) of either operation should make arrangements within their network to pass this work on to more specialist colleagues.
- Major improvements are required on information and support services for patients and carers. Nurse specialist members of urological cancer teams will have key roles in these services.
- There are many areas of uncertainty about the optimum form of treatment for patients with urological cancers. High-quality research studies should be supported, with encouragement of greater rates of participation in clinical trials.

Appendix 7

Estimated Cost of Implementation of Recommendations.

Staffing	Number	Band/Grade	Unit Cost	Total
Consultant Urologist	6	Consultant	£104,000	£624,000
Consultant Anaesthetist @ 0.6 wte per Con. Urologist	3.6	Consultant	£104,000	£374,400
Consultant Radiologist @ 0.3 wte per Con. Urologist	1.8	Consultant	£104,000	£187,200
Radiographer @ 6 per wte Con Radiologist	10.8	Band 5	£27,995	£302,346
Nursing @ 1.8 wte per Con. Urologist	10.8	Band 5	£27,995	£302,346
Nursing @ 0.46 wte per Con. Urologist	2.7	Band 3	£19,856	£53,611
Specialist Nursing	5	Band 7	£41,442	£207,210
Nursing @ 0.64 wte (day surgery)	0.64	Band 5	£27,995	£17,917
Pers. Secretary @ 0.5 wte per consultant urologists	3	Band 4	£23,265	£69,795
Admin support to radiologists at 0.5 wte per Radiologist	1	Band 3	£19,856	£19,856
Admin Support to Specialist Nurses @ 0.5 wte per Nurse	3	Band 3	£19,856	£59,568
Medical Records support 0.5 per unit	2.5	Band 4	£23,265	£58,162
MLSO – Bio-medical Science	1	Band 7	£41,442	£41,442
Support Costs				
Surgical G&S @ £94,500 per Con. Urologist	X 6		£95,400	£567,000
Theatre Goods/Disposables @ £50,000 per Con.Urologist	X 6		£50,000	£300,000
Radiology G&S per Con. Urologist	X 6		£2,500	£15,000
CSSD @ £32,000 per Con. Urologist	X 6		£32,000	£192,000
Outpatients Clinics @ 2 per Con. Urologist	X 12		£10,000	£120,000
Sub Total				**£3,511,853**
Less Consultant funded in 2008				**(£437,076)**
Sub Total				**£3,074,777**
Less 2008/09 Cancer Funds				**(£200,000)**
FINAL TOTAL				**£2,874,777**

Appendix 8

Evaluation Criteria

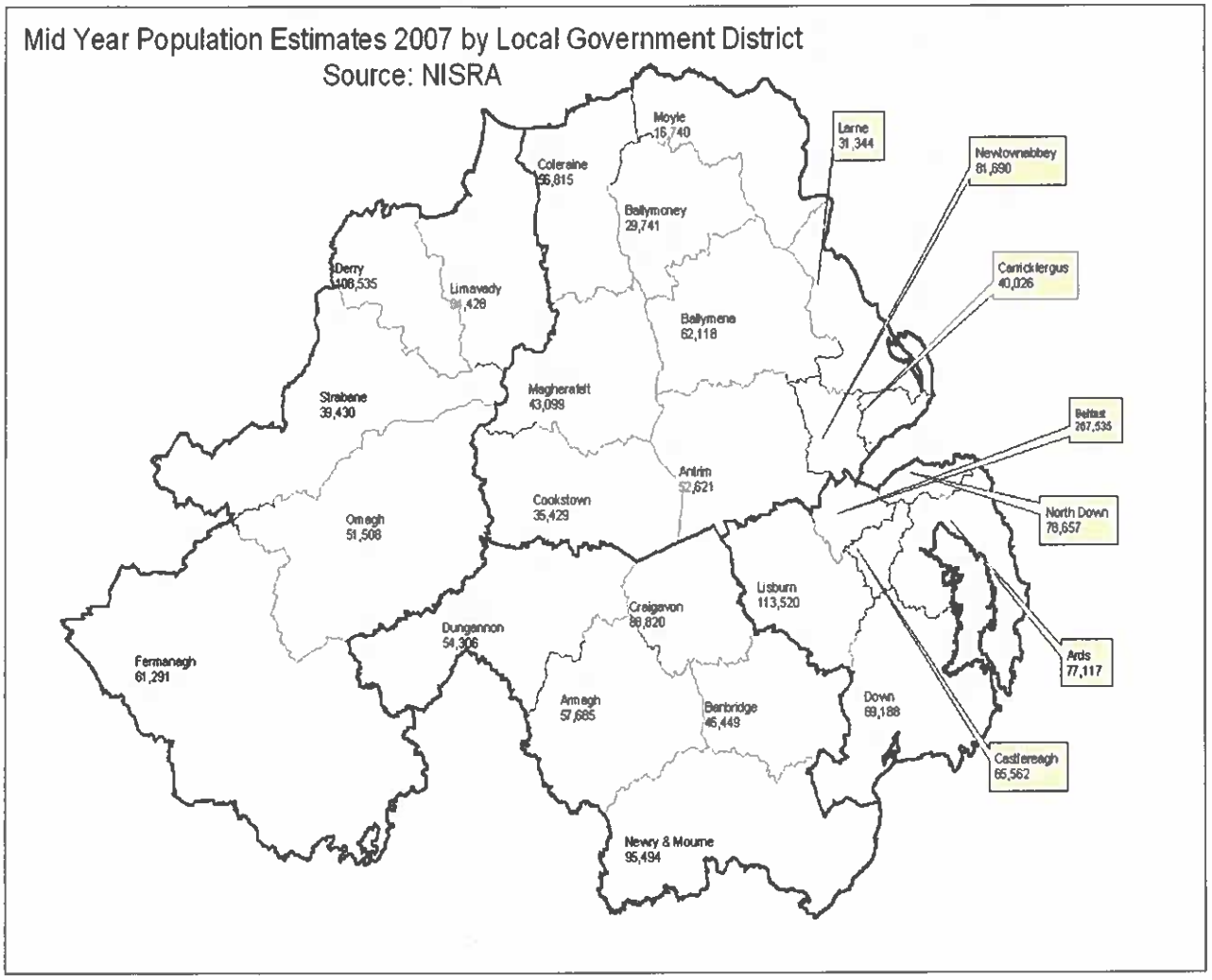
Criteria	Definitions
1. Service Stability / Sustainability	This is the criterion of the highest priority/value. The long term stability and hence viability and success of the service depends on a stable workforce – a workforce that can develop the service further and continue to attract the necessary expertise across all its professions. The criterion is sub-divided into four closely related sub-categories. a. Population – smaller catchment populations restrict the generation of a critical mass of work (cancer and non cancer). Using BAUS recommendations of 1 consultant per 80,000, each team should serve a catchment population of no less than 400,000. b. Team Size – A team of at least five to six consultants is preferred. This will improve long term attractiveness of each team in terms of recruitment and retention. It will also enable at least 2-3 to sub specialise, with dedicated sessions in the sub specialty e.g. uro-oncology, endourology/stones, female urology c. On site interventional radiology and trained urological nursing – These are key quality aspects. On site radiology to ensure timely access to interventions for emergency and urgent cases and sufficient total activity to justify 24 hour urology nursing experience in wards and theatres. This is to enhance multi-disciplinary working and support the development of nurse-led services. d. Commitment to Rotas and Working Time Directive – The service must be capable of sustaining adequate and acceptable on-call arrangements (elective and emergency), compliance with EWTD and equitable provision of emergency care.
2. Feasibility (ease and speed of implementation)	This criterion concerns the need to maximise the use of existing capital infrastructure (beds, theatres, equipment, clinic accommodation). The additional activity required and the appointment of additional Consultants and Nurse Specialists will require additional access to clinical facilities (as described above). It is assumed that the more new capital development is required, the longer the lead in time for starting new teams, and the longer the reliance on the independent sector. Preference will be given to those models that require the least capital resources and restructuring of premises. Consideration of the availability of trained staff will also be given. A particular model will lose points if it is unlikely that trained staff will be available in the numbers required to fill necessary posts.
3. Compliance with DHSSPS Strategy / Commissioner Support / Compatibility with Trust Strategic Plans/impact on other services	A model will lose points if it does not reflect specific regional health and wellbeing strategies/policies – DBS (the location of major hospitals with inpatient care), Cancer Framework (location of cancer units and Cancer Centre). Models should also attract commissioner support. Alignment with Trust Strategic Plans and impact on other services should also be considered.
4. Accessibility for Inpatient Elective Care	It is assumed that each model will be able to facilitate the flexible locating of outpatient and diagnostic service and will therefore be difficult to discriminate scores on this basis. Agreed pathways for emergency care is also assumed. Variation in local provision of elective inpatient care is more discriminatory. A model will lose points if it requires significantly greater travel time (from the do nothing case) for a substantial number of patients.
5. Organisational Complexity	A service should have unambiguous clinical and managerial leadership and accountability arrangements. Some potential models will need to transcend Trust organisational boundaries. This criterion concerns how complicated such arrangements are likely to be and weights each model accordingly – the more complicated the fewer the points awarded.

Appendix 9

Model 3: Three Teams/Networks

Team North and West:	• Upper 2/3rds of Northern and Western integrate to form one Team/Network
	• Main base Hospital - Altnagelvin
	• Potential for small number of inpatient beds in Causeway Hospital to be used for selected elective work subject to satisfactory arrangements for the post-operative management of these patients
Team South and West:	• Lower 1/3rd of Western (Fermanagh) and all of Southern integrate to form one Team/Network
	• Main base Hospital – Craigavon
Team East:	• SET and Belfast integrate to form one Team/Network
	• Continue to provide services to the southern sector of Northern population by outreach – Outpatient/Diagnostics/Day Surgery in Antrim and Whiteabbey hospitals with inpatients going to Belfast

Appendix 10



Southern Health and Social Care Trust

Quality Care - for you, with you

Acute Services Directorate – Adult Urology Services

Review of Adult Urology Services Implementation Project – Team South

GP Discharge Pathway Presentation 7th April 2011 at 2pm – Boardroom, Trust HQ, CAH

Present: Dr P Beckett, Mrs Heather Trouton, Mr Michael Young, Mr Aidan O'Brien, Dr Gerry Millar, Dr Mark McClure, Dr Mark McWilliams, Dr Sean Wilson, Mrs Jenny McMahon, Mrs Kate O'Neill, Mrs Alison Porter, Mrs Alexis Davidson, Mrs Pauline Matier.

Apologies: Mrs Martina Corrigan, Mr Mehmood Akhtar, Dr Gillian Rankin.

Service	Pathway	Discussion	Comments
All Services	**Referral Pathways**	Discussion took place around the need for establishing baseline referral criteria for all services. GPs agreed that this was a reasonable and acceptable proposal subject to final agreement.	
	Referral Criteria	It was agreed that the ICATS model of minimum criteria required should be used:	

		▪ U&E ▪ Blood Sugar ▪ FBP ▪ +/- Urinalysis/MSU ▪ +/- PSA – appropriate to clinical decision It was clarified that U&E request should include GPFR. It was further clarified that it should be specified that if urinalysis was normal, therefore no need for MSU. Mr Young asked if GP colleagues felt it would be appropriate to include radiological investigations such as scrotal ultrasound in referral criteria and acknowledged that whilst there were examples of when it would be appropriate as a means to appropriately signpost patients into services such as the Stone Treatment Centre and an example of when it would be inappropriate for referrals to services such as the LUTS clinic when radiological investigations would be carried out as routine. Dr Millar felt that primary care access to ultrasound was difficult with a wait of 3-4 months and wanted easier access. Mrs Davidson advised that there was a 9 week pathway for ultrasound access in the Trust and that a pilot project was under way with 5 GP practices for electronically referring. . Mr Young queried if GPs felt confident in scrotal examination. Dr Millar advised that if a scrotal lump	

		was found on examination then the referral was marked as a red flag and sent to Urology Services. Dr Williams advised that if GPs were concerned about a patient then they should contact the X-ray Department by telephone and the patient would be accommodated. Ms Porter advised that out of 510 testicular red flag referrals made last year, only 3 proved to be cancerous. Mr Young added that he was finding more red flag patients in routine referrals than there were of red flag referrals. Mrs Trouton queried the definition of red flag criteria and should pathway for referrals be staged as follows: ▪ Somewhat concerned - 9 week pathway ▪ More concerned - direct to Urology ▪ Very concerned - direct to X-ray Dr Millar advised that GPs are aware of the red flag criteria but possibly need re-educated as to it's use and that it would be helpful to have an audit of the 510 testicular red flag referrals to identify who needed re-educated. Action: Ms Porter to provide audit findings. Trust to identify urgent access telephone pathway for radiology. It was agreed that inappropriate referral letters should be returned to referrers. However it was further agreed that this should be done following the next group	

		meeting in June and that an explanation letter should be sent to GPs by the Trust once it's content has been agreed at the next meeting. Action: Trust to approve awareness letter for GPs for next meeting.	
Stone Treatment Service	**Referral Criteria**	Discussion took place re: GP access for plain renal tract x-ray to prove stone for Stone Treatment Centre referral criteria. Dr McClure advised that abdominal x-ray was not the best method of proving stone and that CTKUB was most effective. Mrs Davidson advised that the Trust did not have the capacity to provide this currently and would require another CT scanner. Dr McClure advised GP access for CTKUB was routine practice in the UK and would be money saving to the Trust as a performing a CTKUB only would negate the need for KUB/IVP/USS and was a much quicker procedure. Mrs Davidson advised that if this was the way forward then a business case would have to be developed for the three Trust sites in a bid for funding. **Action:** Trust to progress.	
Haematuria	**One Stop Clinic Referral Criteria**	Discussion took place around the proposal of a one-stop clinic. Mr O'Brien raised concerns that one-stop may be too much for patients and Mrs McMahon advised that this topic was discussed at regional meetings and agreement was reached to adjust pathway to a two day model.	

		Dr Millar advised that a one-stop clinic was reasonable and patients should be educated at to what to expect at the time of referral. Mr Young advised that investigation criteria was governed by NICAN and accepted by the Department. He further advised that +/- IVP & USS depended on clinical decision but the Trust would like IVP's done on all patients with exceptions per clinical indication and that a CT urogramme would avoid CT and IVP and generate savings. Dr Millar referred to unexplained haematuria – GPs would carry out investigations and if appropriate refer as a red flag and this should not be confused with the red flag pathway. It was agreed that the NICAN pre-referral criteria should be used but the work 'unexplained' haematuria should be underlined in the pathway document and accompanied with the word persistent'. **Action:** Mr Young to raise at regional network.	
Prostate Clinic	**One-stop Clinic**	Discussion took place in relation to referral criteria for suspected prostate cancer and GP colleagues confirmed that they were happy with NICAN guidance but queried the PSA level indicator that should trigger a referral into the service. Mrs Trouton enquired if there were trigger points for referrals. Mr O'Brien advised that there were no trigger indicators and queried if	

		patients would cope with a one-stop model as it may be too many investigations on the one day. GP colleagues confirmed that they thought a one-stop model was a good way forward and that primary care had a role to play in educating patients at the time of referral as to why they are being referred and what to expect at the clinic. It was agreed that there would be exceptions to the one-stop model for an element of patients. Dr Millar highlighted the need for a management plan for PSA results < 10 and Dr Beckett supported this and advised that GPs are very keen for this management plan and complete pathways for referrals. Mrs Trouton advised that the Trust will have draft pathways, to include the Andrology Service, for the next scheduled meeting which will include: ▪ Pre-referral ▪ Referral management ▪ Discharge ▪ Management plans Mr O'Brien supported Mrs Trouton to included Inguinal Scrotal pathways in this work. **Action:** Trust to provide pathway and management plan models for next scheduled meeting.	

Communication		Mr O'Brien enquired if other GP colleagues throughout the Trust were aware of the work currently undertaken in the Trust for Urology Services. Dr Beckett advised that GPs are aware through himself but that he would progress a formal communication strategy for the future when pathways have been agreed.	
Next Meeting		End of June 2011 – to be confirmed by P Matier.	

The **Thorndale Unit** is moving into

Craigavon Main Outpatients

On Thursday 17 October 2013

All Urology Outpatients and Urology diagnostic services are included in this relocation.

Any changes to phone extension details will be forwarded in the near future

Corrigan, Martina

From: Corrigan, Martina [redacted]
Sent: 21 September 2013 23:17
To: Connolly, Connie; Forde, Helen; Robinson, Katherine
Subject: RE: New Urology Accomodation

Hi Connie

Thanks for this – the only thing is that whilst the location is changing the name is not as per agreement with the Chief Executive and the Chair we are keeping the name Thorndale Unit. The important thing is to ensure that the signs are removed directing people to the old Unit.

Thanks

Martina

Martina Corrigan
Head of ENT, Urology and Outpatients
Southern Health and Social Care Trust
Telephone: [redacted] (Direct Dial)
Mobile: [redacted]
Email: [redacted]

From: Connolly, Connie
Sent: 20 September 2013 15:24
To: Thompson, DavidG; Toner, Kieran; Forde, Helen
Cc: McMahon, Jenny; ONeill, Kate; McKenzie, Lindsey; Mulligan, Judith; Moorcroft, Caroline; Corrigan, Martina; ODonnell, John
Subject: New Urology Accomodation
Importance: High

Hi All - just wanted to give you the heads up that the new Urology unit has been signed over today.
David-I will going to IT on Monday to take receipt of all of our phones, and I was wondering if you could arrange to meet with a few of the Urology team to talk through getting us up and running. There has been a long standing history of this part of the hospital have no phone reception.
I will be in the new accommodation from Monday at 11am.
Kieran- could you contact me in relation to getting some signposting sorted for the change in location and we need some advice re a few more signs within the unit. (and Braille?) Helen – im just thinking- we need to get patient appointment letter location changed!

Kind Regards
Connie Connolly
Lead Nurse Outpatients
Mobile Number [redacted]

Corrigan, Martina

From: ONeill, Kate [redacted]
Sent: 23 September 2013 16:46
To: John Kearney [redacted]; ODonnell, John
Cc: Connolly, Connie; Corrigan, Martina
Subject: RE: Thorndale Unit

Hi John's,

Monday would not be complete without an email re the new unit; a few further issues identified today that need attended to:

· After moving cages out of the Multifunction room adjacent to the Tea Point we have noticed a leak had also occurred through this skylight – this would not have been addressed when the other two leaks were resolved
· Opaque film required on doors of the above Multifunction room and Kitchen
· No workmen have been on site since our meeting on Friday therefore none of the scheduled work has been addressed

Many thanks,
Kate

Corrigan, Martina

From: Corrigan, Martina [redacted]
Sent: 13 October 2013 14:35
To: Glenny, Sharon
Cc: Robinson, Katherine; Connolly, Connie
Subject: FW: Thorndale Urology Move- IMPORTANT

Hi Sharon

Can you help sort please?

Thanks

Martina

Martina Corrigan
Head of ENT, Urology and Outpatients
Southern Health and Social Care Trust
Telephone: [redacted] (Direct Dial)
Mobile: [redacted]
Email: [redacted]

From: Robinson, Katherine
Sent: 11 October 2013 13:15
To: Connolly, Connie; Corrigan, Martina
Subject: RE: Thorndale Urology Move- IMPORTANT

Ok Someone might want to tip off the PAS help desk that this work is coming and will need acted on promptly . We cannot do this bit

Mrs Katherine Robinson
Booking & Contact Centre Manager
Southern Trust Referral & Booking Centre Ramone Building Craigavon Area Hospital

t: [redacted]
e: [redacted]

From: Connolly, Connie
Sent: 11 October 2013 13:09
To: Robinson, Katherine; Corrigan, Martina
Subject: FW: Thorndale Urology Move- IMPORTANT
Importance: High

Hi- I have sent the initial email re the move there now. Martina is in Belfast the rest of the day but I wanted to ask if we could look at getting the address sorted on the PAS letters early next week. Let me know what suits the two of you. Maria C advises me that letter and clinic codes have to matched ect.

Kind Regards
Connie Connolly
Lead Nurse Outpatients
Mobile Number [redacted]

From: Connolly, Connie
Sent: 11 October 2013 13:07
To: Elliott, Noleen; Dignam, Paulette; McCorry, Monica; Hanvey, Leanne; Muldrew, Angela; Troughton, Elizabeth; Elliott, Noleen; Cox, Sara; Best, Pauline T; Martin, Janet; Gribben, Ruth; Graham, SharonJ; McQuaid, Julieann
Cc: Lawson, Brooke; Lawson, Pamela; Corrigan, Martina; Carroll, Anita; Forde, Helen; McMahon, Jenny; ONeill, Kate; Reddick, Fiona; Robinson, Jeanette; Judith Mulligan; Caroline.Moorcroft; Jacinta McAlinden; McKenzie, Lindsey; ODonnell, John; Toner, Kieran
Subject: Thorndale Urology Move- IMPORTANT
Importance: High

Hi all- just to say that we have finalised the date of the Thorndale Unit moving into the Main Outpatients block All Urology services will be operating from the New Thorndale Unit from THURSDAY 17 OCTOBER 2013.
Flyers, posters, media coverage will be in circulation from Monday 14 October.
All Urology Outpatient activity will move into the Main Outpatient setting from the 17th October 2013.

Can I ask that each of your teams amend any and all appointment letters which are sent to patients highlighting the move of premises from THURSDAY 17 OCTOBER 2013. There will be no initial changes to phone extensions. The contact for Urololgy ICATs services, are unchanged.

I will be working with Martina in relation to amending all PAS letters and clinic codes early next week.

Kind Regards
Connie Connolly
Lead Nurse Outpatients
Mobile Number Personal Information redacted by USI

Corrigan, Martina

From: Dignam, Paulette [redacted]
Sent: 17 October 2013 12:38
To: Glenny, Sharon; Robinson, Katherine; Conway, Maria; Cunningham, Andrea; Elliott, Noleen; McCorry, Monica; Hanvey, Leanne; Troughton, Elizabeth; Muldrew, Angela; Cox, Sara; Neilly, Claire; Addis, Pat
Cc: McMahon, Jenny; ONeill, Kate; Connolly, Connie; Corrigan, Martina
Subject: RE: Thorndale Urology Move- IMPORTANT

Hi Sharon

Andrea asked us for this information on Tuesday and I Emailed back. The only letter code from PAS I use for Thorndale is APPAR for patients who are being reviewed at Mr Young's CMYTDU oncology clinic post MDT. Hope this is of help.

Many thanks
Paulette

From: Glenny, Sharon
Sent: 17 October 2013 12:30
To: Robinson, Katherine; Conway, Maria; Cunningham, Andrea; Elliott, Noleen; Dignam, Paulette; McCorry, Monica; Hanvey, Leanne; Troughton, Elizabeth; Muldrew, Angela; Cox, Sara; Neilly, Claire; Addis, Pat
Cc: McMahon, Jenny; ONeill, Kate; Connolly, Connie; Corrigan, Martina
Subject: RE: Thorndale Urology Move- IMPORTANT

Thanks Katherine. Although there are some clinics which the secretaries send for themselves to attend Thorndale, eg, urodynamics. Just need to check that these have been changed also.

Thanks

Sharon

From: Robinson, Katherine
Sent: 17 October 2013 12:27
To: Conway, Maria; Cunningham, Andrea; Elliott, Noleen; Dignam, Paulette; McCorry, Monica; Hanvey, Leanne; Troughton, Elizabeth; Muldrew, Angela; Cox, Sara; Neilly, Claire; Addis, Pat
Cc: McMahon, Jenny; ONeill, Kate; Connolly, Connie; Glenny, Sharon; Corrigan, Martina
Subject: RE: Thorndale Urology Move- IMPORTANT

We have this already sorted! We couldn't wait any longer because the move happened today. There will still be patients who will have got the old letters but nothing could be done – too short notice!

Mrs Katherine Robinson
Booking & Contact Centre Manager
Southern Trust Referral & Booking Centre Ramone Building Craigavon Area Hospital

t: [redacted]
e: [redacted]

From: Conway, Maria
Sent: 17 October 2013 12:26

To: Cunningham, Andrea; Elliott, Noleen; Dignam, Paulette; McCorry, Monica; Hanvey, Leanne; Troughton, Elizabeth; Muldrew, Angela; Cox, Sara; Neilly, Claire; Addis, Pat
Cc: McMahon, Jenny; ONeill, Kate; Connolly, Connie; Robinson, Katherine; Glenny, Sharon; Corrigan, Martina
Subject: FW: Thorndale Urology Move- IMPORTANT
Importance: High

Hi everyone

Can you please provide me with clinic codes and the letter codes that you used for patients attending clinics/sessions which were held in the 'old' Thorndale Unit please. We need to ensure that location/ directions have been changed on all urology letters - as well as on the Clinic Masterfile on PAS - to reflect the re-location to Main OPD in CAH as of today.

I would be grateful you get this to me asap please.

Many thanks for your help,
Maria

Maria Conway (Mrs)
Service Administrator for Performance
Acute Services
Lead Nurses' Office (SEC)
Admin Floor
Craigavon Area Hospital

Tel: Personal Information redacted by USI
(Mornings only - Mon to Fri)

Tracking code: Personal Information redacted by USI

From: Glenny, Sharon
Sent: 17 October 2013 12:07
To: Conway, Maria
Subject: FW: Thorndale Urology Move- IMPORTANT

Same as before.

From: Corrigan, Martina
Sent: 13 October 2013 14:35
To: Glenny, Sharon
Cc: Robinson, Katherine; Connolly, Connie
Subject: FW: Thorndale Urology Move- IMPORTANT

Hi Sharon

Can you help sort please?

Thanks

Martina

Martina Corrigan
Head of ENT, Urology and Outpatients
Southern Health and Social Care Trust

Telephone: Personal Information redacted by USI (Direct Dial)
Mobile:
Email: Personal Information redacted by USI

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Sent: 11 October 2013 13:15
To: Connolly, Connie; Corrigan, Martina
Subject: RE: Thorndale Urology Move- IMPORTANT

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Mrs Katherine Robinson
Booking & Contact Centre Manager
Southern Trust Referral & Booking Centre Ramone Building Craigavon Area Hospital

t: Personal Information redacted by USI
e: Personal Information redacted by USI

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Sent: 11 October 2013 13:09
To: Robinson, Katherine; Corrigan, Martina
Subject: FW: Thorndale Urology Move- IMPORTANT
Importance: High

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To: Elliott, Noleen; Dignam, Paulette; McCorry, Monica; Hanvey, Leanne; Muldrew, Angela; Troughton, Elizabeth; Elliott, Noleen; Cox, Sara; Best, Pauline T; Martin, Janet; Gribben, Ruth; Graham, SharonJ; McQuaid, Julieann
Cc: Lawson, Brooke; Lawson, Pamela; Corrigan, Martina; Carroll, Anita; Forde, Helen; McMahon, Jenny; ONeill, Kate; Reddick, Fiona; Robinson, Jeanette; Judith Mulligan; Caroline.Moorcroft; Jacinta McAlinden; McKenzie, Lindsey; ODonnell, John; Toner, Kieran
Subject: Thorndale Urology Move- IMPORTANT
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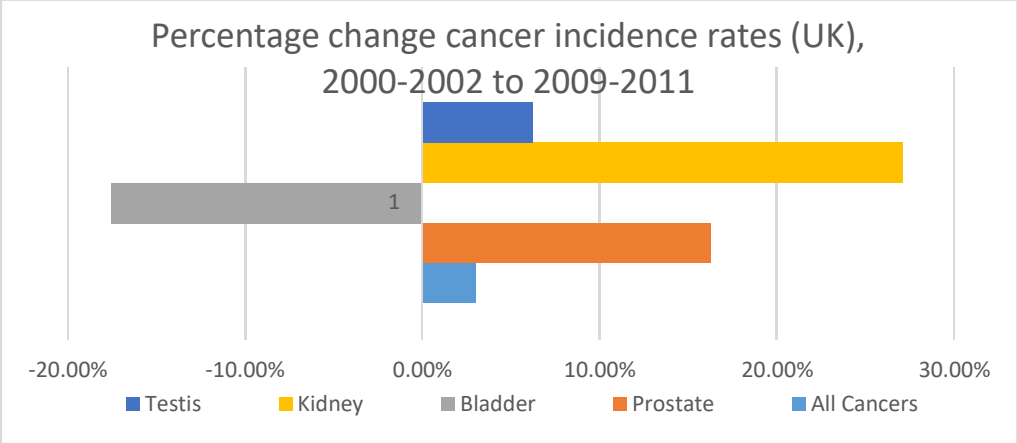
Kind Regards
Connie Connolly
Lead Nurse Outpatients
Mobile Number Personal Information redacted by USI

The Vision for Urology Services
Southern Health and Social Care Trust

Background

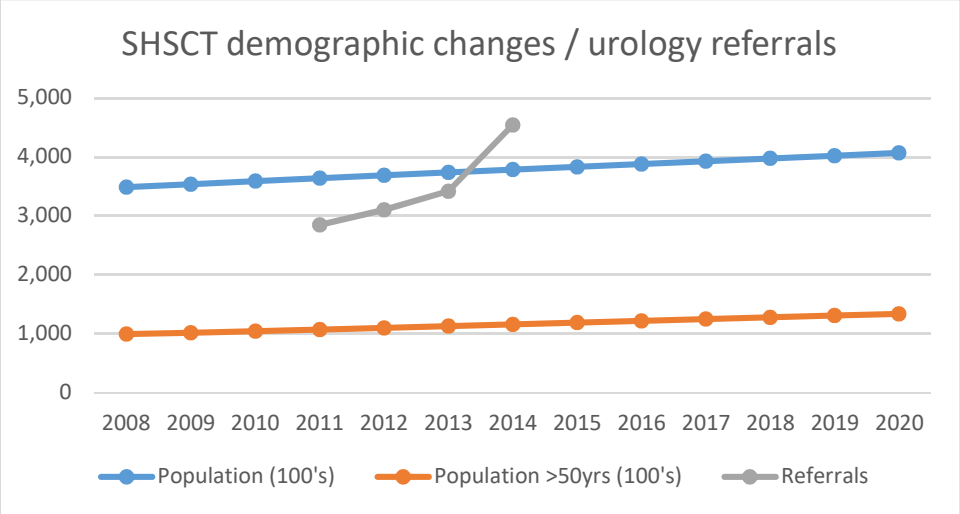
One of the biggest challenges facing the NHS is matching capacity to demand. Demand for secondary and tertiary healthcare services is rising faster than would be expected from population demographic change alone and is driven by a combination of this demographic change, increases in disease incidence, increases in available interventions, increased patient awareness and expectations and capacity constraints of primary care services.

Within urology the incidence rates of disease are rising. Published data is available regarding incidence rates of cancers. The table below shows percentage changes in incidence of the 20 most common cancer in the UK.



Corresponding figures for Northern Ireland are an increase in prostate cancer incidence of 39.9% (UK figure 16%), kidney cancer incidence of 31.4% (UK figure 27%), testes cancer incidence of 6.5% (UK figure 6.2%) and a reduction in bladder cancer incidence of 3.4% (UK figure -18%). These changes in incidence rate equate in increases in case numbers across Northern Ireland of 67.4%, 57.1%, 12.5% and 11.4% for prostate cancer, kidney cancer, bladder cancer and testes cancer respectively over the same time period. A similar pattern would be observed for benign disease but this incidence data is not as readily available as cancer incidence statistics.

Looking specifically at SHSCT, the graph below shows population demographics vs Urology outpatients referrals (nb the demographics information does not include Fermanagh which is part of the SHSCT Urology catchment). The incorporation of Fermanagh (65000 population, 17% rise in population served) into SHSCT urology catchment accounts for some of the big increase seen in 2014, prior to this year on year referral increases were at approximately 10% per year.



The result of this increasing demand for urological services in SHSCT and across the NI Healthcare system is that patients are waiting too long for their care. The SHSCT urology service received 4541 outpatient referrals between 1st July 2013 and 30th June 2014 while over the same time period 2557 of these new referrals were seen. Consultant numbers have now increased which has increased the available clinics to see new patients (to a maximum of 4100) but this does not meet demand or the expected 10% increase in demand in 2014-2015.

Additionally, in order to maximise theatre utilisation above the profiled 41 weeks, SHSCT urology has cross covered theatre lists such that the profile currently being utilised runs at 47 weeks and as a result dropped some outpatient activity. This has meant that while there were 2262 available new outpatient appointments based on a 41 week profile, 1935 were actually delivered (this is based on capacity delivered for the full year and does not include sessions delivered by members of the team who started or left during this 12 month period, 622 new outpatients were seen over this period by these additional members of the team).

For Inpatient / Day Case surgery an average of 140 hours of operating per month over the last twelve months has been listed for theatre within a capacity of 120 hours of operating per week. The result of this demand vs capacity mismatch is a growing waiting list across every aspect of our service, the current waiting lists are;

- New outpatients – 1586 (1250 > 9 weeks, 880 > 15 weeks)
- Follow-up outpatients – 3385 (longest waiter due OP review Feb 2011)
- Inpatient / day case surgery – 973 (115 > 52 weeks)
- Flexible cystoscopy – 185 (includes planned patients)
- Urodynamics – 117 (80 > 9weeks)

In light of this SHSCT urology has worked towards creating a vision for delivery of urological services which;

- Delivers a sustainable service.
- Is based on efficient models of care.
- Maximises available capacity.
- Maintains acceptable, equitable waiting times.
- Incorporates planning for delivery of increasing demand.
- Identifies what additional resource is required to deliver this service.
- Identifies risks which pose a threat to delivery of the vision.

Experience of previous attempts to tackle the demand vs capacity mismatch are that focus on one or two elements has resulted in short term improvement and subsequent return to the previous situation. We agreed therefore that in order to deliver this vision we would re-examine the entire urology service and redesign the entire process. For each aspect of the patient pathway we posed the question 'what can be done differently to reduce our consultant capacity requirement?'. The output from this can be split into three aspects, demand management, capacity planning and management and service delivery which will be discussed in further detail.

1. Demand management

This is a key element in delivering a sustainable service, with the focus being an increase in primary care investigation and management prior to referral into secondary care. To assess the possible impact of managing demand a sample of routine outpatient referrals were reviewed and from these, with expectations for primary care investigation and management prior to urological referral approximately 50% of these referrals could have been avoided. The overall impact of demand management would be expected to be less than 50% as this review did not include urgent or red flag referrals, also some of these patients that did not require referral at that point will require referral after completion of additional investigation / management in primary care. A suggested reasonable expectation for demand management would be a reduction in referrals of 20%.

Existing referral systems that are utilised within NI primary care have been explored. The central vision for referrals into secondary care is to move to all referrals occurring electronically via the CCG. This Gateway currently provides a standardised referral form providing key demographic information and with a free text section for clinical information. From a demand management perspective, key limitations of this gateway is an absence of any mandatory, condition specific requirements for referral with the 'gateway' acting effectively, as an open door; GPs can refer any patient to secondary care without any expectation placed upon them of initial management, investigation or provision of clinical information. A number of different demand management interventions have been utilised in other areas of the NHS. Many of these have been led by primary care and have resulted in an initial fall in referral numbers and this has been followed by a return to previous referral levels – referrals have been delayed

rather than prevented. In order to be successful and sustained we believe demand management systems require;

- To be led by Secondary care.
- Simple safe guidance for primary care management and investigation.
- Timely primary care access to necessary investigations (eg radiology).
- Mandated clinical information at referral specific to each condition.
- Effective policing of referrals and rejection of those that do not meet mandated requirements.

The ideal demand management process would therefore consist of comprehensive guidance for primary care investigation and management of urological conditions which is readily accessible, simple to use and written by the secondary care team. The referral itself needs to include specified mandatory information, specific to the condition being referred for. The referrals need to be reviewed against the mandated requirements and returned to the referrer if they do not meet the requirements. Alongside this there is a requirement for secondary care to provide primary care access to the diagnostic investigations specified in the guidance for primary care management and investigation and a need for access for advice from secondary care without generating a secondary care referral.

All of these requirements could be met by a comprehensive electronic referral process with dynamic forms which mandate provision of specific information and do not allow referral without provision of this information. Design of these forms could be such that they are simple to use (from a primary care perspective) and indeed could cover all specialities from an initial entry point (first question could be ‘what speciality do you wish to refer the patient to?’ which would then lead to subsequent speciality specific questions). Incorporation of secondary care guidance would enable this electronic referral process to categorise the urgency of the referral (e.g. those that meet red flag criteria would be automatically graded as red flag). Most importantly, without completion of all specified mandatory information the electronic form could automatically reject the referral.

These systems are used in other areas of the NHS and to a limited extent in specific conditions within NI (e.g. post-menopausal bleed clinic referral). Unfortunately we are advised that this ideal is a considerable distance from being available within the NI ‘gateway’. Presently referral via the electronic gateway stands at 26%, dynamic protocols are not currently developed within the software (required for dynamic forms).

Having explored the existing / available referral processes available in NI it is clear that presently we cannot move immediately to the ideal mechanism of mandated electronic referral for a number of reasons. Therefore, in order to commence a mechanism of demand management the process will need to be based upon primary care guidance and education, consultant review and triage of all referrals against the agreed primary care guidance and rejection of referrals which do not meet the specified referral criteria. Over time and with training we envisage that some of this work will be performed by clinical nurse specialists. This process will use considerable consultant time and in order to maximise efficiency of consultant time we would

envisage this as a ‘stop gap’ measure until a suitable electronic referral process is available.

2. Service delivery Model

The service delivery model was divided into elective and emergency care with a separate model of delivery for each. Across both models specific consideration is required with regards infrastructure and staffing requirements.

Elective

The Guys model of new patient outpatient service delivery model has been considered as the preferred model of initial secondary care contact for the patient. This model delivers outpatient care such that at the end of the single visit patients are either discharged back to primary care or listed for a urological intervention. The Guys model is delivered with a capacity of 18 patients seen in a session with medical staffing at 2 consultants and a trainee. In addition to the positive service aspects of this model it also had significant positive impact on training and supervision for the SPRs. It was agreed that this model should be pursued as a basic model of outpatient service delivery. The number of these sessions required will be guided by capacity requirements (see below). There needs to be agreement in planning the patient pathways on;

- Do all patients need to be seen in OP?
  Patients referred for a vasectomy can be placed directly on a waiting list rather than coming to an outpatient clinic first.
  Patients referred from the continence team can be listed directly for urodynamics.
- What will be done before the OP visit?
  Ideally all radiological investigations should be done and available at the time of the OP visit. Each referral pathway will require consideration of how appropriate investigation will be arranged.
- What will be done at the time of the OP visit?
  Ideally all investigations required to make a treatment decision will be performed at this OP visit. For each investigation have considered what will be needed to deliver this at the time of the OP visit (ie infrastructure, equipment, staff).
- Who will be followed up?
  Ideally patients will be either discharged or listed and so follow-up requirements will be minimal. Where follow-up is required does this need to be delivered by a consultant in person? Could it be delivered by a nurse in person or over the phone? Can it be delivered by letter? For example TRUS biopsy patients with cancer on biopsy need an in person follow-up with their pathology results but do patients with negative results? Published data from Guys suggests a follow-up rate of 30%.

Specific consideration of models of care and capacity planning needs to include the requirements of active surveillance TRUS biopsies of prostate (utilise radiology provision of TRUS for this group?), TCC surveillance (protocol guided, nurse delivered?), Urodynamics (direct access following continence team referral for female LUTS?) and the specific needs of the stone service which bridges acute and elective care (ESWL capacity and delivery, stent removal).

In order to deliver the demand there needs to be considerable expansion in delivery of aspects of care by non-consultant staff. Staff grade post recruitment is an issue across Northern Ireland and GPwSI models have been utilised but the experience of the Trust and wider NHS is that whilst they provide additional capacity when posts are filled, once a post is vacated they leave a gap in service delivery and recruitment to fill again is difficult. It was agreed that the delivery of care will be broadly based upon a consultant delivered service with SPR delivery (supervised) and CNS delivery of specific aspects.

In order to deliver a sustainable service there is recognition that the number of Clinical Nurse Specialists and scope of practice needs to increase above that which is currently provided. It is recognised that at inception the model will involve consultant delivery of aspects which over time, following likely recruitment and training will become CNS delivered. This training requirement will mean that at inception the capacity of the service will be reduced but this will increase as competencies are acquired. Some aspects of service will remain consultant delivered while others will be consultant led. Examples of these are below;

Consultant Delivered (provided by medical team)	Consultant Led (provided by CNS and medical staff as a team)
New OP appointments	Flexible cystoscopy
Inpatient / Daycase surgery	Urodynamics
Acute care	Intravesical treatments
	Follow-up OP appointments
	TRUS Biopsy of prostate

Specific deficiencies in the current patient pathway with regards fitness for surgery and assessment of holistic patients' needs were identified. These create specific issues in elective list planning, worsen the waiting list position with patients not fit for anaesthetic being on the waiting list and currently result in significant utilisation of consultant time. It was agreed that for elective surgery the waiting list should only include patients deemed fit for surgery. A model was agreed whereby patients listed for elective surgery will receive an initial pre-admission assessment at the time of their listing. This will include holistic needs assessment (care needs, notice requirements, transport issues, post procedure care requirements etc) in addition to an initial anaesthetic assessment. The anaesthetic assessment will identify two groups of

patient, those with no major comorbidity who are fit and able to be placed directly on the waiting list, and those who require further anaesthetic assessment and will only be placed on the waiting list when deemed fit for their planned elective surgery.

There is agreement to the creation of a pooled waiting list for common urological procedures. This would bring advantages in terms of capacity planning, delivery of equitable waiting times and off site operating (see below). It was accepted that individual patients may wish to 'opt out' of this but should be made aware that this will result in longer waiting times for their procedure and that across the team capacity for delivering procedures from this list will differ.

It was acknowledged that delivery of capacity for operating theatre centred care is a major challenge. On Craigavon Area Hospital site Inpatient theatre capacity is fixed and at a premium while the location of the day surgery unit, availability of day unit recovery beds and timing of the urology allocated sessions constrains what procedures can be delivered through day case theatres. Having calculated capacity requirements for theatres we have increased the available urology theatre sessions from 8 per week to 12 per week. This increase has been achieved with current infrastructure by extending the working day across 3 surgical specialities and anaesthetics / nursing. Theatre productivity will be addressed by working with theatres in order to maximise the efficiency of these sessions, specifically addressing turnaround times, start times and ensuring that the lists finish on time by identifying issues which directly impact on these factors (eg porter availability).

There was discussion around procedures which are currently delivered as inpatient care which could be delivered as day cases. In order to increase our scope of delivery of day unit procedures there is a requirement for infrastructure work on Craigavon Area Hospital site. An alternative that is being explored is delivery of day case urological surgery off site with Daisy Hill Hospital and South West Acute Hospital being identified as potential sites. All consultants would be happy to deliver certain procedures on these sites which would offer significant advantages to the service and bring care closer to home for patients requiring suitable procedures. There are specific requirements in order to deliver off site operating which include;

- Theatre equipment.
- Theatre and ward staff training.
- Junior doctor support both in and out of hours (although intended as day case procedures, a proportion of procedures may require subsequent overnight admission).
- Provision of consultant out of hours cover.

Non-Elective

Non elective care presents specific challenges due to variation in demand and a need for prompt access. Significant numbers of referrals for outpatients originate from accident and emergency attendances. A model of non-elective care was presented and agreed which is consultant delivered. This model would entail;

- Consultant led morning ward rounds Mon-Fri.

- Hot clinic – A&E referrals plus non-elective GP referrals which don't require inpatient admission. This will entail appropriate management and investigation of these patients with some seen in an outpatient setting and others managed remotely.
- Non-elective operating (regular 1 hour morning slot on the emergency theatre list).
- GP advice and triage of referrals (demand management).
- Consultant led afternoon ward rounds Mon-Fri (of patients who had investigations so as to review results and make further plans).

3. Capacity management

The Demand / Capacity calculations described below include a number of assumptions and estimates. As a result of these assumptions / estimates, although we are confident in the accuracy of the data presented, the projected capacity requirements / capacity delivery and backlog reduction may upon delivery of the service be wrong (are based upon an 80% upper confidence level therefore 20% risk of true referral numbers being higher than planned for, equally a risk of numbers being lower than planned for). Staffing numbers have been considered based upon what is required to deliver the service as described but in some cases will require recruitment and training before the full capacity can be delivered.

Demand / capacity for the urology service has been calculated based upon the preceeding 12 months demand information. Projected demand for outpatients activity has been based upon an anticipated impact of demand management of a 20% reduction in referrals alongside an expected 10% annual increase in referrals. The demand projections cover a 3 year period with capacity planned at the same level for all three years (based on current demand minus 20% (demand reduction), plus 10% each year for demand increases). This will allow for some backlog reduction during years one (backlog reduction of 17% of overall capacity) and year two (backlog reduction of 8% of overall capacity) with demand matching capacity in year three. All demand projections are based upon an upper confidence level of 80% (as recommended by the NHS institute). The demand calculations are therefore;

Current demand = 80% upper confidence limit of mean demand for April 2013 – March 2014

Projected demand Year 1 = current demand – 20% (demand management impact)

Projected demand Year 2 = Projected demand year 1 + 10%

Projected demand Year 3 = Projected demand year 2 + 10%

Capacity plan = Projected demand Year 3.

Where projected numbers of sessions are calculated, these are based on delivery over a 41 week profile. It is recognised that as the department has worked to cross cover annual leave in order to maximise inpatient theatre utilisation over the past 12 months (resulting in a 47 week profile of theatres covered) this had meant the cancellation of

a number of other sessions, most of which have been outpatients activity. The net impact of this cross cover was a loss of 232 new outpatients appointment slots across the service over a 12 month period.

Regarding inpatient / daycase theatre capacity this is calculated in a similar manner however there is no element of demand management reducing required capacity (as it is anticipated that the same numbers of patients will be listed for surgery as at present). Average theatre times for procedures undertaken over the 12 month period from July 2013 – July 2014 were obtained from TMS with an addition of a turnaround time (time between anaesthetic finishing on one case to starting on the next case). These timings were then applied to all new additions to the waiting list over this period. The capacity calculations include an anticipated 10% increase in referrals each year with capacity being set at the same level for the 3 years to allow for some backlog reduction (21% of available capacity year 1, 10% of available capacity year 2). Additional backlog reduction is expected as a result of theatre productivity / efficiency work but this has not been factored into the capacity planning. Projected capacity requirements are calculated as;

Current demand = 80% upper confidence limit of mean demand for July 2013 – July 2014

Projected demand year 1 = Current demand

Projected demand year 2 = Projected demand year 1 + 10%

Projected demand Year 3 = Projected demand year 2 + 10%

Capacity plan = Projected demand Year 3.

New Referrals

The Data for April 2013 – March 2014 as described above is below. The capacity plan is therefore set at delivering 407 new outpatients slots per month. As described in the service delivery plan the majority of these will be seen in the new patient service modelled on the Guys clinic. A proportion will be managed via the Acute clinic by the consultant of the week. We have estimated this at 5 new referrals per day (25 per week, with the acute clinic running 50 weeks of the year as the only aspect of service running 5 days a week all year round with no service on bank holidays and weekends, resulting in 1250 being managed via this service per year). The New general outpatient clinic will therefore have an annual capacity requirement of 3634 patients per year. Based upon the guys model number of 18 appointments delivered by 2 consultants plus a trainee, modelled at 41 weeks this will require 202 of these clinics to be delivered over the year, equating to 5 clinics per week. This capacity will enable reduction in the current backlog of new referrals by 1291 patients over the first 2 years of delivery of the service.

New referrals 2013 - 2014	
April	410
May	379
June	395

July	426
August	360
September	442
October	459
November	438
December	395
January	380
February	443
March	345
Total referrals	**4872**
Monthly Mean	**406**
80% CI Upper limit	**420**
Projected Monthly Demand Year 1	**336**
Projected Monthly Demand Year 2	**370**
Projected Monthly Demand Year 3	**407**
Projected Backlog reduction (over 3 year period)	**1291**

Inpatient / Daycase Theatres

Theatre time calculations have been collated from twelve months data of waiting list additions and theatre data systems information on theatre case length (time from patient entering theatre to being in recovery), unfortunately information on turnarounds (time between patient being in recovery and next patient being in theatre) was not readily available and has been estimated at 10 min. The table below shows the monthly minutes of theatre listings over a twelve month period July 2013-2014 (including the 10 min turnaround). An additional analysis of cases that could be delivered in a daycase setting has also been performed which has demonstrated that expansion in current capacity for inpatient / daycase theatres is required for inpatient theatres with adequate current capacity within daycase theatres.

As discussed in the service plan, utilisation of offsite theatres is being explored. Theatre capacity will therefore be planned at 2101 hours per year which profiled over a 41 week period equates to 13 theatre lists per week. As discussed previously, work is already underway to enable delivery of this required theatre capacity in the near future. The calculations here do not include the increase in numbers of cases listed that would be expected as a result of the increase in new patient appointments delivered. It is anticipated that this increase in numbers of patients placed on the waiting list will be met to a significant degree by theatre productivity / efficiency work.

We have benchmarked our required operating minutes against theatre time requirements for a large NHS Foundation Trust in England which has been through a number of cycles of theatre productivity / efficiency work. If our theatre timings are brought level with these timings this will result in a further capacity of 6 hours theatre capacity per week (based upon current timings) which we anticipate will meet this demand. However, it is noted that in order to get to the benchmark timings, the

Benchmark Trust had been through 6 year period of multiple cycles of productivity and efficiency work and therefore there is significant risk that this productivity increase does not meet the demand increase and therefore backlog reduction is reduced. Given this significant risk, backlog reduction prediction figures have not been calculated.

	Total minutes operating listed
July	8614
Aug	8845
Sept	6792
Oct	10402
Nov	7998
Dec	7245
Jan	8145
Feb	8416
Mar	7537
Apr	8741
May	8070
June	8971
Total Minutes operating listed	**99776**
Monthly Mean Operating listed	**8315**
80% confidence upper limit	**8682**
Projected Monthly Demand Year 1	**8682**
Projected Monthly Demand Year 2	**9551**
Projected Monthly Demand Year 3	**10506**

Flexible cystoscopy

As part of the 'Guys model' of new outpatient consultations the haematuria and diagnostic / Lower Urinary Tract Symptoms (LUTS) assessment patients will undergo their flexible cystoscopy during their Outpatient attendance. Patients undergoing TCC surveilance flexible cystoscopies and flexible cystoscopy and removal of stent will continue to need this service otside of the 'Guys model'. Between 12 – 16 patients per month undergo a planned flexible cystoscopy (TCC surveilance). We have not got patient numbers for flexible cystoscopy and removal of stent. For planning if we assume that half of all emergency cases get a stent that requires removing (other half have stent and subsequent further procedure) and 2 elective cases per week, this will give an estimate of 16 procedures required each month. This would mean a service need of one flexible cystoscopy list per week. The elective flexible cystoscopy service is planned to be deliverred as a consultant led service delivered by clinical nurse specialist and occuring alongside elective consultant outpatient activity.

TRUS biopsy of the prostate

As with the flexible cystoscopy service most will be provided at the time of the initial consultation. Long term it is anticipated that this will be provided by clinical nurse specialists within this clinic but this will require CNS training and recruitment. Some will not be suitable for providing through this clinic (patients on anticoagulation, active surveilance as specific examples). These will be provided within the capacity currently provided by radiology consultants. It has not been possible to obtain accurate data on these numbers and the demand / capacity for this service will require close monitoring and possible adjustment during the initial months of introduction of the service.

Urodynamics

This will not be provided as part of the 'Guys model' clinic due to time and space requirements. This investigation is planned to be a consultant led, CNS delivered service with specific consultant delivered sessions for complex clinical conditions (estimated 2 CNS delivered : 1 Consultant delivered). Our initial estimate is that we will require 3 sessions per week (9 patients). However, this is an estimate and the demand / capacity for this service will require close monitoring and adjustment during the initial period.

Extracorporeal shock wave lithotripsy (ESWL- Stones)

Based upon current demand 444 treatments are required per year. The year on year increase for this service is affected by both within Trust referrals and referrals from other NI trusts. We have not obtained information on the last 5 years listing numbers for this tretament in order to estimate the year on year demand increases and as such have not modeled this. We treated 276 patients in the last 12 months. The service will therefore need to deliver additional treatment sessions to meet this unmet demand. Additionally there is a requirement for capacity to utilise this treatment modality in the acute management of ureteric colic which is currently not available. We estimate that this service will require 3/4 sessions per week to deliver the required capacity running 50 weeks per year. Again, this is an estimate and the demand / capacity for this service will require close monitoring and adjustment during the initial period.

Follow-up appointments

Estimating future follow-up capacity is extremely complex and would be based upon large numbers of assumptions / estimates. Follow-up demand for 2013-2014 was 4994 appointments, additionally there would have been further demand if we had seen the patients currently awaiting new appointments. The change in service delivery as described will reduce demand for follow-up appointments. Additionally there is a large current backlog. We anticipate patients only attending outpatients where absolutely necessary. This will be achieved by the triage ensuring that all necessary investigations have been performed prior to the first outpatients attendance. Where investigations are arranged, writing with results and if required telephone follow-up. Those patients who do need to attend for follow-up will be seen either by CNS or consultant. A significant proportion of this required follow-up will be consultant led and nurse delivered (in particular oncology follow-up), thus reducing the consultant time requirement to deliver the demand. We propose to provide available capacity to meet demand for the past 12 months and this capacity will be delivered in a consultant led

service with approximately 50% of the capacity provided by the consultant and 50% provided by the CNS team. Ongoing capacity for follow-up will need close monitoring and adjustment once true demand within the new service is understood.

A separate plan is required for reduction of the follow-up backlog. We propose to manage this as a team working through the 3385 overdue follow-up appointments, initially by case review and discharge as appropriate and then by provision of additional capacity (outside of proposed service) which will require funding. We would be opposed to this work being outsourced to private providers as experience of this is that significant numbers are referred back for ongoing follow-up while our aim in reviewing this backlog is to achieve a very high discharge rate.

Staffing requirements

Staffing requirements in order to deliver the service to meet demand as illustrated have been calculated. In the Thorndale Unit (urology outpatients), in order to provide the services we will require expansion of the team of Clinic Nurse Specialists. There will need to be 4 members of this team 'on the ground' for each half day session plus support workers. In our current service significant amounts of CNS time are utilised managing the outpatients department. To free up this time we propose the creation of new outpatients administrative roles which will enable the clinical staff to spend more time delivering patient care. These staffing requirements are shown below, some of the gap is funded but currently unfilled;

Band	In Post (WTE)	Proposed (WTE)	Gap (WTE)
7	1.86	3.4	1.54
5/6	2.72	4.4	1.68
2/3	0.8	3.4	2.6
4 Admin Support	0	1	1
2 Admin Support	0	1	1

The CNS team is anticipated to provide opportunity for progression and development and as such we would anticipate that as the individuals acquire skills and educational requirements to deliver service at a higher band they will be afforded this opportunity in-house. Without this we would be a significant risk of providing training / development to members of staff who then leave the Trust to progress their careers. Funding and subsequent appointment to these posts is essential in order to deliver the service as described.

At consultant level numbers of PA's have been calculated based upon capacity requirements as above and the following hours calculations;

Session	Consultant Hours per session	Weekly sessions required	Weekly Hours	Weekly PA's

	(including admin time)			
Theatres (Inpatient and daycase)	5	14	70	17.5
Outpatients clinics (New, FU, Off site)	5	17.6	88	22
Urodynamics	5	1	5	1.25
ESWL	1	4	4	1
Multidisciplinary team meetings (oncology and non oncology)	5	6	30	7.5
Acute care	4.75	12.2	57.9	14.5
Unpredictable out of hours work	4	6	24	6
Supporting Professional Activities	6	7	42	10.5
Total			320.9	80.25

In order to deliver the anticipated demand the service will therefore require funding for 7 consultants (11.4 PA's) in addition to the expansion in the outpatients nursing team. Without this we will not be able to meet projected demand as consultant capacity would be reduced.

Summary

We have reviewed the Urology service within Southern Health and Social Care Board and examined every aspect from the perspective of aiming to provide a sustainable service. We believe the plan as described will enable us to provide this while maximising the efficiency of utilisation of consultant time. In order to do this there is a need for expansion of the clinical nurse specialists within the team. This expansion will require training and funding, without this the service cannot be provided in a sustainable manner. However, even with this expansion and maximisal efficiency of consultant time there is no currently sufficient consultant time available to provide capacity for projected demand. Without providing this capacity we will also not be able to deliver any backlog reduction.

Demand reduction will be a major aspect of delivery of the service. This requires support in our engagement with primary care and in the principle of secondary care defining the criteria for referral and rejection of referral which have not followed agreed primary care investigation and management guidance. The currently available mechanisms for this process will require significant consultant input. The proposed electronic mechanism for this process would be preferable and reduce this consultant input but presently we believe this aspiration is some considerable time away.

Designing ‘the vision’

Current Status…

- Our current demand vs capacity is;
  - 416 OP referrals received vs 366 New OP slots per month
  - 160 hours of Theatre work listed vs 140 hours delivered per month (IP and GA day case)
- Demand vs Capacity mismatch;
  - 50 new referrals per month
  - 20 hours operating per month
- Our current Backlog is;
  - 1390 New outpatients without appointments (1250 waiting > 9 weeks, 880 waiting > 15 weeks)
  - 802 patients listed for IP or Day case procedures (Flexi and ESWL excluded)
  - 3600 FU appointments pending
- Expansion requirements;
  - 10% increase per year
  - Sheffield this figure was 17% (ie 10% may be conservative)

Demand > Capacity

What does the board want?

- Sustainable delivery
- Efficient models of care
- Acceptable waiting times
- Uniquely they have asked the specialist clinicians for solutions.

What does the board expect?

- Low expectation of clinicians ability to deliver service change.
- Clinicians tend to act as clinicians, managers as managers.
- In order to deliver the boards expectations we (clinicians) need to think and act as managers
  - Process design / mapping
  - Capacity planning and management
  - Risk assessment and mitigation
  - Presentation and delivery of ‘vision’

Approach…

- What is different about the Ulster vs SHSCT?
- NHS processes tend to evolve rather than be designed.
  - Multistep pathways with new processes being simply added in resulting in complex elongated pathways
  - How many people (steps) does a new patient referral letter pass through before the patient comes to clinic?
- Service modernisation can only be achieved by redesigning the entire process and not by tinkering at the edges.
  - Without redesign all that is achieved is further ‘evolution’ of current pathways and continuation of current practice.

Patient Pathway…

- A patients interaction with us can be summarised as…
  - GP referral
  - New OP visit
  - Diagnostic tests
  - Treatment
  - Follow-up
  - Discharge
- For each aspect ask the question ‘what can be done differently to reduce our capacity requirement?’

GP referral…

- Are all referrals necessary?
  - 48 GP referrals, majority LUTS.
  - 50% could have been not referred.
  - Routine referrals (not red flag / urgent).
- How can referrals be prevented where not necessary?
- How can primary care involvement and integration into delivery of urological care be maintained?
- How can referrals be policed to prevent slippage back to current systems?
- Demand Management

New OP Visit / Diagnostic tests…

- Do all patients need to be seen?
- What could be done before the OP visit?
  - What is needed for this to happen?
  - Who can arrange this?
- What could be done at the time of the OP visit?
  - What is needed to deliver this?
- What can't be done at the time of the OP visit and why?
  - Where possible we should be approaching everything with the default position being delivery at the time of OP visit
- What can't be done at time of OP visit, can it be delivered without additional consultant contact?

Treatment…

- Are we utilising all our available resource?
  - Turnaround in theatre
  - On time (start and finish)
  - Off site theatres
- Do all cases need to be done in IP theatres?
  - Cystoscopy & Botox (flexi?)
  - TURBT (small / recurrent) in day theatres?
  - Vasectomy all LA?
- ESWL, Flexi, UDS, TRUS
  - What can be delivered at time of OP visit?
  - What capacity is required?

Follow Up / Discharge…

- Is Follow up necessary?
  - Can it be done by GP?
  - Can it be done by another Healthcare professional?
  - Does the patient need to come to hospital for FU?
  - How much FU is needed?
  - Best timing of FU (TURP example)?
- When is discharge occurring?
  - Immediately after treatment?
  - Patients with problems, how do they get seen?

Key Aspects…

- Three key areas of service design;

    1. Demand management
    2. Service delivery Model
    3. Capacity management

- Start broad before focussing on individual aspects.
- Nothing is off limits.
- Can’t and Won’t are not sufficient in dismissing ideas.
- Identification of risks essential.

	Urology Day time Activity						JULY		2019																									
.	.	.	.																															
Site		CAH		CAH	CAH	CAH	CAH	CAH	CAH	DHH	STH	CAH	CAH	NEW	NEW	CAH	CAH	Ban	Arm	Erne	STH	T	T	T	T	STC	STC	STC	STC	CAH	T				
Activity		on	reg	TH	TH	TH	TH	DSU	DSU	DSU	DSU	C/U	C/U	OP	OP	OP	OP	OP	OP	OP	OP	oncol	oncol	Urody	Urody	Rx	Rx	OP	OP		haem				
Day	Date	call	call	am	pm	am	pm	am	pm		am	am	pm	am	pm	am	pm	am	am		pm	am	pm	am	pm	am	pm	am	pm	MDT	am	LEAVE	OFF	OFF		
Mon	1	H	E		H.K						Y.L			#.T.S			#						G		#	X.K			T.	L		OD			AOB	#
Tues	2	H	E	Y.K	Y.K			OB.S								G	OB															OD			AG	#
Weds	3	H	E	OB.K	OB.K	H			S.(h)la					G			T									Y.L				OB		OD			JOD	#
Thurs	4	G	E	.Y.											Y.K	#										X.K				OB.T	L	OD.H			MH	#
Fri	5	G	E	T.S	T.S	G						K/g	K/ob				#					OB	#	OB	#	X		#				OD.H.Y			T	#
Sat	6	G																																	Y	#
Sun	7	G																																	L	#
Mon	8	G	K		#.T					OB				#		#	#			Y			#		#.E	X.E	X		#	L	L.S	OD.H			S	
Tues	9	G	K	Y.E	Y.E			#.T.S(la)			#				#.T.S	#					#											OD.H			E	
Weds	10	G	K	OB.E	OB.E	#.T			L.od/la					#			T									Y.L				G		OD.H			K	
Thurs	11	Y	K	OB.L											#											X.E				OB.T	S	G,OD.H				
Frl	12	Y	K	#	#	#							#				#					#	#	#	#	#										
Sat	13	Y																																		
Sun	14	Y																																		
Mon	15	Y	S		H.E					#				H.#.L			#	#					#		#.K	X.K			T	L		G.OD				
Tues	16	Y	S	OD.E	Y.E		?H	T.K(ga)							T.K	#																G.OB				
Weds	17	Y	S	OD.K	OB.K	H			L.(h)ga					#			T						OD.E			OD.T.L				OD		G				
Thurs	18	LOCUN	S	OB.L											#	H										X.K				OB.OD.I	E	G				
Frl	19	LOCUN	S	G.K	AUDIT	T						E/y	AUDIT				AUDIT					OB	AUD	OB	AUD	Y										
Sat	20	LOCUM																																		
Sun	21	LOCUM																																		
Mon	22	LOCUN	E		H									H.OD.#			OD			OB			G		OD	X	X		#	S		Y	L.K			
Tues	23	LOCUN	E	OD.K	OD.K			#			G				#	H					G											Y				
Weds	24	LOCUN	E	OB.K	OB.K	H		S.(od)la						G.S			#						OD			OD.Y.				H			L			
Thurs	25	OB	E	Y.S											Y.K											X.				G.OD.H	K		L			
Frl	26	OB	E	G.K	G.K	T							S/y				Y					#	Y	#	Y	X										
Sat	27	OB																																		
Sun	28	OB																																		
Mon	29	OB	K		H.E									H.OD.#			OD						G		OD	X.E			T	S		Y	L			
Tues	30	OB	K	OD.E	OD.E			T(la)							#.T	G.H																Y				
Weds	31	OB	K	OD.E	OB.E	H			S.(h)la					G.S			T						OD			Y.T.#							L			

		Urology Day time Activity					JANUARY			2017																				
	Site		CAH		CAH	CAH	CAH	CAH	CAH	CAH	STH	DHH	CAH	CAH	NEW	NEW	CAH	CAH	Ban	Arm	Erne	STH	T	T	T	T	STC	STC	STC	CAH	T
	Activity		on	reg	TH	TH	TH	TH	DSU	DSU	DSU	DSU	C/U	C/U	OP	OP	OP	OP	OP	OP	OP	OP	oncol	oncol	Urody	Urody	Rx	OP	OP		haem
Wk	Day	Date	call	call	am	pm	am	pm	am	pm	am		am	pm	am	pm	am	pm	am	am		pm	am	pm	am	pm	am	am	pm	MDT	am
	Sun	1	G			#					#				#	#		#						#		#	#		#		
1	Mon	2	G			Y.M										OB.OD./	A.B														
1	Tues	3	G	D/C	OD.M				OB.C																						
1	Weds	4	G	D/M	OD.C	OB.C	#			OD.D/la					J.M. B			J									X.			OB	
1	Thurs	5	H	M/D											B	J.Y.C	J													OB,G.D.I	C.D
1	Fri	6	H	D	G.T	G.		B					C/g?	#	B		J	J					#.OB	#	OB	ob		Y			
	Sat	7	L																												
	Sun	8	L																												
2	Mon	9	H	D		T (h).									A.OD.C	B		OD.A			OB		G			OD.C	X.		#		
2	Tues	10	H	D	OD.C	Y.C			B.M		G/la.					A.M.B	A					G									
2	Weds	11	H	D	OD.M	OB.M	H.T			B.C/ga					J.G.C			J						D			X			G	
2	Thurs	12	OB	C/D											B	J.Y.M.	J													G.D.H.C	M
2	Frl	13	OB	D	G.T	G.M	B							C/ob.			H.J	Y.J					H.#	Y	H.M	Y		Y.C			
	Sat	14	OB																												
	Sun	15	OB																												
3	Mon	16	OB	C		H.T									H.OD.M	B	A	OD.#	Y / Y.D					G		OD.M	X		A		
3	Tues	17	OB	C/D	OD.M	AUDIT			Y.D						B	AUDIT	G.A														
3	Weds	18	OB	D	OD.C	H.M	H.M			OD.C/ga					G.J			J									X			H	
3	Thurs	19	OD	M											B	J.Y.C	J													H.OB.G	C
3	Fri	20	OD	M/D	G.T	G.C		B					C.D/sy	M/y	*B*		H.J	Y					H.OB	Y	OB	Y		Y			
	Sat	21	OD																												
	Sun	22	OD																												
4	Mon	23	OD	D		H.T									H.A.C	*B*		A		OB	Y			G		#	X		#		
4	Tues	24	OD	D	Y.C	Y.C			B/L		G/ga					B.A.OB.	A					G									
4	Weds	25	OD	D	OB.C	OB.C	H.C			H.L/la					J.G.L			J						#			X			D	
4	Thurs	26	H	C											*B*	J.Y.D	J													D.G	D
4	Frl	27	H	C/H	G.T	G.M		*B*						C.D/y	*B*		#.J	Y					#	Y	S	Y.	X	#			
	Sat	28	H																												
	Sun	29	H																												
5	Mon	30	H	LD		T(h)									#.OD.M.C		A	D.OB..A						G.C		OD.M	X		#		
5	Tues	31	H	L	OD.C	Y.C.D			OB.M						A.OB.D.I		G.A.D														

		Urology Day time Activity						DEC	2015																					
	Site		CAH		CAH	CAH	CAH	CAH	CAH	CAH	STH	DHH	CAH	CAH	NEW	NEW	CAH	CAH	Ban	Arm	Erne	STH	T	T	T	T	STC	STC	STC	CAH	Tdale
	Activity		oncall	Ward	TH	TH	TH	TH	DSU	DSU	DSU	DSU	C/U	C/U	OP	OP	OP	OP	OP	OP	OP	OP	oncol -1	oncol-2	Urodyn	Urodyn	cover	OP	OP		haem
Wk	Day	Date			am	pm	am	pm	am	pm	am		am	pm	am	pm	am	pm	am	am		pm	am	pm	am	pm	am	am	pm	MDT	am
1	Tues	1	Hayne	B	D.M	Y			S							D.OB.M	G														
1	Weds	2	Hayne	B	D.	OB.M	S			D./ ga					G.#									S.			Y			OB	
1	Thurs	3	Young	B												#											Y			OB.H,D	M
1	Fri	4	Young	B	G	G		S					M/d	M/ob				#					Hy.OB		OB.	#		#			
	Sat	5	Young																												
	Sun	6	Young																												
1	Mon	7	Young	T		Hy.B					#				S.D.M			.D.		OB				G.		D	S		S		
2	Tues	8	Young	T	D.M	Hy.M			OB.B		G /la					OB.#.B	Hy					G									
2	Weds	9	Young	T	D.B	OB.B	S			Hy.M/ga					G.Hy.M			S									Y			Hy	
2	Thurs	10	Glackir	T												Y.B											Y			H,G,,D	B
2	Fri	11	Glackir	T	Hy.B	AUDIT	S.M							AUDIT				AUDIT					#		#	AUDIT		Y			
	Sat	12	Glackin																												
	Sun	13	Glackin																												
2	Mon	14	Glackir	B		Hy.									S.D.			D.#			Y			#		D	M		S		
3	Tues	15	Glackir	B	D.	Y.			S.							D.#	Hy.#														
3	Weds	16	Glackir	B	D..	OB	S.			D /ga					Hy.#									S			Y			G	
3	Thurs	17	Suresh	B												Y.M											Y			Hy,G,S	M
3	Frl	18	Suresh	M/C	G.	G.		Hy					#	M/y				Y					Hy.OB		OB	Y	Y	Y			
	Sat	19	Suresh																												
	Sun	20	Suresh																												
3	Mon	21	Suresh	M		H.T									#.Hy.B			OB.#	Y					G		#	T		#		
4	Tues	22	Glackir	M	Y.T	Y.T			OB.B		#					#.OB.B	Hy.					#									
4	Weds	23	Suresh	M	D.T	OB.T	Hy			Hy./la					#.G.#			#									Y			OB	
4	Thurs	24	Suresh	T												#														#	M
4	Fri	25	O'D	T	#	#		#						#		#		#					#		#	#		#			
	Sat	26	O'D																												
	Sun	27	O'Brien																												
4	Mon	28	Young	M		#									#			#			#			#		#	#		#		
5	Tues	29	Glackir	M	D	Y.			Y		#					D.OB.	Hy.#					#									
5	Weds	30	Young	M	D.	OB	S			D					Hy.G.									#			Y			Hy	
5	Thurs	31	O'Brie	B												Y.#											Y			OB.,D.	#

Corrigan, Martina

From: Corrigan, Martina [redacted]
Sent: 10 December 2015 14:16
To: Young, Michael
Subject: RE: Paed ESWL List

Thanks Michael

Just seeing this now as I am behind in emails!! So happy with this as long as Ram knows the plan

Martina

Martina Corrigan
Head of ENT, Urology and Outpatients
Southern Health and Social Care Trust
Craigavon Area Hospital

Telephone: [redacted]
Mobile: [redacted]
Email: [redacted]

From: Young, Michael
Sent: 03 December 2015 21:15
To: Corrigan, Martina
Cc: Dignam, Paulette; Young, Michael
Subject: RE: Paed ESWL List

Ok this is fine and would be a better way to arrange the paeds list.
Anaesthetics needs to plan well ahead who covers this list.
The number per year is random but with doing even younger kids there way be more sessions than last year

Can we say there would be between 4-6 per year is this reasonable?

Second point is radiographer issues in STC
Had a meeting with Josephine this week
The points are that the radiographer can not order the ultrasounds for the clinic and will not be able to do the treatments without prior booking of the therapy. The reason is the radiographers can not self refer and especially so if fluoroscopy is possible.
(only been doing for 15 year !!!)
So what need done - clinic needs to be preordered = so either Nuala and co do this the previous week in the admin time or at least do the first few and the doctor at the clinic order the rest – the latter will result in less pt being booked for the clinic
For the treatments – Paulette will need to give me the pt H&C the week before so I can book the treatments _ Josephine will supply the code
A lot more work for me but I do not see any alternative.

Hows that then

MY

From: Corrigan, Martina
Sent: 02 December 2015 20:41
To: Young, Michael
Cc: Dignam, Paulette
Subject: FW: Paed ESWL List

Hi Michael,

Can you advise please?

Thanks

Martina

Martina Corrigan
Head of ENT, Urology and Outpatients
Southern Health and Social Care Trust
Craigavon Area Hospital

Telephone: Personal Information redacted by USI
Mobile: Personal Information redacted by USI
Email: Personal Information redacted by USI

From: Meredith, Lorraine
Sent: 02 December 2015 09:50
To: Corrigan, Martina
Cc: Johnston, Pamela
Subject: Paed ESWL List

Hi Martina

Mr Young had previously spoke with me regarding a Paed ESWL list for today, which was then cancelled. Mr Young would like this to be re-arranged for January 2016, but we would prefer if this is requested through yourself and the theatre rota meeting.

Can I ask you to check which date are suitable for Mr Young and the Belfast Consultants? Also, can you check how many lists will be required each year (if known)?

Thanks
Lorraine

Lorraine Meredith
Service Administrator ATICS
& TMS Service Administrator
SHSCT
Ext: Personal Information redacted by USI
Tel: Personal Information redacted by USI
Mobile: Personal Information redacted by USI

Corrigan, Martina

From: Corrigan, Martina < Personal Information redacted by the USI >
Sent: 12 December 2014 17:11
To: Kelly, Brigeen; Meredith, Lorraine
Cc: Hanvey, Leanne; Haynes, Mark
Subject: Theatre list on Monday 29 December 2014

Brigeen and Lorraine

I have no consultant supervision for the ENT list on the AM of Monday 29th, but Mr Haynes has agreed now to do an all-day list from 9am-5pm.

I would be grateful if this could be noted on the rota please?

Many thanks and apologies for the last minute change

Kind regards and hope you have a good weekend

Martina

Martina Corrigan
Head of ENT, Urology and Outpatients
Southern Health and Social Care Trust
Craigavon Area Hospital

Telephone: Personal Information redacted by USI
Mobile: Personal Information redacted by USI
Email: Personal Information redacted by USI

Corrigan, Martina

From: Corrigan, Martina [redacted]
Sent: 29 December 2014 16:21
To: Haynes, Mark
Cc: Hanvey, Leanne
Subject: Start times for Monday theatres in January

Good afternoon

I am not sure if I had said this to you already but I am not able to get anaesthetics to start at 8am due to them having their teaching from 8-9am every Monday. This means that Turlough's session will be 9-1pm.

I am still working on this and hope to try and resolve (Charlie is looking at job plans), but for January can you please organise the list to commence at 1pm-8pm please.

Apologies about this and as I say I am working hard at trying to resolve.

Regards

Martina

Martina Corrigan
Head of ENT, Urology and Outpatients
Southern Health and Social Care Trust
Craigavon Area Hospital

Telephone: [redacted]
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Email: [redacted]

Urology Performance – 19 February 2019

Referrals received

2016-2017 - 5463
2017-2018 - 4594
2018-2019 – 3807 (up to end of January 2019)

Red Flag referrals (Total for one year = 3430)

62 DAY REFERRALS	Dec 17	Jan 18	Feb 18	Mar-18	April18	May 18	Jun 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19
Urological Cancer	118	138	161	182	157	160	183	147	193	175	197	193	180	173
31 DAY REFERRALS	Jan 18	Feb 18	Mar-18	April18	May 18	Jun 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Dec 18	Jan 19
Urological Cancer	99	86	76	64	82	77	75	101	56	104	66	57	57	73
Total	**217**	**224**	**237**	**246**	**239**	**237**	**258**	**248**	**249**	**279**	**263**	**250**	**237**	**246**

CAPACITY = 4 per consultant per clinic and if a registrar available then this increases to 6, therefore should have 6 consultants x 6 slots = 36 per week

New Outpatient waiting lists

Total on waiting list = 3687

Total URGENT waiting a date is 669 (longest = 24 weeks) (note that there are 6 others waiting longer but are in the PB cycle (1 x 147 weeks, 1 x 133 weeks, 1 x 87 weeks, 1 x 63 weeks, 1 x 58 weeks and 1 x 40 weeks)

Total ROUTINE waiting a date is 3018 (longest is waiting 161 weeks)

RED FLAGS waiting with no dates:

Referral	No waiting	Time Waiting
Urology (Prostate)	**44 patients**	**67 days**
Urology (Haematuria)	**57 patients**	**61 days**
Urology (Other)	**14 patients**	**26 days**

Dr Paul Hughes clinic in DHH has been cancelled for the first 2 weeks of March currently have 11 patients to be booked.

Review outpatient backlog (taken from Business objects) – should have been seen by 31 March 2019

Consultant		
	total	**Longest date**
Mr Young (general)	284	July 2015
Mr Young (stones)	618	March 2015
Mr O'Brien	675	March 2015
Mr Glackin	80	February 2017
Mr Haynes	59	October 2018
Mr O'Donoghue	549	September 2015
Mr Jacob	634	February 2017
Enniskillen	157	March 2016
Total	**3056**	

Total per year

2015	**77**
2016	**198**
2017	**661**
2018	**1485**
2019	**635**

Adult Inpatient and Daycase waiting lists – position 19 February 2019 (1805 patients)

Consultant	Urgent Ins	Weeks Waiting	Routine Ins	Weeks waiting	Urgent D/C	Weeks waiting	Routine DC	Weeks waiting
Mr Young	161	231	66	264	114	208	208	251
Mr O'Brien	216	237	57	237	36	212	23	235
Mr Glackin	53	110	34	119	48	56	38	51
Mr Haynes	91	178	47	225	22	94	50	216
Mr O'Donoghue	119	156	34	195	88	102	26	203
Mr Jacob	37	150	18	161	102	130	117	167
Total	**677**		**256**		**410**		**462**	

Paediatrics Inpatient and Daycase waiting lists – position 19 February 2019 (27 patients)

Consultant	Urgent Ins	Weeks Waiting	Routine Ins	Weeks waiting	Urgent D/C	Weeks waiting	Routine DC	Weeks waiting
Mr Young	0	0	0	0	2	4	1	81
Mr O'Brien	7	55	4	182	1	35	2	134
Mr Glackin	0	0	0	0	0	0	1	11
Mr Haynes	0	0	0	0	1	61	0	0
Mr O'Donoghue	1	9	1	128	0	0	2	105
Mr Jacob	2	70	0	0	2	115	0	0
Total	**10**		**5**		**6**		**6**	

Planned patients that should have been seen

Consultant	
Mr Young	57
Mr O'Brien	42
Mr Glackin	20
Mr Haynes	40
Mr O'Donoghue	41
Mr Jacob	23
Total	**223**

UROLOGY PERFORMANCE – 20 MAY 2015

New Outpatient waiting lists
Total on waiting list = 1842 patients
Total with a date = 70 patients

Total URGENT waiting a date is 266
(longest = 1x 45 weeks, 1 x 38 week and 1 x 34 weeks)
225 patients waiting 0-9 weeks
41 patients waiting 10-45 weeks – longest after the 34 weeks = 13 weeks

Total ROUTINE waiting a date is 1506 (longest = 50 weeks)
254 patients waiting over 40 weeks
312 patients waiting 30-39 weeks
330 patients waiting 20-29 weeks
345 patients waiting 10 – 19 weeks
265 patients waiting 0-9 weeks

Update on urology review backlog:

Data Validation (PAS) commenced December 2014 – to look for duplicate episodes etc. to ensure lists were cleansed before patient validation (letters) were sent.
There were a number of duplicates identified, as well as other PAS issues/errors such as:

- patients added to OPWL incorrectly, or to the wrong OPWL
- patients added to Consultant OPWL instead of Nurse-Led
- Date Required not changed (patient appeared to be in backlog, but should have had a future Date Required for review)
- Patients not booked from OPWL, but had been seen since their stated Date Required
- OP Discharges per Consultant letter not followed up on PAS – i.e. Episode not closed down on PAS
- Under 18 discharges – must receive confirmation from consultants first – not being processed efficiently

All PAS issues identified (mostly recurring problems) have been highlighted to Service Administrators/PAS User Group/Data Quality Team/Information Team – for action and future PAS training/refresher training

Total patients data validated – 1900 approx

Patient letter validation – commenced last week February 2015
Total 973 letters sent (to longest waiters).
260 patients were discharged (either didn't want appointment or didn't respond)
713 patients still wanted an appointment = 73%

Review Backlog position as of 30 April 2015

CONSULTANT	URGENCY	OPWL CODE	TOTAL	LONGEST WAIT
MR M YOUNG	ROUTINE	BURM4R	6	Mar-13
MR M YOUNG	URGENT	BURM4UR	0	0
MR M YOUNG	ROUTINE	CURMYR	406	Dec-12
MR M YOUNG	URGENT	CURMYUR	57	Jun-14
MR M YOUNG	ROUTINE	CMYUOR	0	0
MR M YOUNG	ROUTINE	CMYSTCR	286	Feb-14
MR M YOUNG		TOTAL	755	Dec-12
MR A O'BRIEN	ROUTINE	CAU4R	80	Nov-11
MR A O'BRIEN	URGENT	CAU4UR	10	Jan-15
MR A O'BRIEN	ROUTINE	CU2R	448	Dec-11
MR A O'BRIEN	URGENT	CU2UR	105	Sep-14
MR A O'BRIEN	ROUTINE	CAOBUOR	273	Sep-13
MR O'BRIEN		TOTAL	916	Nov-11
MR A GLACKIN	ROUTINE	CAJGR	206	Apr-13
MR A GLACKIN	URGENT	CAJGUR	45	Feb-14
MR A GLACKIN	ROUTINE	CAJGUOR	5	Apr-15
MR GLACKIN		TOTAL	256	Apr-13
MR K SURESH	ROUTINE	CKSR	54	Apr-13
MR K SURESH	URGENT	CKSUR	174	Apr-13
MR K SURESH	ROUTINE	CKSUOR	28	Feb-15
MR SURESH		TOTAL	256	Apr-13
MR MD HAYNES	ROUTINE	CMDHR	0	0
MR MD HAYNES	URGENT	CMDHUR	0	0
MR MD HAYNES	ROUTINE	CMDHUOR	0	0
MR HAYNES		TOTAL	0	0
MR JP O'DONOGHUE	ROUTINE	CJODR	27	Feb-15
MR JP O'DONOGHUE	URGENT	CJODUR	3	Feb-15
MR O'DONOGHUE		TOTAL	30	Feb-15
UN-NAMED REVIEWS	ROUTINE	EUROR	42	Dec-13
UN-NAMED REVIEWS	URGENT	EUROUR	6	Feb-15
ENNISKILLEN		TOTAL	48	Dec-13
MR AKHTAR	ROUTINE	CMAR	125	Dec-12
MR AKHTAR		TOTAL	125	Dec-12
OVERALL TOTAL AND LONGEST WAIT			2386	Nov-11

Inpatient and Daycase waiting lists

Total = 924 on waiting list = 172 with dates

249 urgent inpatients without a date longest = 91 weeks

Consultant	Total URGENT Inpts without date	Waiting time
Mr Young	56 patients	Longest = 84 weeks 38 between 14-84 weeks 19 between 0-13 weeks
Mr O'Brien	112 patients	Longest = 81 weeks 26 > 51 weeks 60 between 14-50 weeks 26 between 0-13 weeks
Mr Glackin	13 patients	Longest = 33 weeks 1 x 33 weeks 12 between 0-13 weeks
Mr Haynes	18 patients	Longest = 52 weeks 6 between 14-52 weeks 12 between 0-13 weeks
Mr Suresh	20 patients	Longest = 25 weeks 7 between 14-25 weeks 13 between 0-13 weeks
Mr O'Donoghue	30 patients	Longest 91 weeks 11 between 14-91 weeks 19 between 0-13 weeks

116 urgent daycases without a date longest = 69 weeks

Consultant	Total URGENT Inpts without date	Waiting time
Mr Young	48 patients	Longest = 69 weeks 17 between 14-69 weeks 31 between 0-13 weeks
Mr O'Brien	14 patients	Longest = 54 weeks 4 between 14-54 weeks 10 between 0-13 weeks
Mr Glackin	11 patients	Longest = 13 weeks 11 between 0-13 weeks
Mr Haynes	3 patients	Longest = 17 weeks 1 at 8 weeks 1 at 3 weeks
Mr Suresh	23 patients	Longest = 27 weeks 8 between 14-27 weeks 15 between 0-13 weeks
Mr O'Donoghue	17 patients	Longest 35 weeks 4 between 14-35 weeks 13 between 0-13 weeks

Flexible Cystoscopy

Consultant	Planned Flexis To be seen by end of June	Waiting time	On D/C list	Waiting time
Mr Young	6 patients	2 April 1 May 3 June	4 patients	7 weeks
Mr O'Brien	8 patients	1 Feb 6 May 1 June	4 patients	38 weeks
Mr Glackin	9 patients	2 May 7 June	12 patients	14 weeks
Mr Haynes	7 patients	2 May 5 June	0 patients	-
Mr Suresh	1 patient	1 April	12 patients	27 weeks
Mr O'Donoghue	0 patients	-	25 patients	25 weeks

Urology PERFORMANCE – 9 November 2018

New Outpatient waiting lists

Total on waiting list = 3436 – longest routine wait = 146 weeks

Total 699 URGENT waiting a date is (longest = 74 weeks)

Review outpatient backlog (taken from Business objects) – should have been seen by 31 December 2018

Consultant		
	total	**Longest date**
Mr Young (general)	285	July 2015
Mr Young (stones)	605	March 2015
Mr O'Brien	586	March 2015
Mr Glackin	127	February 2017
Mr Haynes	25	August 2017
Mr O'Donoghue	513	September 2015
Mr Jacob	546	May 2017
Enniskillen	273	June 2015
Total	**2960**	

Total per year

2015	**118**
2016	**218**
2017	**673**
2018	**1951**

Adult Inpatient and Daycase waiting lists – position 9 November 2018 (1755 patients)

Consultant	Urgent Ins	Weeks Waiting	Routine Ins	Weeks waiting	Urgent D/C	Weeks waiting	Routine DC	Weeks waiting
Mr Young	152	216 wks	60	249 wks	128	194 wks	231	236 wks
Mr O'Brien	184	227wks	55	222 wks	31	197 wks	25	220 wks
Mr Glackin	36	95 wks	30	104 wks	47	61 wks	36	43 wks
Mr Haynes	83	163 wks	45	211 wks	37	90 wks	49	201 wks
Mr O'Donoghue	105	141 wks	31	180 wks	64	87 wks	26	188 wks
Mr Jacob	40	136 wks	21	146 wks	115	122 wks	124	152 wks
Total	**600**		**242**		**422**		**491**	

Paediatrics Inpatient and Daycase waiting lists – position 9 November 2018 (28patients)

Consultant	Urgent Ins	Weeks Waiting	Routine Ins	Weeks waiting	Urgent D/C	Weeks waiting	Routine DC	Weeks waiting
Mr Young	0		0		3	10 wks	1	66 wks
Mr O'Brien	7	200 wks	3	111wks	2	42 wks	1	119 wks
Mr Glackin	0		0		0		0	
Mr Haynes	0		0		1	46 wks	1	133 wks
Mr O'Donoghue	2	80 wks	1	113 wks	1	41 wks	1	90 wks
Mr Jacob	2	55 wks	0		2	100 wks	0	
Total	**11**		**4**		**9**		**4**	

Planned patients that should have been seen

Consultant	Urgent Ins
Mr Young	54
Mr O'Brien	38
Mr Glackin	39
Mr Haynes	40
Mr O'Donoghue	23
Mr Jacob	18
Total	**212**

Corrigan, Martina

From: Corrigan, Martina [redacted]
Sent: 30 September 2013 15:29
To: Glenny, Sharon
Subject: FW: swap of theatre session from 8/11/2013

Hi Sharon,

For keeping in mind as per the conversation with Ajay on Thursday – I will use the theatre list for ENT and I will give you a name shortly……..

Thanks

Martina

Martina Corrigan
Head of ENT, Urology and Outpatients
Southern Health and Social Care Trust

Telephone: [redacted] (Direct Dial)
Mobile: [redacted]
Email: [redacted]

From: Pahuja, Ajay
Sent: 27 September 2013 17:17
To: Corrigan, Martina
Cc: [redacted]
Subject: swap of theatre session from 8/11/2013

Another email for you !- apologies

Are there any other theatre sessions available in November to swap my theatre from Friday the 8th November PM list ?

Thx
Ajay

Southern Health and Social Care Trust

Specialty Induction

Urology

Craigavon Area Hospital

August 2019

Mr A Glackin, Consultant Urologist

Revised: 20/06/2019

Specialty induction for Urology Craigavon Area Hospital

Consultants	Secretary
Mr A O'Brien	Noleen Elliott
Mr M Young (Clinical Lead)	Paulette Dignam
Mr A Glackin	Elizabeth Troughton
Mr M Haynes	Leanne Hanvey
Mr J O'Donoghue	Nicola Robinson
Locum	Teresa Loughran

We have 3 Specialty Registrars, 2 Specialty Doctors and 2 FY1 Doctors on rotation. Mr Young and Mr Glackin are the Assigned Educational Supervisors for the Specialty Registrars.

General Information
- All doctors need to obtain a key fob/card to access wards/theatres
- All doctors need to request IT access
- Also get access to "safeq" to enable access to printing facilities

Annual Leave
Requests for annual leave/study leave must be made 6 weeks in advance (to allow for clinics to be reduced). Mr Young co-ordinates the Urology Team schedule and all requests for leave must be notified to him.

Emergency Admissions
We cover Craigavon Area Hospital, Daisy Hill Hospital in Newry and the South West Acute Hospital in Enniskillen for all urological emergencies. It is important that we deal promptly with requests for urological care from referring hospitals & GP's. When accepting a case for admission to Craigavon please inform the bed manager and the nurse in charge of 3 South.

The Urology Registrars must liaise with the on call Consultant Urologist regarding care provided under their name.

All Children under 16 years old: please discuss directly with the Consultant Urologist on-call before accepting the care of a child.

It is vital that the overnight admissions are identified first thing each morning by discussion with the surgical on-call team.

Ward Rounds

Daily on 3 South at 0900 led by the Urology Consultant of the Week and attended by one urology registrar and FY1.

There is an evening board round on weekdays.

- All blood results/investigations should be chased before 5pm that day. If not available, only then should this work be passed to the on-call FY1.
- As far as possible all the reports of the investigations should be available on ward rounds to avoid unnecessary delays.
- All discharge summaries should be completed in the morning and in electronic format. **The information must be checked by the registrar.**
- Keep Morbidity & Mortality up-to-date on NIECR.
- All patients discharged from ICU need to be reviewed by a doctor within 6 hours of admission to either the emergency or elective wards (and have their medication prescribed).

On Thursday mornings the Consultants and trainees participate in a formal handover ward round.

Emergency Theatre

Theatre 1, the direct dial number is Personal Information redacted by USI. All cases must be listed on the TMS and discussed with the anaesthetist responsible for the list and the nurse in charge. Theatre 1 has x-ray and laser capability. It is the responsibility of the booking clinician to advise the radiographer of the case and to make the e-request on RIS-CX. We make extensive use of this list within NCEPOD guidance. Please advise the admitting Consultant if you are taking a case to theatre.

Elective Operating

Urology is based in Theatre 4 led by Sister Susan England.

- The Green Additions to the Waiting List Form should be filled out for all inpatient and day-case surgery. Any addition to the surgical waiting MUST be discussed with a Consultant and countersigned by them.
- All elective patients should be pre-operatively assessed; the Trust's Pre-Operative Assessment Service is based in the Outpatients Department.
- The majority of elective surgical patients are admitted on the day of surgery to Elective Admission Ward, which is located on West 1.
- The first patient on the Theatre list should be ready to go to theatre at 8:30am.

Guideline for Consent:

Please note consent should be taken at Outpatients when adding a patient to the waiting list and reconfirmed on the day of surgery.

Explain the procedure to the patient, including alternatives

Explain the risks and how they are minimised

Check's the patient's understanding

Outpatient Department and Correspondence

We are fortunate to have a purpose built Urology outpatient facility located in the Thorndale Unit at CAH. It is run by Sister Kate O'Neill and Sister Jenny McMahon. We have capacity for urodynamics, ultrasound, intra-vesical therapy, prostate biopsy and flexible cystoscopy. Most of our Craigavon clinics take place from this location. The Consultants also provide outpatient services at various locations throughout the trust area.

We provide a dedicated Stone service from the Stone Treatment Centre. We have a new on site lithotripter. The Unit is located beside the main theatre department.

- Digital Dictation should be used for any correspondence
- Please keep your letters informative but short, concise and clear, and remember to include your name and signature
- If you require a letter typed immediately, e.g. an urgent or red-flag patient, use the correct option on G2 electronic dictation and SPEAK/E-MAIL to the appropriate secretary
- Please check your pigeon hole and trust email accounts at least once a week
- Use electronic discharge, check and sign results (bloods, urines, x-ray etc.)

Education & Protocols/Guidelines

- Patient Safety Meetings are held in the Lecture Theatre in Medical Education Centre (MEC) for the whole directorate and the Thorndale Unit for Urology only on a monthly basis. An M&M proforma must be filled in for all deaths on NIECR by the registrars and checked with the responsible Consultant.
- Regional Urology Audit is held 3-4 times per year. Dates to be advised by Mr Abogunrin Consultant in Urology at SEHSCT.

Please familiarise yourself with Trust's Intranet. Trust protocols/guidelines can be found on the intranet. Please note it is your responsibility to ensure you have read and are aware of the Trust's protocols/guidelines. You will be notified when new protocols/guidelines are issued or updated.

Corrigan, Martina

From: Cunningham, Kate [redacted]
Sent: 28 December 2016 13:45
To: Carroll, Ronan
Cc: Nelson, Amie; Corrigan, Martina; Clayton, Wendy
Subject: RE: e-Referrals management solution

Ronan

Would any for the following dates and times suit you

Date	Time	Location
3rd January	Afternoon	CAH
6th January	Afternoon	CAH
11th January	Afternoon	CAH

If not I will ask Aideen to arrange a meeting.

Kate

From: Carroll, Ronan
Sent: 28 December 2016 12:31
To: Cunningham, Kate
Cc: Nelson, Amie; Corrigan, Martina; Clayton, Wendy
Subject: RE: e-Referrals management solution
Importance: High

Kate
Yes to a meeting
Ronan

Ronan Carroll
Assistant Director Acute Services
Anaesthetics & Surgery
[redacted]

From: Cunningham, Kate
Sent: 28 December 2016 12:18
To: Carroll, Ronan
Subject: e-Referrals management solution

Good afternoon Ronan

You may well be aware that NIECR has developed an e-Referrals management solution. This is being rolled out throughout Northern Ireland. SHSCT is one of the last adaptors.

NIECR will deliver an e-Referrals management solution which will allow electronic GP referrals to be triaged within a rich clinical data set. The solution performs the following key functions:

1. Display referral in NIECR
2. Register Referral automatically on PAS
3. Adheres to registration protocols
4. Identifies open referrals to same specialty
5. Enhances Data Quality

6. Present referral to Specialty Consultants for Triage
7. Upon completion presents to Booking Office for completion
8. Add to waiting list
9. Make appointment
10. Discharge referral

Key Benefits

1. Fully paperless process
2. Automated OP referral registration
3. Informed referral triage decision making using NIECRs rich clinical data set
4. Safe and fully auditable
5. 80% of GP electronic referrals in NHSCT now completed on PAS (appointed, added to Waiting List or Discharged) within 3 days from GP electronically referring.
6. Around 30% of all GP electronic referrals completed (Per above) on the same day GP made referral
7. Potential to release portering and administrative staff to support direct clinical care areas e.g. wards, EDs and 7-day working.

We are currently working with Obs and Gynae on the implementation of this NIECR module and it is planned that they will be first to go. Regional NIECR have been working with the our booking office and this functionality is soon to become available. In an attempt to manage the roll out Catherine Robinson (following meetings with the services) has informed me of the list of specialities that wish to go next.

These are as follows:

1.Gastro
2.General Surgery
3.Urology

I have been in contact with Louise Devlin to meet with the lead Gastro Consultant and herself to make some plans for implementation. Do you wish to meet to discuss this further.

Regards.

.

Kate Cunningham

Transformational Lead
Rosedale
Gilford
Mobile Personal Information redacted by USI
ITS Programme Management Sharepoint Site

Corrigan, Martina

From: Cunningham, Kate [redacted]
Sent: 17 November 2017 15:56
To: Haynes, Mark; Gilpin, David; Young, Michael
Cc: Nelson, Amie; Clayton, Wendy; Corrigan, Martina
Subject: RE: new referrals / ?paperless

Hi Mark/David/Michael

Just to reassure you that we have a contingency plan currently being developed and put in place for your particular service, we will not proceed without this being in place. If NIECR should go down either planned or otherwise, medical records will be informed and copies of the referral letter will be printed out from CCG and delivered to OPD.

Kind regards.

Kate Cunningham

Transformational Lead
Mobile [redacted]
ITS Programme Management Sharepoint Site

From: Haynes, Mark
Sent: 17 November 2017 06:27
To: Gilpin, David; Young, Michael
Cc: Cunningham, Kate; Nelson, Amie; Clayton, Wendy; Corrigan, Martina
Subject: new referrals / ?paperless

Morning David / Michael

Most of the disciplines that are now using e-triage no longer have a printed CCG referral in their notes, instead they view the referral on NIECR. This had been discussed pre e-triage go live and is seen as phase 2 of the implementation.

Could you consider whether this would be satisfactory within your teams or any specific issues it would give (along with thoughts of how these could be overcome). Of course any paper Consultant to Consultant referrals and any G.P paper referrals would continue to be printed and in the notes.

My only concern would be those occasions when ECR is not working for a period. Planned outages are usually planned when clinics are not occurring however unplanned outages can happen at anytime and while rare, if no letter is in the notes then seeing new patients when ECR down would be rendered impossible (with OP waits of >80 weeks for some specialities patients have often forgotten what they were referred for). So would be a need for a backup process which would enable the letters to be found quickly when ECR is down.

I be grateful if you could forward your responses to Kate Cunningham (copied in to this email).

Mark

Proposal for ADEPT Management Project in Southern Health and Social Care Trust

Aim

To establish and develop a satellite Urology Service in the first instance in Daisy Hill Hospital this is to include Outpatients, daycases and some suitable inpatients.

Background

There is a General Surgeon with a Urology Interest in Daisy Hill Hospital who is retiring. This will mean that there will no longer be any urology service available locally for the Newry and Mourne Population.

The Project

Start with a baseline to find out the views of the Consultant Team and then work at establishing and setting up the service in Daisy Hill. Then auditing at how this is all achieved, using Manpower, Equipment, Facilities available etc..

Below are some of the outcomes that it is anticipated will come from this project:

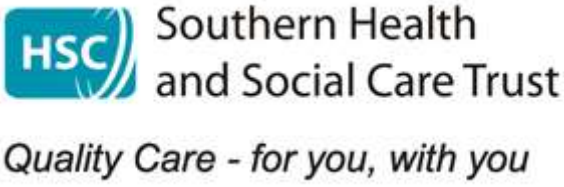
- Clinical engagement not only from Urology but from General Surgery.
- Developing pathways for suitable elective patients so their operation can be carried out in Daisy Hill Hospital
- Developing pathways, guidance and information on Urological Procedures for emergency patients and therefore preventing inappropriate admissions or reducing length of stay because there will be guidance on what should be done for various conditions.
- Release Main Theatre time in Craigavon Hospital so that team can concentrate on more major cases that need to be done in Craigavon Hospital, therefore ultimately reducing the waiting times for Urology Surgery.

The skills gained from this project will be transferable and will mean that there can be a satellite service can be enhanced in South West Acute Hospital (currently the Urology Team travel to do outpatients and are keen to commence daycases there as well, so if there was time then this process could be rolled out to this facility.

The learning and outcomes could be shared with other Trusts in Northern Ireland.

The successful candidate would be monitored and mentored by Mr Haynes and Mr Glackin (Consultant Urologists) and Mrs Corrigan, Service Manager for Urology.

Stone Treatment Centre Improvement Project



Contents

1. Extracorporeal Shockwave Lithotripsy (ESWL)

ESWL is a method of using shockwaves applied to the back of a patient to treat kidney stones and ureteric stones (ureter is the pipe which drains urine from the kidney to the bladder). ESWL is undertaken with pain relief and no anaesthetic is needed unless the patient is a child, and is most commonly conducted as a day case. The alternative for stone treatment is ureteroscopy and percutaneous nephrolithotomy (PCNL), both of which require general anaesthetic and are conducted in a theatre setting.

2. Rationale

The overall lifetime risk of renal or ureteric calculi is 10-15%, the male to female ratio is 2:1 and the peak age of presentation is 30-50 years. The recurrence rate can be high, with up to 30% of cases recurring at 10 years and 90% of cases recurring at 30 years.

The Southern Trust has an on-site lithotripter providing a maximum of 3 ESWL sessions a week, with each session treating a maximum of 3 patients, giving a total of only 9 patients per week. There is currently no capacity or model for emergency ESWL. Occasional Paediatric list in conjunction with Belfast and adult patients from the Northern and South Eastern Trusts are also accommodated. The lithotripter is therefore not used for 11 out of a possible 14 daytime clinical sessions.

The average waiting time for first elective ESWL session was 9 weeks, with the longest single wait at 55 weeks as of October 2016, but the waiting time was rapidly increasing as demand increased.

Currently all emergency stones needing treatment are operated on via the emergency list. For patients who are suitable, emergency ESWL may be a more cost effective and potentially less morbid modality for treatment. Ureteric stone patients who are admitted as an emergency have been recommended to be treated within 48 hours from the decision to treat (Wiseman, 2017).

Selected patients could be removed from overburdened inpatient elective Ureteroscopy waiting lists if ESWL capacity was increased. This could potentially provide a more cost effective modality compared to use of the operating theatre and requirement of a general anaesthetic.

3. Project aim

1. To meet the demand for the Extra Corporal Shockwave Lithotripsy (ESWL) service for elective and emergency renal and ureteric stone treatment for the Southern Trust.
2. Provide stone treatments recommended by NICE, BAUS and EAU
3. Provide patients with informed choice

In order to meet the demand for ESWL the waiting list needs to be reduced and then maintained at a reasonable wait. Imaging of patient's stone must be recent to avoid re-imaging or difficulty in identifying stone location for treatment, which can only be achieved with a short wait for treatment. The desired wait time will be set following the service evaluation and visit to a 'Gold Standard' service centre.

4. Hypothesis

Patient numbers per session can be increased by reviewing and improving the process currently in place. Extra sessions per week can decrease the overall cost of the patients treated for renal and ureteric stones by decreasing the number treated by the more costly emergency theatre and elective theatre sessions.

5. Objectives

1. Review and appraise current service set-up for ESWL. Including equipment, clinical area, staff, referral, follow-up and discharge of patients. Recording of treatments and any further investigations and stone prevention.
2. Identify current funding parameters for ESWL and potential funding
3. NICE and EAU guidelines for stone treatments in relation to current practice and application to any changes
4. Obtain costs of ESWL vs Emergency ureteroscopy surgery vs Elective ureteroscopy surgery in the Southern Trust
5. Review emergency surgery conducted over 9 month period that could have received ESWL had it been available
6. Evaluate 'Gold standard service'. How do other NHS hospital work regarding onsite ESWL including follow-up and prevention. How do the top European centres implement their ESWL service.

7. Project Scope

The project will encompass the patient pathway of stone diagnosis to treatment and discharge for those patients suitable for ESWL in the Southern Trust. It is outside the scope of this project to provide a service for stone prevention and follow-up of recurrent or high risk stone formers. The theatre practise of alternative treatments for stones, ureteroscopy and PCNL, will not be part of the project, although recommendation for type of stone treatment patients receive will be reviewed as part of the service evaluation on how patients are selected for ESWL.

8. Project Sponsor

The overarching sponsor is the Medical Director and his Executive Team. Keeping the Medical Director Richard Wright copied into important e-mails to drive the project forward is fundamental, as well as regular face to face meetings with project update presentations. The project heavily involves the Urology team especially Mr Michael Young as clinical lead and Martina Corrigan as Urology Manager and daily/weekly engagement is crucial. It is a necessity for the project sustainability and eventual outcomes to be supported that the groups of people mentioned thus far are kept regularly up to date and are in agreement with actions.

9. Project Team

In order to fulfil our aims for the Southern Trust the team will have a constant core team of staff who work at the Craigavon Stone Centre. Team members who are going to deliver the service are vital for inclusion, as they will drive the improvement, sustain the improvement, and hopefully continue future improvement. The team can learn together the methodology of improvement science, the need for improvement and not just change. There will be interaction required from other departments in order to fulfil the aims and objectives and the need for the team to be flexible to incorporate other personnel when required. The team in fundamental for success, especially in a National Health Service setting, where the varied skill sets and experience can be utilised, but without a team effort no project in the NHS can succeed as barriers will occur. The Medical Director and executive team will be kept informed and utilised as the project requires. In order to meet certain objectives input will be required from Estates, Trust architects, Pharmacy, IT, Radiology, Accident and Emergency and the remainder of the Urology Consultant Team.

The Core Team:

Mr Michael Young : Urology Clinical Lead and Project Lead

Mr Matthew Tyson: Project lead

Mr John O'Donoghue: Urology Consultant

Martina Corrigan: Manager for Urology

Saba Husnain: Staff Grade Urology Doctor

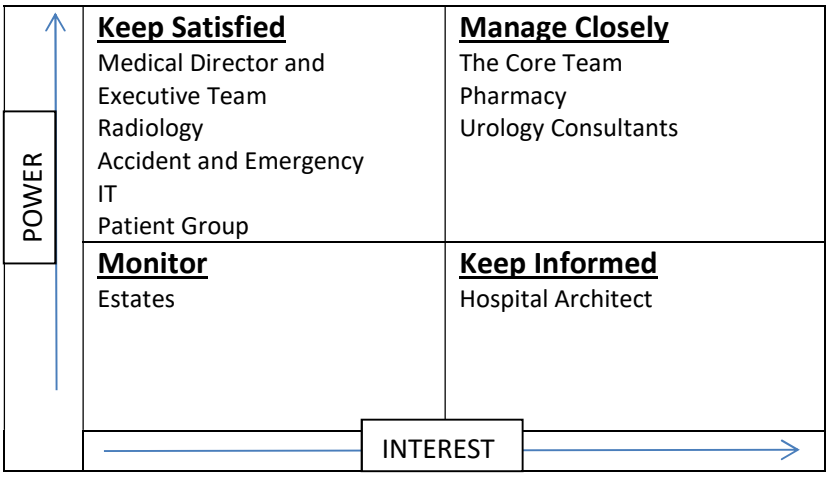
Laura McAuley: Staff Grade Urology Doctor

Paulette Dignam: Secretary and Administration

Hazel McBurney, Bronagh OShea, Bernadette Mohan, Wayne Heatrick: Radiographers

Nuala Mulholland, Mairead Leonard, Justin McCormick, Kate McCreesh, Martina O'Neil: Nursing Staff

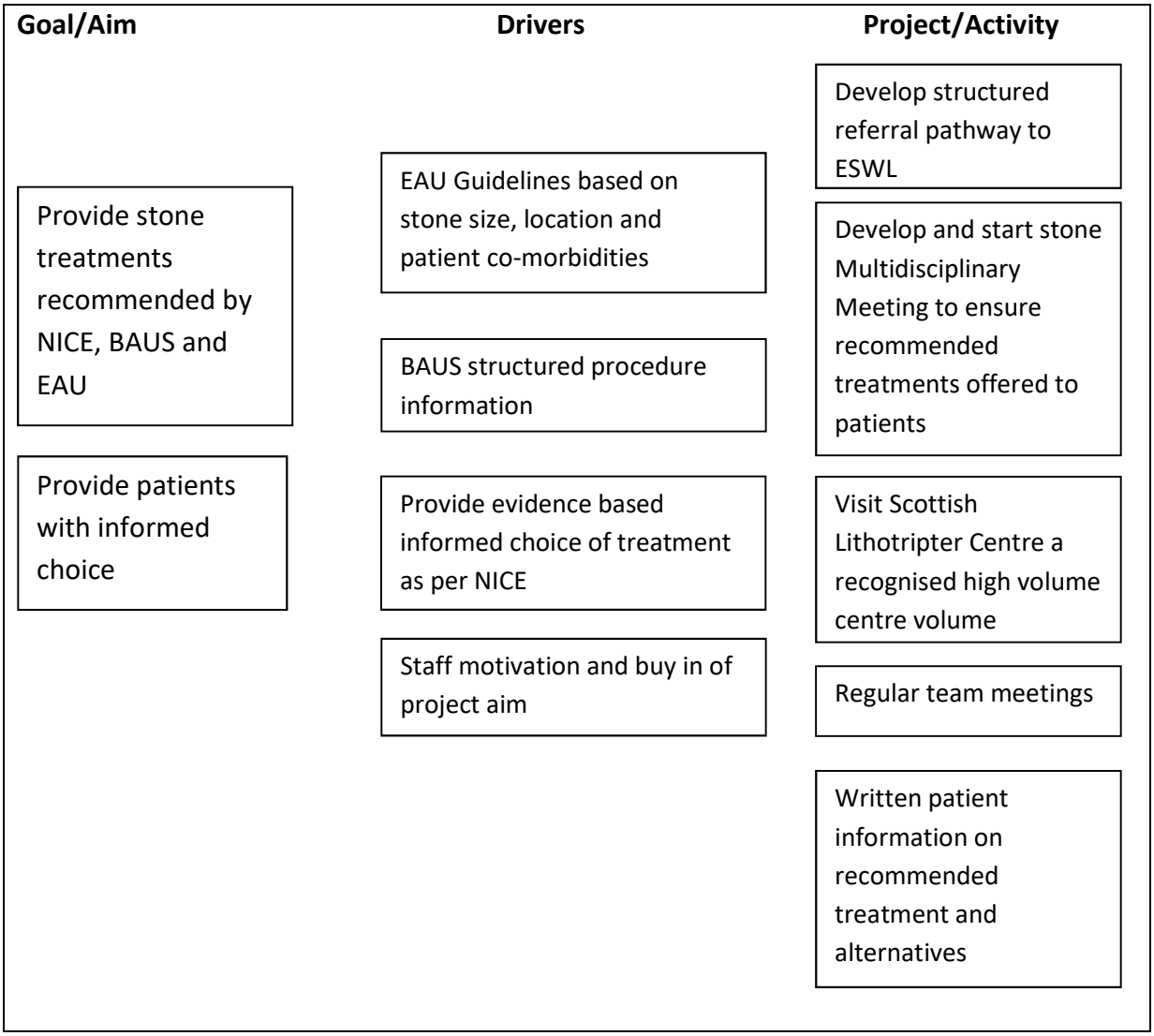
Stakeholder Evaluation



10. Approaches and Measures (Method)

To help plan the project improvement and due to the complexity of the task, driver diagrams were constructed. (Royal College of Physicians Ireland, 2012)

Goal/Aim	Drivers	Project/Activity
To meet the demand for (ESWL) service for elective and emergency renal and ureteric stone treatment for the Southern Trust	More ESWL to reduce the demand on main theatre for Ureteroscopy and Laser to Stone	Prove ESWL treatment is more cost effective then main theatre Ureteroscopy
	Reduce the waiting list for ESWL by increasing activity	Time and Motion study of ESWL treatment session
	Increase number of patient treated per day with ESWL, allowing for emergency ESWL	Evaluation of current service
	Reduce the demand for outpatient appointments	Visit Scottish Lithotripter Centre a recognised high volume centre volume
	Staff motivation and buy in of project aim	Regular team meetings
	Identify method to stop patients having outpatient appointment prior to ESWL treatment, to reduce patient wait for ESWL	Patients booked directly for ESWL treatment from diagnosis of stone



As highlighted by the driver diagram a **service evaluation** is a must and was the first step, this included the **patient pathway**, **time and motion study** of ESWL treatment session and infrastructure of the Stone Treatment Centre. This was followed by **a visit to the Scottish Lithotripter Centre** to see first-hand the processes of a high volume ESWL centre, and to determine what lessons could be relayed to the Southern Trust.

A 2 hour **Team Meeting** every Thursday morning was an opportunity for planning and review of **PDSA cycles**, keeping the team up to date, role and responsibility setting as well as motivating team members to the aim and learning.

Patient questionnaire following receiving ESWL treatment, as well as **patient and staff interview** of ESWL treatment sessions.

Data Collection and Review of Patient notes to record how many patients who received Emergency Treatment for Kidney Stones could have undergone ESWL. An analysis of the

cost implication of Emergency ESWL vs Emergency Ureteroscopy and Elective ESWL vs Elective Ureteroscopy.

Process measures will reflect the steps involved in the patient being identified and referred to the Stone Treatment Centre, such as the referral pathway, including the structured referral form, as well as the process and number of the patient(s) on the day of treatment.

Structure measures will reflect the staffing and equipment required for the Stone Multidisciplinary Meeting (MDM), and the ESWL treatment sessions.

Outcome measures will be assessed on proving the changes are improvements, these will be in keeping with the ethos of 'High Quality Health Care' (Southern Health and Social Care Trust). In relation to the overall aims quantitative outcomes will be measured as a reduction in the waiting times for patient to receive ESWL and the provision of Emergency ESWL. Quantitative review of Stone Meeting outcomes in relation to guidelines as per European Urology and quantitative patient questionnaire on 'informed choice on treatment of their stone'. Finally there is a chance to prove an economic benefit from the project, with quantitative outcome evidence that increasing funding of ESWL stone treatments saves money to the Trust overall. As noted by Donabedian outcome measures will be the 'ultimate validators' of the effectiveness and quality of this project (Donabedian, 2005)

Balances are important, so that no change or improvement has a direct or indirect negative consequence. An example for this project would be ensuring that by increasing the number of ESWL sessions that patients are successfully treated with ESWL for their stone, and only a minimal number require further treatment by Ureteroscopy in main theatre. This will be determined largely by the correct, guideline orientated selection of patients for the most recommended treatment for their stone.

11. Data Collection (Results)

1. **Service Evaluation**

The service evaluation looked at the patient journey from diagnosis of a ureteric or renal stone to an end point of completion of treatment of the stone. The evaluation was conducted using observation of patient pathway, interview of staff and patients and questionnaire of patients receiving ESWL treatment.

Summary of evaluation findings:

Summary of Service Evaluation August 2016

1. **Patients were most commonly diagnosed with kidney or ureteric stone in Accident and Emergency using NCCTKUB.**
2. **There was no Trust guideline policy on who, how or when to image when presenting with possible renal colic.**
3. **Referral of patients from Accident and Emergency was either by telephone call to registrar on-call or hand written free hand referral to consultant on call for outpatient follow-up.**
4. **Only 56% of patients had serum calcium checked (within the previous year) for referral of emergency treatment (Ureteroscopy and Laser in main theatre as emergency ESWL was not available). Serum calcium needed for potential risk of developing stones, and if raised a rare cause of morbidity and mortality (World Health Organisation , 2015). Only 37% of patients had their serum Uric acid checked, if elevated another possible cause of kidney stones.**
5. **Patients referred for outpatient review were seen in Outpatient Appointment prior to any stone treatment commencing**
6. **NO Emergency ESWL was available**
7. **The wait for ESWL was 9 weeks (and increasing)**
8. **Day of treatment for ESWL Stone Treatment Centre consisted of:**
    a. **3 patients treated per session (half day), 9 patients per week. Staff present for treatment X1 Staff Nurse, X1 Health Care Assistant, X1 Radiographer, On-call Doctor called to prescribe medications.**
    b. **Dedicated Stone Treatment Centre for ESWL, with modern Lithotripter**
    c. **Data from the staff interview indicated they were enthusiastic, dedicated, and eager to improve service, they had a good knowledge base and were eager for further learning and to share learning so far. Themed comments were 'need to reduce waiting list', 'imaging need to be up to date for day of treatment, images of stone diagnosis were often out of date due to the long wait for treatment', 'medications prescribed in advance of treatment as delays were being caused by waiting for doctor to prescribe'.**
    d. **The themed responses from the patient interviews were 'difficulty in finding the Stone Treatment Centre', 'long wait for treatment', 'nowhere to safely store personal items, no lockers', 'no dedicated changing room', they did also comment on 'excellent staff', 'kind staff', 'tea and scone post treatment' was most appreciated.**

e. The Post ESWL pain questionnaire highlighted the need to provide breakthrough pain medication for those who had pain during treatment, so effective treatments could be given. Pain medication was based on Piroxicam 20mg and Paracetamol 1g pre-treatment, with no breakthrough medication.
f. The Time and Motion study highlighted long period of time needed by nurses in the current method of working to consent and prep patient for ESWL, with some reaching 45 minutes. There was down-time of the Lithotripter whilst the nurse undertook the consent and checks. There was no dedicated room to consent patient and do pre-ESWL checks, the patient was in the same room as the patient who was being recovered from previous treatment, separated by a curtain, and thus confidentiality was an issue.
g. The discharge letter from ESWL treatment was a handwritten note, with a further formal dictated and typed letter weeks to months later.

9. Follow-up of treatment was a further outpatient appointment for patient.

2. **Visit to Scottish Stone Centre Edinburgh**

Summary of Visit to Scottish Stone Centre, Edinburgh, 14-15 November 2016

1. Patient Journey followed
   a. Structured referral to Stone Centre was viewed
   b. All referrals were reviewed and stone treatment recommended at Stone MDM. Urology Stone Consultants and Treating Radiographer were present at the meeting. Dictation was used to instruct which pre-formed letter to send to patient. Patients were booked direct to treatment as required by radiographer present.
   c. Letter for recommendation for stone treatment was sent to patient
   d. Patient arrives within a 2 week wait for ESWL treatment
2. Day of ESWL treatment
   a. Treatment staff included x2 staff nurses and x1 radiographer
   b. Medication was pre-prescribed (Diclofenac 100mg PR and Oral 1g Paracetamol)
   c. Breakthrough medication was available (IV Opiate)
   d. Discharge information was sheet given to patient
   e. Follow-up imaging was booked on completion of treatment by radiographer, to be viewed by Urology Consultant and further or alternative treatment planned as required.
3. Number of Patients treated
   a. 2 week max wait
   b. Capacity for emergency patient to be treated daily
   c. 3-4 patients were treated per session, and all sessions were filled.
   d. Centre ran 5 days a week (Monday to Friday)
4. Staff Interviews noted radiographers are dedicated to work only at the Stone

Treatment centre and have 'developed large skill and knowledge base', 'multiple publications have evolved from the centre', feel working full time at Stone Centre 'provides a dedicated, skilled team' to providing patient treatments, the model allows for 'minimal wait from diagnosis to treatment, thus reducing the possible re-presentation to Accident and Emergency'.

3. **Recommendations following Service Evaluation of Southern Trust Stone Treatment Centre and Visit to Scottish Stone Centre**

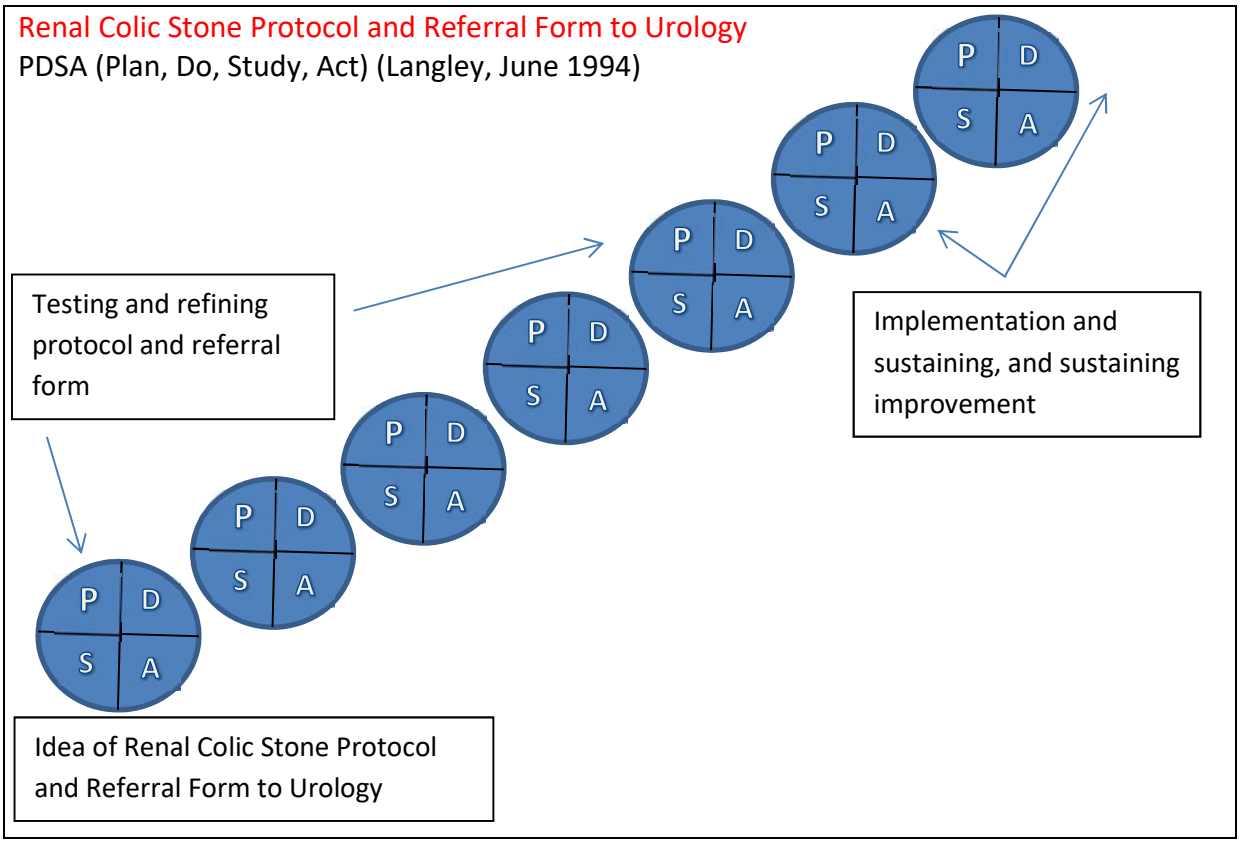
Recommendations for Craigavon Stone Treatment Centre

1. Need for Southern Trust Protocol on whom and how to image possible renal colic (Stone presentation) patients in Accident and Emergency.
2. Need for structured referral to stone treatment centre, including all information needed to recommend stone treatment at a Urology Stone MDM.
3. Need weekly Stone MDT meeting, with administrative support and dedicated meeting space with imaging available and Electronic Care Records. Pre-prescribe medication for ESWL treatment.
4. Information pack to patient on outcome of Stone MDM for recommendation of treatment of their stone, informed choice, consent form, map to ESWL Stone Treatment Centre, ability to see Doctor in Outpatient if patient doesn't want to proceed to treatment or ask further questions.
5. Decrease the wait for ESWL treatment to 2 weeks, so imaging is not out of date and prevent re-presentations to Accident and Emergency.
6. Decrease the time for Nurse to check-in patient and consent patient for ESWL treatment on day of treatment
7. Have typed discharge for patient ready upon discharge from ESWL treatment day. Have discharge uploaded on day of treatment to Electronic care records so can be viewed at any time by Doctors, especially in the event of an emergency admission to Accident and Emergency.
8. Review on pain medication given to patients at Southern Trust Stone Treatment Centre, and recommendation for breakthrough medication during ESWL treatment.
9. Have architectural drawing proposal on how to alter Stone Treatment Centre to also provide private consultation room for patients, and area to change and keep personal items secure.

4. **Renal Colic Protocol and Stone Referral Form for Southern Trust (pdsa cycles)**

The service evaluation and visit to the Scottish Stone Centre highlighted the need to provide the Southern Trust with a Renal Colic Stone Protocol to help Doctors in Accident and Emergency decide on when to image, how to image, blood tests required and how and when to refer to Urology. The referring doctor should complete a structured Stone Referral Form so all information that is a necessity is provided, so a treatment option can be recommended to a patient from Stone MDM. The Thursday Morning team meeting was utilised as a platform for ideas (plan), invited speakers from other specialities and distribution of work (do) and review (study), to eventual implementation (act).

The Renal Colic protocol and Urology Stone Referral Form needed input and agreement from Urology, Accident and Emergency and Radiology departments. Background work was required to ensure all recommendations were evidence based and fitted with current guidelines for all specialities involved (C. Türk (Chair), 2016). Numerous PDSA cycles (X7) (Langley, June 1994) were required in order to agree on the current forms which are now in active use. The current forms can be viewed in the appendix.



5. **Stone Multidisciplinary Team Meeting (MDT) benefits**

The Thursday morning team meeting evolved in to the Stone MDT.

The Stone MDT model allows a much greater through put of patients then a single doctor seeing a patient in clinic. It benefits the patient as they are discussed amongst a group of healthcare professionals, with an evidence based treatment of their stone recommended. It means the time from diagnosis to treatments is reduced. The MDT model was based on the Scottish Lithotripsy Centre model, and relies on organisation for the weekly meeting.

The weekly Thursday MDT has discussed up to 30 patients in a meeting so far. The meeting will eventually incorporate new patient referral in the first part, then review of follow-up imaging in the second part of patients who have completed their ESWL treatment to ensure their stone(s) have been successfully treated, then a template letter confirming this could be sent.

Patients have already been given their diagnosis of a stone and location when they presented, usually to Accident and Emergency. The outcome of MDT, if conservative treatment or ESWL then patient information pack can be sent so they can proceed directly to treatment or further imaging. All the information needed to make a decision on a patient in included in the Urology Stone Referral. There is always the option to see the patient in Outpatient Clinic if the option needs further discussion, such as Percutaneous Nephrolithotomy, or significant co-morbidities, although these are the minority.

Urology Stone MDT

Benefits:

1. **Platform for discussion of complex patients, what is their most suitable management and by whom. The full range of therapeutic options can be discussed**
2. **A+E referrals can be reviewed and patients placed for appropriate treatment with only complex patients or high risk patients having outpatient's appointments. (All patients could be offered an outpatient appointment if wish to discuss their MDT outcome further, prior to any treatment).**
3. **Shorten delay to treatment with direct booking.**
4. **Decrease number needing outpatient appointments, thus saving money.**
5. **Patients may be happier not to see doctor in outpatients if their case has been discussed with the experience of multiple healthcare professionals then just one in clinic.**
6. **Education platform for staff.**
7. **Time to disseminate any quality improvements cycles, audits or concerns and compliments.**
8. **Any clinical trials, allow suitable discussion and allocation.**

9. **Potentially greater continuity of care.**
10. **Improved and more efficient coordination of the stone service.**
11. **Improve communication between care providers and develop clear lines of responsibility.**
12. **Improve resource management and efficacy, such as on site lithotripter (minimises paper work on treatment days, allowing increased capacity).**

Disadvantages:

1. **Some may see discussion of straight forward cases as unnecessary, (if patients are booked direct without discussion at MDT, then data capture is required for audit purposes)**
2. **Meeting only held once a week, some patients will need treating prior and not go through MDT.**

Potential Cost Savings of Patients being booked directly to treatment for ESWL

Cost of New Outpatient Appointments = £250
Cost of Follow-up Outpatient Appointment = £170
Combined total of = £420 per patient

Number on waiting list for ESWL = 233

- Potential cost saving of £97,860 in appointments if directly booked and followed up with imaging and letter
- On average 31 new patients booked for ESWL per month (average June to December)
- The number of ESWL patients increases year on year as stones become more common due to diet factors, increases in obesity and aging population, as well as potentially global warming (stones are more common in warmer climates)
- The potential savings will therefore increase year on year by utilising the MDM model.

6. **Patient Information Pack** (see appendix)

Following an MDM discussion, the patient is placed on the correct, guideline recommend pathway for treatment of their stone. The outcome of MDM is communicated to the patient in a letter, with the majority of letter a standard template to save administrative time, see appendix. Those patients selected for ESWL treatment of their stone are also sent an information pack on the treatment.

The information pack was developed from first reviewing the Scottish Stone Centre patient information, an internet search of other centres patient information on ESWL and the British Association of Urology consent for ESWL (British Association of Urological Surgeons , 2016).

From listening to the patients we included a map, and a plan set in place to review patient's satisfaction on ease of use to arrive at their destination.

The documentation went through a number of PDSA cycles, taking around 6 months to reach agreement with the MDM Stone Treatment Group, until a version was ready for sending to patients. The next PDSA cycle will be to study the evaluations of the information from the patient group.

From the time and motion study the information pack was designed to decrease the time taken to pre-admit a patient before they commence their ESWL on the day of treatment. **This would help in time saving on day of treatment and allow an extra patient to be added to the treatment session, such as an emergency patient.**

The information pack includes: a. MDM letter outcome (template letter)

b. Information and consent on ESWL

c. Map on how to find Craigavon Stone Treatment Centre

d. Advice on discontinuation of medication pre-treatment and when to re-start

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The Next PDSA cycles

The patient information pack sees a number of PDSA cycles running simultaneously (Langley, June 1994).

a. **Patient feedback questionnaire on contents on patient information pack (Study), all separate, yet linked PDSA cycles.**

b. **A repeat time and motion study to review if the patient information has decreased administration time for admission of patient prior to treatment.**

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c. **Though MDM and pharmacy involvement to ensure medication advice sheet stays up to-date. Periodic review date set, and awareness of pharmacy to notify of updates.**

7. **Extracorporeal Shockwave Lithotripsy treatment session**

Recommendations were made following the service evaluation, patient and staff interviews, and patient post-treatment questionnaire

Recommendations and outcomes for Craigavon Stone Treatment Centre

1. **Decrease the time for Nurse to check-in patient and consent patient for ESWL treatment on day of treatment**
   Patient information pack and pre-prescription of pain medications. Follow-up time and motion study to be conducted.

2. Have typed discharge for patient ready upon discharge from ESWL treatment day. Have discharge uploaded on day of treatment to Electronic care records so can be viewed at any time by Doctors, especially in the event of an emergency admission to Accident and Emergency.
   Reviewing the data needed for inclusion into a discharge letter, for immediate discharge and follow-up, the letter went through a number of PDSA cycles through the stone MDM and day of treatment.
   We moved from a hand printed discharge letter to an electronic generated letter, allowing a standard letter to be generated, with all necessary information required for completion.
   The letter had to be quick (less than 5 minutes) and easy for the author to complete. Following meetings and successful lobbying of the Electronic Care Records team (Northern Ireland regional Electronic notes) we achieved access and upload of the discharge letter. The letter can now be uploaded to Electronic Care Records straight after its generation, and allows a printed copy to the patient.
   The patients General Practitioner (GP) had previously received a typed discharge letter some 6 weeks following the patient's treatment. The standard electronic uploaded discharge summery immediately following treatment meant the additional letter to the GP was no longer required**.** The electronic generated discharge therefore prevented any further secretarial input, and thus saving money.

3. Review on pain medication given to patients at Southern Trust Stone Treatment Centre, and recommendation for breakthrough medication during ESWL treatment.
   A literature review was conducted on the Stone Treatment Centre long standing use of Piroxicam prior to ESWL treatment. The data suggested that the NSAID diclofenac may provide a more successful pain relief than Piroxicam 20mg.

Prospective data on treatment parameters and pain scores were collected on the pre-ESWL medication Piroxicam and paracetamol given to patients on the day of treatment. From reviewing patients receiving 20mg Piroxicam and 1g paracetamol, compared to those who could only receive paracetamol due to Piroxicam contraindication there was no benefit of receiving the addition of Piroxicam compared to paracetamol alone.

Following the evidence collected and literature review, the pain medication was changed to pre-ESWL Diclofenac Potassium 100mg oral and paracetamol. The work included the input from the pharmacy team, who also consulted the literature and evidence available. The Stone Treatment Centre will now collect data on the pain medication change to Diclofenac Potassium 100mg oral and paracetamol, to ensure a change has been an improvement.

Patients contraindicated to NSAIDS could receive codeine phosphate or tramadol.

A breakthrough pain medication was highlighted in the review. Following investigation work, Penthrox (3mg Methoxyflurane**)** was identified as a possible solution. The medication required for breakthrough pain relief had to be administered by a staff nurse only, with no doctor present. The Scottish Stone Centre used an opiate based breakthrough medication to achieve adequate stone treatments for patients requiring additional pain relief. The Craigavon Stone Treatment centre is staffed by a radiographer, staff nurse and health care assistant, and thus not suitable for opiate administration, which requires x2 staff nurse to check the medication. Options were explored for the provision of a second staff nurse, but were restricted by cost and availability of a second staff nurse. Penthrox is a recognised pain relief and used widely in Australia, especially by Emergency Departments and Paramedics, and is safe to be administered by a single staff nurse, with very few contraindications. A medication New Product Application was successfully passed by the Hospital Drugs and Therapeutics board, which included a literature review of the current evidence (see appendix). The board required evidence of the effective use of Penthrox as a breakthrough pain relief for ESWL, for 50 patients, data collection currently ongoing.

4. Have architectural drawing proposal on how to alter Stone Treatment Centre to also provide private consultation room for patients, and area to change and keep personal items secure.
   The Stone MDM team and hospital architect reviewed the recommendation and official hospital architectural plans were drawn. We were unable to expand the floor print of the centre, but in moving several plasterboard walls, a changing room for patients and suitably sized consultation room could be constructed. This left a recovery room, which doubles as the Stone MDM room on a Thursday morning, and the treatment room for ESWL. See Appendix for the plans, which have been approved and are on the Hospital waiting list to be undertaken.

   We involved the hospital estates team to ensure the ventilation to the room was suitable. Calculations for the use of Penthrox for air changes were undertaken and

the number of air-changes was easily improved by re-calibrating the system.

11. Leadership Approach

The NHS Healthcare Leadership Model provided a structured road map for leadership with a view to Improvement of a service, through the nine dimensions of Leadership Behaviour (NHS, 2013). Using the model we started by Inspiring a Shared Purpose with the Stone Treatment Team on a vision of where the centre could improve for the benefit of the patient. It was also important to listen to each member of staff in helping to develop and reach their individual goals, such as the request to be involved in research and development of the centre (Research Nurse/Radiographer funding application), the aim of a radiographer to learn treatment of distal ureteric stones with ESWL (Staff sent to Edinburgh Stone Treatment Centre to observe and learn).

Data collection was important, so changes could be made following the evaluation of the information gained, and improvement could be measured in a quantitative method where possible, such as the improvement to the pain medication. It was important though to collect the data as a team and through the weekly team meeting, analyse and act through improvement science methodology, such as the numerous PDSA cycles, time and motion studies, patient questionnaires.

It was important to work collaboratively with other teams, such as Accident and Emergency and Radiology when it came to initiating the improvements to the diagnostic and referral pathway for renal and ureteric stones. The Stone Service is intrinsically connected to the wider Health Care Service and so important to build strong, workable, strategic relationships with other departments involved in the patient journey of stone diagnosis through to treatment. We took time to understand the issues affecting other departments and addressed any concerns of the new referral pathway. With the interconnectivity of the other departments involved, we had to share the vision early, and highlight the benefits this would produce for the Stone Service, for the patient and for their own departments.

It was important to keep the team united, focused and motivated on the task in hand. The weekly meeting helped bring the team together and allowed a platform for staff to air their views on aspects of the project. The provision of the meeting with tea/coffee and croissants in a room away from any active clinical duties, helped staff to openly discuss the issues in play and feel part of the team and want to contribute. Setting the right environment to succeed is fundamental for team working and achieving the aim, and there is much we can learn from how the commercial world interact and achieve the best from their staff (Deloitte, 2016).

Developing and encouraging progression of staff enabled the project to achieve the improvement aims. Developing the staff, developed the service, developed the teams skills in improvement science, giving evidence based results.

Presenting our results to the Hospital Senior Team allowed the request for further funding to develop the Stone Treatment Centre and to be on the waiting list for structural layout improvement to the Centre. By demonstrating our results on how we could decrease waiting times for stone treatments, decrease the need for outpatient appointments, cut the cost of emergency stone treatments, decrease the waiting time and cost of discharge summery from Stone Treatment Centre we hope to highlight to the Senior Team to the need and importance of the Stone Treatment Centre.

Eric Dishmans TED talk on 'health care as a team sport', a personal view through his own renal disease, and the need to be pro-active on healthcare, take the patient on the journey with you and empower them to understand and prevent their disease or disease progression (Dishman, 2014). In a stone context, treat the stone and prevent recurrence, but the patient needs to understand their stone disease. The Stone Treatment Centre improvement model will progress in the future to prevention strategies by utilising patient groups along with a Stone Treatment Centre dietician to prevent recurrence of their stone disease.

Many different staff groups were involved or impacted by the project, including Urology, Radiology, Pharmacy, Accident and Emergency, Estates, IT, Administration and Management. Leadership of the project was based on the 'Developing Collective Leadership for Health Care' Kings Fund paper (Michael West, 2014). The project needed a 'post-heroic' model of leadership, and so we undertook collaborative leadership, to create a positive environment where ownership of the implementation and success or failure of the project is a shared responsibility and mission. Using a collaborative leadership model and the inherent aims of the project a 'high concern for people and high concern for productivity', the most work with content staff was achieved (Blake R R, 1991).

The work of Parish (C, 2006) identified that a broad range of leadership styles (directive, visionary, affiliative, participative, pace-setting and coaching leadership) are demonstrated by a successful leader. The range of leadership styles still needs to be relevant to a modern Health Care Setting, with an overarching theme of collaboration…. 'Coming together is a beginning, staying together is progress and working together is success' (Ford)

12. Outcome and improvement measures

The improvement project is a continuum and not a single finish point. Much was achieved and improved, and the more success will follow.

Aim	Result Outcome	Quality Improvement method and evidence	Future
1. Emergency ESWL	Ability to provide a forth treatment on ESWL treatment session	• Time and motion study • Weekly team meeting • Cost analysis vs Main theatre (Potential saving of £874500 over 5 years)	• Funding application for further sessions
2. Meet demand for ESWL elective sessions	Funding application with evidence submitted for extra sessions	• Cost analysis vs Main Theatre (ESWL saves potential £1248 and £2235 per patient when compared to day case and inpatient Theatre Ureteroscopy) • Ability to book patient directly from Urology MDM • Reducing Outpatient appointments	• Await outcome of funding • Provide sessions for other trusts in Northern Ireland/ Cross boarder
3. Provide stone	• Urology	• PDSA cycles	• Patient

treatments recommended by NICE, BAUS and EAU 4. Provide patient with informed choice	Stone MDM • Evidence based stone pathway • Patient information leaflets • Chance to discuss in person	on paperwork and Stone MDM • Patient interviews	questionnaire • Further PDSA cycles
As a result of original aims			
a. Patient discharge summery	• Electronic and printed paper version on day of treatment	• Decreased discharge summery time from weeks to immediately following treatment • Saved administration and medical cost and time	• Improvements planned to the electronic discharge sheet for 2019
b. Improvement to Stone Treatment Centre Building layout	• Architectural plans and successful buildings work submission	• Time and motion study • Patient interviews • Staff walk around	• Await building works
c. Stone diagnostic and referral pathway	• Currently in use • Evidence based	• Patient now having calcium and uric acid checked and point of care • Appropriate information now gained for decision of treatment of stone	• Currently paper version • **Should aim for electronic referral on Electronic Care Records**
d. Stone MDM	• Patients discussed	• Evidence based	• Needs administrative

	weekly via A+E referral pathway • Faster decision and review of patients stone disease then waiting for outpatient appointment	treatments • Staff education • Patient information and education • Saves on Outpatient appointments (saves £420 per patient booked for ESWL)	personal dedicated to Stone Treatment Centre
e. Pain medication for ESWL	• Changed to Diclofenac Potassium • Trial of Penthrox breakthrough medication	• Study on Piroxicam ESWL pain medication, led to change to Diclofenac	• **Patient pain questionnaire on diclofenac and Penthrox for evidence of effectiveness of use, results awaited**
f. Application for Stone Treatment Centre Research post	• Application accepted for research funding	• Ability for collecting and analysing Stone Treatment and medications	• Await and plan for start of research project, including staff recruitment

13. Project sustainability

The continuation of the project is through the collaborative team model established, and will be steered in the correct direction by Urology Clinical Lead Mr Young , Staff Grade Ms Laura McCauley and Martina Corrigan, with help from all of the Stone Treatment Team. The project is and will always be team approach.

The increasing obesity epidemic, ageing population, sedentary lifestyle and potentially global warming (increasing temperature with poor fluid intake) highlights the importance of this project, not only to meet the demand for current stone patients, but to build capacity for the future increase. It is a project therefore that cannot be ignored.

14. Bibliography

A.N.Argyropoulos, D. T. (2010). SWL is more cost-effective than ureteroscopy and Holmium:YAG laser lithotripsy for ureteric stones: A comparative analysis for a tertiary referral centre. *British Journal of Medical and Surgical Urology,*, Volume 3, Issue 2, Pages 65-71.

Better OS, A. A. (1973). Studies on renal function after relief of complete unilateral ureteral obstruction of three months' duration in man. *The American Journal of Medicine* , 234-240.

Blake R R, M. A. (1991). *LEADERSHIP DILEMMAS- GRID SOLUTIONS.* Houston : Gulf Publising .

British Association of Urological Surgeons . (2016, March). *Lithotripsy, Procedure Specific Information* . Retrieved September 10, 2017, from http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/ESWL.pdf

C, P. (2006). Being nice is not enough for good leadership on the wards. *Nursing Standard* , 20 (41):6.

C. Türk (Chair), T. K.-c. (2016). Urolithiasis. *European Urology Guidelines* , 3.4.2.3.3.-3.4.3.3.

Campbell, D. (2015, January 19). *NHS cannot cope with ageing population, warns top doctor*. Retrieved January 06, 2017, from The Gaurdian : https://www.theguardian.com/society/2015/jan/19/nhs-we-have-not-fit-for-future-warns-top-doctor-bruce-keogh

Deloitte. (2016). *Ingedients for Success, Striking the Right Balance.* Deloitte.

Dishman, E. (2014, March 04). *Healthcare should be a team sport* . Retrieved November 01, 2016, from TED@Intel: https://www.ted.vom/talks/eric_dishman_health_care_should_be_a_team_sport/up-next#532964

Donabedian, A. (2005). Evaluating the Quality of Medical Care. *The Millbank Quarterly*, 83(4):691-729.

Fink RL, C. D. (1980). Renal impairment and its reversibility following variable periods of complete ureteric obstruction. *The Australian and New Zealand Journal of Surgery* , 77-83.

Ford, H. (n.d.).

Langley, G. N. (June 1994). *The Foundation of Improvement, Quality.*

Michael West, K. S. (2014, May 21). *Developing collective leadership for health care*. Retrieved January 6, 2016, from Kings Fund : https://www.kingsfund.org.uk/publications/developing-collective-leadership-health-care

NHS. (2013). *Healthcare Leadership Model Version 1.0.* NHS.

NICE. (2015). *Renal or ureteric colic - acute*. Retrieved Febuary 08, 2018, from https://cks.nice.org.uk/renal-or-ureteric-colic-acute#!backgroundsub:2

O'Neill, M. (2016). *Health and Wellbeing 2026: Delivering Together' .* Northern Irish Assembly.

Professor Rafael Bengoa (Chair), D. A. (2016). *Systems not structures, changing health and social care.* Northern Irish Assembly .

Royal College of Physicians Ireland. (2012, October 05). *Driver Diagrams.* Retrieved September 01, 2016, from Leadership in Quality in Healthcare : publichealth.hscni.net/sites/default/files/directorates/files/CAW%20Day%20

Southern Health and Social Care Trust. (n.d.). *Southern Health and Social Care Trust*. Retrieved January Friday, 2017, from Corporate Information : http://www.southerntrust.hscni.net/about/1594.htm

TED Talks. (n.d.). *TED Talks*. Retrieved from www.ted.com>talks

Vaughan, E. J. (1971). Mechanism of acute hemodynamic response to ureteral occlusion. *Investigative Urology*, 109-118.

World Health Organisation . (2015, October). *Patient Advocates use past experience to change the future .* Retrieved December 03, 2016, from WHO: www.WHO.INT

15. Appendix

a. **Ureteric and Renal Stone Pathway (guidance and referral form)**
b. **Urology Stone Multidisciplinary Meeting**
    - **i. Patient Pathway Stone MDM**
    - **ii. Patient Information Pack**
        - **iia. Template Letters**
        - **iic. Patient Information and Consent Form**
        - **iib. Anticoagulation Pathway**
c. **ESWL Treatment Day Protocols**
d. **ESWL Medications**
e. **Craigavon Area Hospital ESWL TMS i-sys Sonolith lithotripter Adult Protocol**
f. **Business Case Proposal**
g. **Research funding proposal**

a. Ureteric and Renal Stone Pathway

Including guidance for pathway and referral form

Ureteric and Renal Stone Pathway

Southern Trust Hospitals

Southern Health and Social Care Trust
Quality Care - for you, with you

Note: Male >50yrs, no history of renal stones, then consider AAA pathway

History Suggestive of Renal Colic? THEN DO THE FOLLOWING

- Urine dipstick including pH
- Pregnancy test (12 to 55 years)
- Patient observations
- FBC, U&Es, CRP, Calcium and uric acid

(Same day imaging if single kidney, infection, AKI)

Not Pregnant and >18 years old

Non Contrast CT Urinary Tract

Ureteric stone or obstructing kidney stone

Is there any:
1. Infection (? SEPSIS 6)
2. Acute Kidney Injury
3. Uncontrolled pain
4. Ureteric stone >6mm
5. Diabetes
6. Immunosuppression

Yes → Discuss with Urology

No → Complete Outpatient Stone Referral Form

Non-obstructing Stone in Kidney, not ureter

Evidence of Pyelonephritis

Yes → Consider admission if necessary (See Hospital/ NICE guidelines)

No → Consider alternate cause for pain

AND

For the stone finding, complete Stone Referral Form

<18 years old

USS RENAL TRACTS

Hydronephrosis OR highly suspicious of stone, OR Urological abnormality, Discuss with Urology.

Pregnant

Discuss with Obstetrics

USS RENAL TRACTS

Discuss with Urology
Consider NC MRI Renal Tracts

Negative Imaging

Consider alternative cause of pain

(Non-visible haematuria on urine dipstick: Notify GP to re-check and refer if needed as per NICE guidance)

Pathway next due for REVIEW July 2018 Stone MDM

Completed form send to Urology Consultant on-call, Craigavon Area Hospital

WIT-27618

Ureteric and Renal Stone Referral

Urology, Craigavon Area Hospital

Southern Health and Social Care Trust

Quality Care - for you, with you

Please refer to A+E protocol for referral guidance:

Uncompleted forms will be returned to referring Doctors

Patient identification (sticker)

Referring Doctor: _____

Referring unit: _____

Date of referral**:** ___ / ___ / 20___

Patient Phone number:_____

Physical or mental disability? **Yes** **No**

Presenting symptoms: (circle)

Side of stone: Left Right

Side of Pain: Left Right No pain

Visible haematuria Yes No

Acute Medication given from A+E:

Imaging modality: (circle)

NCCTKUB* **USS KUB/ NC MRI**

(*CT Urinary tract) **(If <18 yrs or pregnant)**

Findings:

X ray KUB done: Yes No

(Indication: if stone not visible on CT scout)

ALLERGIES: (circle) YES NO

Drug:

Anticoagulants:

Immunosuppressive agents:_____

Past medical History: (circle)

Solitary Kidney **yes** **no**

Abdominal Aneurysm: **yes** **no**

Pacemaker: **yes** **no**

If yes, type_____

ASTHMA: **yes** **no**

Cardiac Stent: **yes** **no**

Date of stents_____

CKD Stage IV or V: **yes** **no**

Current Gastric Ulcer **yes** **no**

Malignant hyperthermia **yes** **no**

Symptomatic heart failure **yes** **no**

Other past medical history:

-

-

BLOODS

Creatinine:_____ eGFR:_____

Corrected Calcium:_____ Uric acid:_____

Haemoglobin:_____ Platelets:_____

White Cell Count:_____ CRP:_____

Urine dip stick:

pH:_____ Blood:_____

Leucocytes:_____ Nitrites:_____

Pregnancy test Positive Negative (circle)

Completed form send to Urology Consultant on-call, Craigavon Area Hospital

Southern Health and Social Care Trust
Quality Care - for you, with you

Radiology:#

It would aid stone management if the radiologist were to record

1. Stone size
2. Stone location
3. Stone attenuation
4. Skin to stone distance
5. Hydronephrosis
6. Congenital anomalies
7. Extravasation
8. Stranding

Based on AUA guidance http://www.auanet.org/guidelines/imaging-for-ureteral-calculous-disease accessed August 2017.

b. Urology Stone Multidisciplinary Meeting

Time: 09:00 Thursday mornings

Location: Stone Treatment Centre, Craigavon Area Hospital

Urology Consultants, Staff grade, STC Sister, Radiologist, Radiographer, Secretary

Stone meeting agenda to be produced by the Urology Staff Grade or Fellow attached to the unit. Urology referrals to be reviewed and checked for accuracy, then work list generated on ECR. Any forms missing vital information to be returned to sender unless delay may impact upon safety of a patient, in which case organise to see patient urgently.

Patient Details	**Imaging modality and stone details**	**Meeting outcome**	**Specific Tasks**
Example 343234321	NC CTKUB 01/01/17. 7MM upper ureteric stone	ESWL	Stop rivaroxaban 2 days prior

The imaging modality and stone details can be cut and pasted into the diagnosis part of a **letter template**, pending on meeting outcome decision.

Patient pathway to be determined at meeting, see table 1.

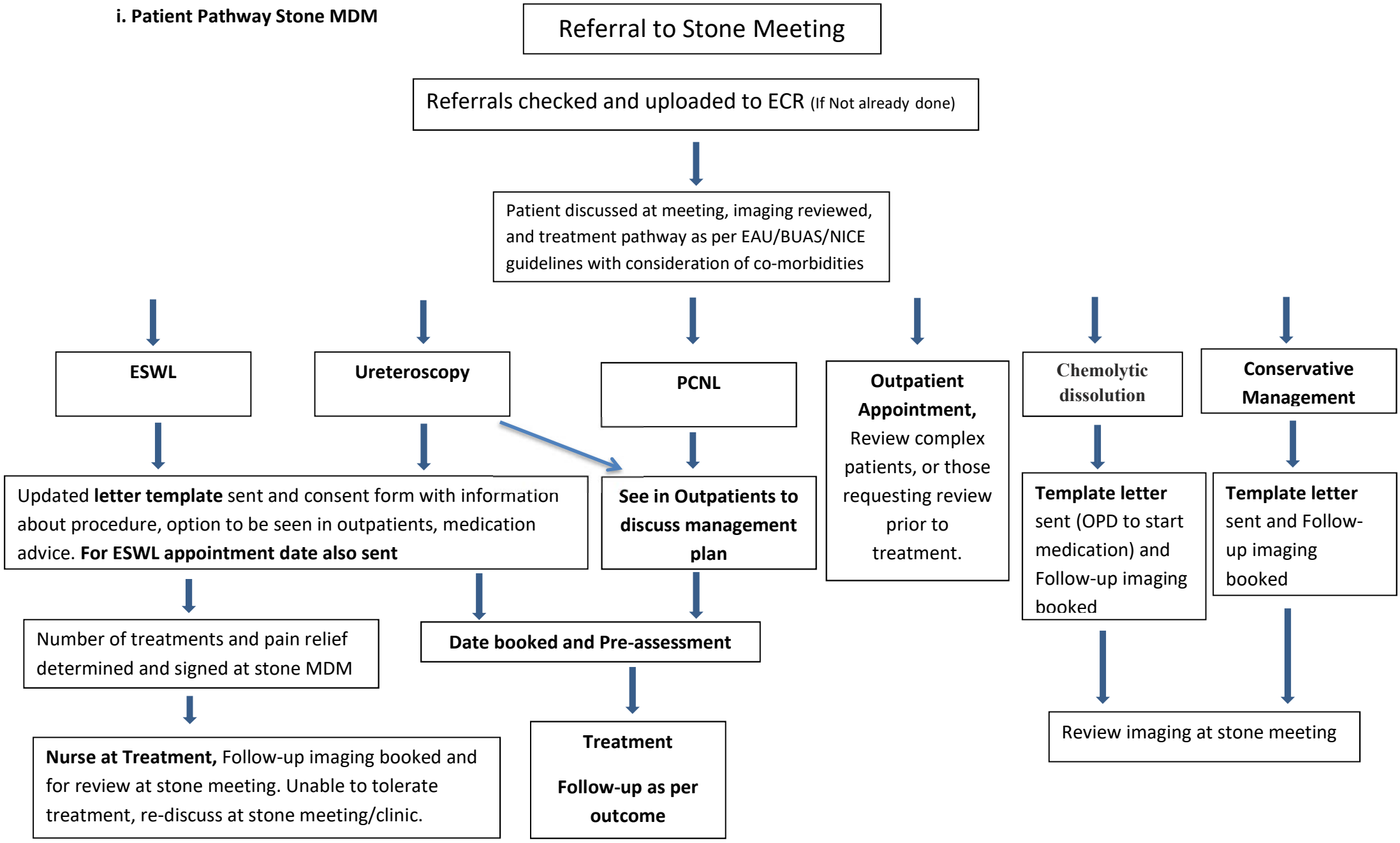
ESWL booking is organised at meeting. Appointment date, meeting letter (template as above), consent form, patient information, and **anticoagulation medications advice** sent out following meeting. The secretary can organise letter at time of meeting, since only the imaging modality and stone details need added to template. Alternatively the meeting outcomes can be forwarded to the secretary following meeting conclusion.

ESWL Radiology request completed at meeting containing: 1. Stone side and location
2. Number of ESWL sessions
3. Follow-up imaging planned

Dictation for complex patient may be needed and should be ready for use.

Medications for ESWL can be signed for each patient, Pharmacy to provide pre-printed drug cards to save time on prescribing and ensure clarity of prescription. Pre-printed outpatient script for take home medication. Allergies and contraindications are checked on referral, ECR and again on day of treatment by nursing staff prior to administration.

i. Patient Pathway Stone MDM



ii. Patient Information Pack

Patient Letter and Information Pack

The Urology MDM allows for direct template letter to be sent to the patient, explaining they have been discussed by the multidisciplinary panel and which treatment pathway has been advised.

Patients who are not suitable for direct treatment pathway will be called to clinic to discuss management, these will include all PCNL and ureteroscopy (at present) patients and those deemed the highest risk for any treatment.

The aim of the pack is to decrease the number of patients seen in clinic, yet providing the patient with reassurance they have been reviewed by the stone MDM and provided with a fully informative pack containing,

1. Letter explaining MDM OUTCOME and Imaging findings
2. Modified BAUS information leaflet and consent form (to bring on day of treatment sign last page)
3. Anticoagulation schedule for those on anticoagulants
4. Map for Blood room and Stone Treatment Centre

Pre-assessment: All patients listed for ureteroscopy and PCNL. ESWL patients deemed high risk on anticoagulation should undergo pre-assessment so clexane cover can be organised as per guidelines.

Patient Hospital Contact: The letter will contain the contact number of Stone Centre secretary, for which the patient will contact if:

1. Request OPD instead of direct to treatment
2. If date received is not suitable
3. If stone has passed (patient advised to present to GP for stone to be sent for analysis), so can be re-discussed at meeting for follow-up

Font size

The font size can be increased for any patient who has difficulty in reading and sent out accordingly by the secretary

Language

The patient information is set as English. A further copy could be provided using patient language services to translate the information before being sent. A template letter and consent form could be created for common other languages that are not English, with translator provided on day of treatment.

Dear iia.Template letter for Conservative Treatment

Patient Details: Insert here

Your recent x-ray/scan demonstrated a kidney stone. This was discussed at the Southern Trust Stone Meeting, Craigavon Area Hospital.

Your imaging report demonstrated: Insert here

There is a very good chance this stone will pass and not need surgery/intervention.

We have organised repeat imaging in 6 to 8 weeks' time to check for stone passage, the x-ray department will contact you with a date. However, if you are unwell in the interim, especially with a high temperature, please attend your GP or A+E.

Dietary Advice

• Specific types of stone can be managed by measures aimed at the cause of your stone formation

• Generally, keeping your urine dilute & colourless reduces your risk of forming a further stone by almost one third (30 to 40%)

• In addition, a normal calcium, low-salt, low-protein dietary intake can reduce your risk of stone formation even further

If you pass the stone, please call **Paulette on** [redacted] or **Gemma on** [redacted], and then please take your kidney stone to your GP, so it can be sent for analysis of stone type.

If you have any further questions please call number above.

Your repeat imaging in 6 to 8 weeks will be discussed at the Stone Centre Meeting and we will contact you with the outcome.

Many thanks

Mr Young FRCS(Urol)

Urology Consultant

Dear

Template Letter for ESWL Stone Treatment

Patient Details: Insert here

Your recent x-ray/scan demonstrated a kidney stone. This was discussed at the Southern Trust Stone Meeting, Craigavon Area Hospital.

Your imaging report demonstrated: Insert here

The stone we are going to treat first is

We have organised for you, **Extra Corporeal Shockwave Lithotripsy (ESWL)** in order to treat your stone at the **Craigavon Stone Treatment Centre**

Date of ESWL is: (if no date given, then await appointment letter).

Please call **Paulette on** [redacted] or **Gemma on** [redacted] **to confirm the treatment date is suitable**

Please find enclosed with this letter:

1. *Information* on Extra Corporeal Shockwave Lithotripsy (**ESWL**)
2. ***Consent form*** **-** Following reading and understanding the information on ESWL provided, please sign consent form and **bring along to the day of treatment.**
3. ***Advice sheet*** for patients who take anticoagulation medication (BLOOD THINNERS), on when to stop before treatment and when to restart following treatment.
4. *Dietary advice* sheet to help decrease risk of further stones
5. *Map* of how to get to **Craigavon Stone Treatment Centre**

If you pass the stone before your ESWL treatment, please call **Paulette on** [redacted] first, otherwise call **Gemma on** [redacted], and then please take your kidney stone to your GP, so it can be sent for analysis of stone type.

On your treatment day please bring your consent form and all your medications (including over the counter medications). Report to check in desk on day of treatment (see map).

If however you would like to discuss the treatment on offer or possible alternatives then please call the number above to make an appointment.

We look forward to meeting you at Stone Treatment Centre for your treatment.

Many thanks

Mr Young FRCS(Urol)
Urology Consultant

Dear Template Letter for Ureteroscopy and Laser

Patient Details: Insert here

Your recent x-ray/scan demonstrated a kidney stone. This was discussed at the Southern Trust Stone Meeting, Craigavon Area Hospital.

Your imaging report demonstrated: Insert here

We have recommended for you, **Ureteroscopy and laser, under general anaesthetic** in order to treat your stone.

We shall see you in our outpatient clinic to discuss your stone management further.

Enclosed with this letter:

1. Information sheet on **Ureteroscopy and laser to stone**, under general anaesthetic
2. Dietary advice sheet to help decrease risk of further stones

If you pass the stone, please call **Paulette on** Personal Information redacted by USI or **Gemma on** Personal Information redacted by USI, and then please take your kidney stone to your GP, so it can be sent for analysis of stone type.

We look forward to meeting you at Craigavon Area Hospital.

Many thanks

Mr Young FRCS(Urol)

Dear

Template Letter PCNL

Patient Details: Insert here

Your recent x-ray/scan demonstrated a kidney stone. This was discussed at the Southern Trust Stone Meeting, Craigavon Area Hospital.

Your imaging report demonstrated: Insert here

We have recommended, **Percutaneous Nephrolithotomy (PCNL), under general anaesthetic** in order to treat your stone.

We shall see you in our outpatient clinic to discuss your stone management further.

Enclosed with this letter:

1. Information sheet on **Percutaneous Nephrolithotomy (PCNL)**, under general anaesthetic
2. Dietary advice sheet to help decrease risk of further stones

If you pass the stone, please call **Paulette on** [redacted] or **Gemma on** [redacted], and then please take your kidney stone to your GP, so it can be sent for analysis of stone type.

We look forward to meeting you at Craigavon Area Hospital.

Many thanks

Mr Young FRCS(Urol)

Urology Consultant

Dear

Chemolytic Therapy

Patient Details: Insert here

Your kidney stone was discussed at the Southern Trust Stone Meeting, Craigavon Area Hospital.

Your imaging demonstrated: Insert here

We have organised for you, **specialised dissolution therapy, this is medication to dissolve your stone.**

Enclosed in letter:

1. Information sheet on Chemolytic dissolution of kidney stones
2. Dietary advice sheet to help decrease risk of further stones

We shall see you in Stone Treatment Clinic to discuss starting the treatment medication in the near future.

When your outpatient appointment letter arrives, please phone to confirm.

If you pass the stone, please call **Paulette on** [redacted] or **Gemma on** [redacted], and then please take your kidney stone to your GP, so it can be sent for analysis of stone type.

Many thanks

Mr Young FRCS(Urol)

Urology Consultant

iib Patient information and consent form

Procedure specific information should be sent to each patient when directly booked for a procedure from Urology Stone MDM. This should provide information on the treatment selected and alternatives, as well as a clear presentation of contraindications and risks so the patient can make a balanced decision themselves if they wish to proceed or not.

Further to the procedure specific information, a consent form is attached to be signed by the patient once they understand and agree to go ahead with the treatment proposed. This consent form should be brought to the day of treatment with the patient and countersigned by the nurse.

What if the patient doesn't wish to go ahead with the proposed treatment or wish to ask further questions?

A telephone number for **Stone Treatment Centre** secretary is provided on the letter template from Urology Stone MDT. The patient may contact this number and arrange an outpatient appointment or phone-call appointment for further discussion as required, prior to any treatment going ahead.

Next Page is ESWL patient information and consent form

Extracorporeal Shockwave Lithotripsy (ESWL)

What does the procedure involve?

Delivering shockwaves through the skin to break kidney stones into small enough fragments to pass naturally. This involves either x-ray or ultrasound to target your stone.

What are the alternatives to this procedure?

Telescopic surgery, keyhole, open surgery and observation to allow stones to pass on their own.

What should I do on the day of ESWL treatment?

1. Please take all prescribed medications, except blood thinners (anticoagulants), which you should have already stopped as per anticoagulant advice sheet.
2. You can have a light meal on the morning of your treatment (or light lunch if an afternoon appointment), but you should drink only water in the two hours before the treatment.
3. **Please bring your consent form and your medications on the day of treatment.** It is helpful if you bring your own dressing gown to wear.
4. We advise you bring someone with you and not to drive yourself home following your treatment, especially if you have received any medication with a sedative effect. In the absence of a chaperone we may have to restrict your medication and treatment.
5. Please leave enough time to park at the hospital if driving; it can take up to 30 minutes to find a parking space.
6. On arrival:
   a. Book into A+E reception for your ESWL treatment (see map)
   b. (If on Warfarin proceed to blood room, see map)
   c. Proceed to Stone Treatment Centre for ESWL Treatment

On arrival to stone treatment centre

1. Ring the bell, take a seat and the nurse will be with you shortly.
2. **Please tell your Health Care Provider before your treatment** if you have any of the following:
   A. Usually take blood thinning medication such as warfarin, aspirin, clopidogrel (Plavix®), rivaroxaban, prasugrel or dabigatran.
   B. Heart pacemaker or defibrillator
   C. Artificial joint
   D. A history of abdominal aneurysm
   E. A neurosurgical shunt
   F. Any other implanted foreign body
   G. An artificial heart valve
   H. PREGNANT
   J. <u>Tell Your Nurse on Arrival</u> if you have <u>ANY ALLERGIES</u>

3. You may need to pass a urine sample on arrival for analysis

4. Pain relief will be given at least 30 minutes before, and additional pain relief might be needed during the treatment

What happens during the procedure?

You do not need an anaesthetic and you will be awake throughout the procedure. We usually only use general anaesthetic for children.

You will be asked to lie on the treatment bed and your stone will be located by Ultrasound and/or X-ray. Gel will be applied to the skin over your kidney and the treatment head, which generates the shockwaves to treat your stone, will be placed comfortably against this part of your back (as per picture).

You will have a sensation like being flicked in the back by an elastic band. You will hear a clicking noise of the machine during the treatment.

Your treatment will be monitored by a Nurse and Radiographer.

You may also feel a deeper discomfort in the kidney. If this proves too painful, we can usually give you an additional painkiller.

Your treatment will normally last up to 60 minutes, with an average total stay of 2 hours in the Stone Treatment Centre.

Following the Procedure

Please feel free to ask how the procedure went and ask any questions.

Patients usually stay with us for up to 30 minutes, to be monitored by the nurse and light refreshments will be offered.

You will be given pain relief medication and a discharge letter from the nurse, which will include your follow-up plan.

At Home following procedure

1. Rest for 24 hours
2. Drink 6 pints of water a day (unless told to fluid restrict by your doctor)
3. Some pain may be expected, please take your pain relief medication when needed.
4. Expect to see blood in the urine for 3 to 4 days. Restart blood thinning medication 2 days after treatment, unless heavy bleeding.
5. If any blistering or bruising appears on your treatment side, use a soothing skin cream to ease discomfort.
6. Any stone fragments passed, please collect and take to your GP for testing.

What else should I look out for?

If you develop a fever (above 38ºC or 100.4 F), severe pain on passing urine or you cannot pass urine then attend your GP or A+E department immediately.

Driving after ESWL

We advise not to drive for 24 hours after the procedure. It is the patient's responsibility to know when they are pain free and feel well enough to drive following ESWL treatment.

Are there any side-effects?

Most procedures have possible side‑effects. But, although the complications listed below are well recognised, most patients do not suffer any problems.

Common (greater than1 in 10)

- Blood in your urine for up to 72 hours after the procedure.
- Pain in your kidney as small fragments of stone pass.
- Urinary infection due to bacteria released as the stone breaks.
- Bruising or blistering of the skin.
- Need for further ESWL treatment.
- Failure to break stone(s) which may need additional or alternative treatment, especially for very hard stones.
- Recurrence of stones.

Occasional (between 1 in 10 and 1 in 50)

- Stone fragments may get stuck in the tube between the kidney and the bladder and require surgery to remove the fragments.

Rare (less than 1 in 50)

- Severe infection requiring intravenous antibiotics (less than 1%) and the need for drainage of the kidney by a small tube placed into it.
- Kidney damage (bruising) or infection needing further treatment.
- Damage to the pancreas or lungs by the shockwaves requiring further treatment.

Information based on British Association of Urology Surgeons, Patient information, Lithotripsy for stones, Published 2016.

Further Information can be viewed at:

https://www.baus.org.uk/patients/conditions/6/kidney_stones

http://patients.uroweb.org/i-am-a-urology-patient/kidney-ureteral-stones/treatment-kidney-ureteral-stones/

Extracorporeal Shockwave Lithotripsy Consent Form

Patient Sticker

Please bring on day of ESWL

I have read, understood and agree to go ahead with extracorporeal lithotripsy (ESWL) treatment(s) for my renal/ureteric stone

……. …… …….

Patient name Patient signature Date

…… …….. ……

Radiographer name Radiographer Signature Date

To be placed in patients notes

iiic Anticoagulation (Please also refer to patient anticoagulation pathway, Stone MDM)

Patients on anticoagulation medication will be identified by the structured referral form and checked on Electronic Care Record at Stone MDT (or prior by Doctor organising the list for Stone MDM). A further check for ESWL is on treatment day by the nurse, otherwise for theatre cases by the pre-assessment team.

For ESWL, patients taking Aspirin 75mg regularly there is controversy if this should be stopped or not. The BAUS patient information leaflet would appear to lean towards stopping the medication (British Association of Urological Surgeons , 2016); the team visit to the Scottish Lithotripter Centre in October 2016 noted their current practise is to stop Aspirin 75mg, 7 days prior to ESWL. Other centres are noted to continue their patients on Aspirin 75mg, but state to stop all other NSAIDs 7 days prior (Colchester Hospital University Foundation Trust , 2016).

A PubMed Search for continued daily patient use of Aspirin 75mg and ESWL was conducted. The search terms included 'ESWL' OR 'Extracorporeal Shockwave Lithotripsy' OR Shockwave lithotripsy' and Aspirin.

A retrospective study could be undertaken in Craigavon as patients who were on 75mg Aspirin, previous to this report patients were not told to stop the medication. Has there been any clinical presentation of renal haematoma or prolonged or heavy haematuria necessitating admission. Since Urology Stone MDT August 2017 the decision was made to stop Aspirin 5 days prior ESWL (Based high bleeding procedures, Southern Trust)

Information sheet on how long before any treatment a patient should discontinue their anticoagulation medication is part of the information pack and produced as part of the Stone MDM. ESWL patients should not restart anticoagulation until 48 hours after the treatment and only when urine is no longer haematuria (European Association of Urology , 2017).

Patients who require bridging low molecular weight heparin should attend pre-assessment so this is safely facilitated for ESWL, as with main theatre procedures.

Pharmacy and Haematology

Before the information is to be disseminated to patients the clinical information should also be reviewed by Pharmacy and Haematology teams. When new anticoagulants are introduced to the market, a trigger should be in place to inform the stone MDM so the anticoagulation advice sheet can be updated accordingly. Alternatively this could fall as part of a periodic review of the information pack.

List position for ESWL and Patients needing an INR

Patients who are on Warfarin therapy will require an INR prior to treatment with ESWL. Therefore they should not be placed at the start of the morning list, this is to allow their INR blood test to be taken and processed. The haematology laboratory should therefore be contacted once the INR has been sent so to be processed promptly and reduce the chance of a patient delay in treatment whilst the result is awaited.

Blood sample for INR can be collected from the phlebotomy service located next to the Thorndale Unit. The patient could either be sent to the service direct from registering their visit to the hospital at the main reception next by A+E, with the blood form left in preparation with the phlebotomy service. Alternatively the form could be collected by the patient from the Stone Treatment Centre, but this would add on much time for the patient and potential delay in INR result and thus treatment.

Process for Anticoagulation plan at Stone MDT

- If patient determined low risk for CVD then anticoagulation protocol followed and patient informed by letter from MDT when to discontinue their medication, given a blood form for pre-ESWL INR check and with instruction to ensure first INR check 5-7days after treatment restarted
- If patient determined high risk for CVD then consider postponing procedure or offering alternative treatment e.g. URS or observation
- If patient determined high risk for CVD but requires ESWL then green form completed at MDT and patient referred to Pre-operative assessment:
    - For bridging with low molecular weight heparin (LMWH), the Pre-Operative Assessment Nurse and Pharmacist will ensure the prescription is written and the LMWH is dispensed by the hospital pharmacy.
    - The pre-operative assessment nurse will inform the patient in writing of the dates of administration of enoxaparin and inform their GP about the pre-operative management of warfarin by sending them a copy of the green form.
    - Where possible, the patient / carer should be instructed on self-administration of LMWH by the pre-operative assessment nurse.
    - The post-op management must be documented on green form so that LMWH can be prescribed and dispensed by pre-op assessment in preparation for discharge with appointment made for INR check 5-7days post ESWL

On day of ESWL:

• INR should be checked to ensure it is <1.4. If INR is above this target, ESWL does not proceed and patient rescheduled

Determination of CVD risk for patient

Low Risk:

- AF with no prior stroke or TIA
- VTE more than 3months ago
- 6months after MI/ PCI/ BMS/ CABG/ stroke (12months if with complications)

High Risk: (consider ureteroscopy/ observation/ postponing of treatment instead of ESWL)

- Mechanical heart valve
- 12 months after drug eluting stent
- Target INR >3
- AF with previous stroke or TIA
- VTE in last 3months (post pone surgery)
- Antiphospholipid syndrome
- 6weeks after MI/ PCI/ BMS/ CABG (6months if complications)
- 2weeks after stroke

(MI – myocardial infarction, PCI – percutaneous coronary intervention, BMS – bare metal stent, CABG – coronary artery bypass grafting)

References:

- Sharepoint: http://sharepoint/as/clinical/Anticoagulant%20Documents/Forms/AllItems.aspx
- Alsaikhan, B., & Andonian, S. (2011). Shock wave lithotripsy in patients requiring anticoagulation or antiplatelet agents. *Canadian Urological Association Journal*, *5*(1), 53–57. http://doi.org/10.5489/cuaj.09140
- https://uroweb.org/guideline/urolithiasis/#3

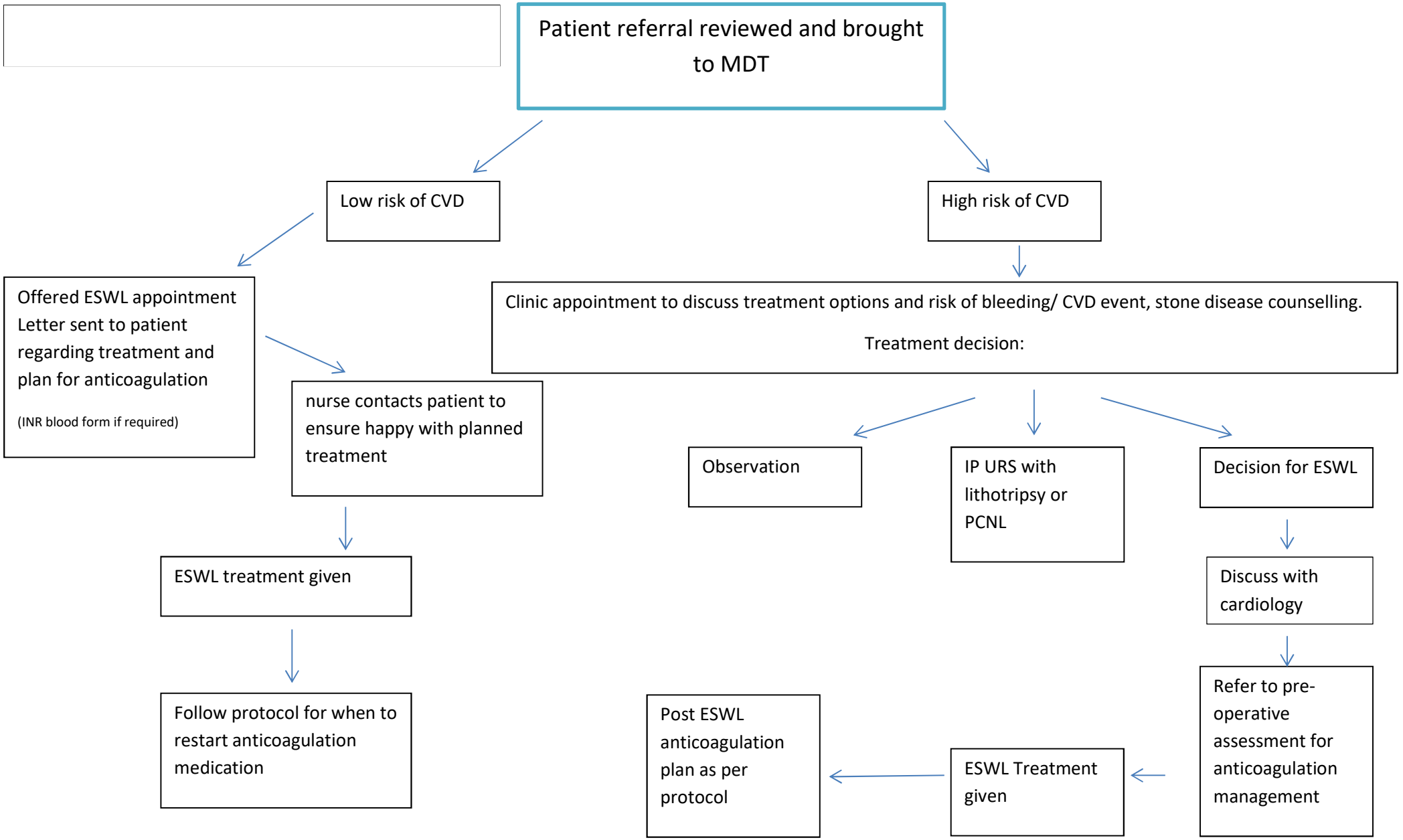
Received from Martina Corrigan on 07/07/2022. Annotated by the Urology Services Inquiry.

~ CrCl ≥80 stop 48hours, CrCL 50-80 stop 72hours, CrCl 30-50 stop 96hours

CVD risk	ASA (e.g. Aspirin)		Thienopyridine agents (e.g. clopidogrel)		Warfarin		Dabigatran		Rivaroxaban/ Apixaban/ Edoxaban	
	Pre op	*Post op*	*Pre op*	*Post op*	*Pre op*	*Post op*	*Pre op*	*Post op*	*Pre op*	*Post op*
Low Risk	Stop 5 days	Restart 2days	Stop 5 days	Restart 2days	Stop 5 days	Restart evening (normal dose)	Stop – rv CrCl~	Restart 2days	Stop 2days#	Restart 2 days
High Risk	Continue	Continue	Stop 5days Bridge treatment dose LMWH	Restart clopidogrel 2days Discontinue LMWH	Stop 5 days Bridge LMWH: - treatment dose (day 3 and 2 pre op) - 50% of dose day 1 pre op	Restart evening Prophylactic dose LMWH 48hours then resume treatment dose until INR therapeutic	Stop – rv CrCl~ Prophylactic dose LMWH	Restart 2days Continue LMWH 2days then stop*	Stop 2 days# Prophylactic dose LMWH	Restart 2days Continue LMWH 2days then stop*

*Do not give DOAC and LMWH together

Stop 3 days if Cr Cl <30



Patient Advice Prior to ESWL Treatment for Stones

Plan for your anticoagulation (blood thinning) medications: Page 1 of 2

(Please see circled which is relevant to you)

Warfarin	Please stop 5 days before ESWL Please bring the attached blood form and attend the blood (phlebotomy) room at the Thorndale Unit, Craigavon Hospital, for INR at 08:30am on the day of your treatment Then proceed to the Stone treatment centre for result review and ESWL treatment Please restart your normal dose of warfarin the evening of your treatment. **Please ensure you have an appointment to get an INR check 5-7days after your warfarin is restarted.**

Aspirin **Dipyridamole** **Clopidogrel**	**Please stop 5 days before ESWL and restart your normal dose 2 days after your treatment**

Rivaroxaban (Xarelto) **Apixaban (Eliquis)** **Edoxaban (Lixiana)**	**Please stop 2 days/ 3days (depends on creatinine clearance) before ESWL and restart your normal dose 2 days after your treatment**

Dabigatran (Pradaxa)	**Please stop 2 days/ 3 days/ 4 days (depends on creatinine clearance) before ESWL and restart your normal dose 2 days after your treatment**

Ticagrelor **Prasurgel**	**Please stop 7 days before ESWL and restart your normal dose 2 days after your treatment**

Patient Advice Prior to ESWL Treatment for Stones

If you have recently undergone a cardiology procedure and are on medication following this procedure, please contact **Paulette on** Personal Information redacted by USI or **Gemma on** Personal Information redacted by USI before you accept the appointment.

Medications/ Supplements

Unless you are informed otherwise, please continue all medications that are prescribed by your doctor.

Many herbs, vitamins and diet supplements may increase the risk bleeding during ESWL.

Certain over the counter medications may also increase your risk of bleeding.

Please stop taking all over the counter medications, vitamins, herbs and diet supplements 7 days before ESWL. You may resume taking these supplements 2 days after your treatment.

Examples of herbal remedies to be stopped[1]:

- Garlic[2]
- Ginseng
- St John's Wort
- Ginkgo biloba
- Danshen

Common over the counter medication to be stopped[3]:

- Naproxen
- Aspirin (e.g. Anadin, Anadin extra)

1. Cordier W., Steenkamp V. Herbal remedies affecting coagulation: A review. *Pharmaceutical Biology* Vol. 50 , Iss. 4,**2012**
2. Gravas S, Tzortzis V, Rountas C, Melekos MD. Extracorporeal shock-wave lithotripsy and garlic consumption: a lesson to learn. *Urol Res*. **2010** Feb;38(1):61-3. doi: 10.1007/s00240-009-0242-0. Epub 2009 Dec 15.
3. Dickman A. Choosing over-the-counter analgesics. The Pharmaceutical Journal, Vol. 281, p631 | URI: 10040592

C. Proposed Protocols for ESWL

Craigavon Stone Treatment Centre

Agreed method of working at Urology Stone MDT on

For review 3 months after start date of working at stone MDT.

1. **Staff Nurse checking in and out of Patient**
    1. Patient to Arrive 45 minutes prior to treatment and hand in patient consent and contraindications signed form (Sent by post prior to appointment)
    2. On arrival patient is asked to produce a Urine sample (and pregnancy test for child baring age 12 -55 years of age IRMA guidelines. QUOTE)
    3. In the patient consultation room, consent form checked signed. Contraindications to ESWL form checked with patient again and nurse signs check list to confirm.
    4. Medications given as per protocol (30 minutes before ESWL , ref evidence meds onset of action)
    5. Following completion of ESWL, patient to remain in waiting room, given light refreshments and observed for 30 minutes.
    6. Bloods pressure, Heart rate, respiratory rate and oxygen saturation checked prior to discharge.
    7. Radiologist books patient for either;
        1. Follow-up imaging as indicated by stone meeting or
        2. Re-book slot for ESWL and inform patient of date and time, included in discharge letter (add to hospital W/L)
    8. Upon discharge copy of discharge and medications given and explained, ESWL post procedure advice sheet given.

2. **Medication Protocols**

    1. Patient to receive medication pathway set and prescribed at Thursday morning stone meeting
    2. Nurse to check with patient allergies/ check contraindication
    3. Pathway 1,2,3,4 Nurse led, Pathway 5 Doctor led

	Pathway 1	Pathway 2	Pathway 3	Pathway 4	Pathway 5
30mins prior to ESWL, oral medications	Paracetamol 1g	Paracetamol 1g, Diclofenac Potassium 50mg oral	Paracetamol 1g, Diclofenac potassium 50mg oral	Paracetamol 1g	Doctors led, meds advised
Breakthrough pain relief during ESWL	Not suitable	Not suitable	Penthrox 3ml inhaler	Penthrox 3ml inhaler	Penthrox or Alfentinal

3. i. **Radiographer ESWL treatment and discharge letter**
    A. Patient consent form counter signed by radiographer
    B. Stone to be treated as per Stone meeting outcome letter or as per stone clinic outpatient letter.
    C. Stone localised using USS and/or fluoroscopy
    D. Ramping as per protocol

E. Following completion of patients dedicated treatment hour please fill **lithotripter e-discharge to state**

1. Patient full name, date of birth, address
2. Radiographer and nurse full name
3. Urologist responsible for patient
4. Blood pressure before/ during/after
5. Medication given prior, during and discharge from treatment
6. Number of shocks, energy and power
7. Stone location
8. Pain encountered during treatment
9. Fragmentation
10. **Until the software changes below have been made, please use the free text comment box to fill out <u>either</u>** a. Rebooked for second treatment to same stone
    b. Rebooked for third treatment to same stone
    c. Rebooked for fourth treatment to same stone
    d. Rebooked for treatment to concurrent stone
    e. Follow-up imaging 6weeks (option x-ray, USS, both or CTKUB)
    f. Re-discuss at MDT meeting due to treatment failure or complication
    g. Stone clinic review

Software changes proposed;

i. Hounsfield units of stone being treated
ii. Validated Pain score 0-10
iii. Treatment limited due to: drop down box
    a) Pain
    b) Nausea and vomiting
    c) Other patient factors
    d) Time constraints
iv. Stone to skin distance (cm)
v. Accurate stone size from original CT (mm)
vi. Number of treatments to stone
vii. Record of other stones present (green colour on diagram, red treated stone)
viii. Allergies (free text)
ix. Free text comments
x. Drop down selection of follow-up
    a) Rebooked for second treatment to same stone
    b) Rebooked for third treatment to same stone
    c) Rebooked for fourth treatment to same stone
    d) Rebooked for treatment to concurrent stone
    e) Follow-up imaging 6weeks (option x-ray, USS, both or CTKUB)
    f) Re-discuss at MDT meeting due to treatment failure or complication
    g) Stone clinic review

<u>e-discharge is then uploaded to ECR (copy to patient/GP/patients notes)</u>

ii. **Auxiliary Nurse during treatment**

A. Ensure patient comfort on table; supervise patients to prevent moving off the table during a treatment. Allow patient to play music they have brought in and use the earphones if patient has brought their own with them.

B. Undertake continuous observations of **heart rate** and **oxygen saturation** during Penthrox use, and ask radiologist to stop treatment and retrieve staff nurse from adjoining room if patient concerns raised, such as increased MEWS.

C. **Blood pressure** check every 15 minutes during Penthrox treatment, or more regular if required.

iii. **Staff nurse**

A. To provide Penthrox medication as breakthrough pain relief to suitable patients.

4. When Help is needed

1. **Treatment Query;**
   - Urgent advice needed then contact Mr Young on Mobile [redacted]
   - Call Urology Registrar on call if Mr Young unavailable
   - If unable to contact then call consultant on-call via switch board (0)

2. **Unwell patient;**
   - Contact the Registrar on Call for Urology on bleep [redacted] or mobile through switch board. If unable to contact call the Consultant on-call.

Cardiac Arrest or Peri-arrest Dial 6666 and state 'cardiac arrest, stone treatment centre' Then call Urology Doctors.

Nurse Checklist for Stone Treatment centre

Admission: Date: _____ **Patient Label:**

Time: _____

Signed: _____

Print Name: _____

Prior to treatment	YES	No	Comment if required
Confirm patient details			
Confirm patient understands treatment and any questions			
Chaperone present			
Review medication list			
Allergies (incl latex)			
Medications stopped as advised			
Able to take NSAIDs			
Urinalysis (POCT urine if symptomatic of UTI, Immunosuppressed)			(See flow chart)
Pregnancy test (12 to 55 years of age)			
Safety checklist from patient:			
Anticoagulation stopped as per protocol			List medication held:
Artificial heart valve			If yes give antibiotic prophylaxis Check anticoagulation protocol
Pacemaker or defibrillator			Electrophysiologist check/programme pre and post ESWL **YES/NO**
Artificial joint or mobility concern			
Abdominal aneurysm			Proceed only if aneurysm discussed at MDT and ESWL recommended. **YES/NO** Otherwise, cancel ESWL and discuss at Stone MDT
Neurosurgical Abdominal shunt			Cancel treatment and discuss at Stone MDT
Neurostimulator or other abdominal implant			If aware at MDT and ESWL to proceed **YES/NO** Implant not to be in focal zone of treatment
Pregnancy test positive			Cancel if positive and discuss at Urology Stone MDT
Pre ESWL Medications given and signed for			
Counsel on use of Penthrox (if indicated)			
Consent form check – radiographer countersigned			

During treatment	YES	No	Comment if required
Penthrox used			
Comments			

Observations

Admission

BP: **Pulse:** **Sats on air**: **Temperature:**

During Treatment

Time	BP	Pulse	Sats on air	Other (if required)

After treatment and on discharge

BP: **Pulse:** **Sats on air**: **Temperature:**

After treatment	YES	No	Comment if required
Post ESWL information given			
Medications for discharge			
Chaperone			
Anticoagulation to restart			Restart date as per protocol/ warfarin clinic organised **YES/NO**
e-Discharge letter for GP and patient			
Follow up arrangements made by radiographer			

Discharge: Date: _____

Time: _____

Signed: _____

Print Name: _____

Management of blood pressure Prior to ESWL Treatment

Acute episodes of hypertension may arise in a variety of clinical settings due to the exacerbation of a pre-existing chronic hypertensive condition or as *de novo*. Emergency, intensive care, anaesthesia, and surgery are among the clinical settings where prompt recognition and treatment of acute hypertensive episodes (AHE) is of paramount importance. A variety of surgical and medical events may trigger intense sympathetic activity, resulting in sudden elevations in blood pressure (BP).

Table 1

Classification of Blood Pressure for Adults Aged ≥18. **(Pre-ESWL)**

Category	Systolic Blood Pressure	Diastolic Blood Pressure	
Normal	<120	<80	Proceed with ESWL.
Pre-hypertension	120–139	80–89	
Hypertension-Stage I	140–159	90–99	Proceed with treatment with ESWL. Advise patient to have BP rechecked with GP.
Hypertension-Stage II	≥160	≥100	Return to GP for checking and managment
Hypertensive Urgency	>180	>120	Contact oncall doctor #Irrelevant redacted by the USI – to discuss with medical team.
Hypertensive Emergency	>180	>120 and target organ damage	

Adapted from Chobanian, 2003.

Tulman DB, Stawicki SPA, Papadimos TJ, Murphy CV, Bergese SD. Advances in Management of Acute Hypertension: A Concise Review. *Discovery medicine*. 2012;13(72):375-383.

d. ESWL Medications

(Pain Relief and Antibiotics)

PATHOGENESIS OF PAIN DURING ESWL

The pain experienced by a patient receiving ESWL is multifactorial, but broadly speaking can be split into patient factors and lithotripter factors.

Patient Factors	Lithotripter Factors
Cutaneous superficial skin nociceptors*	Lithotriptor type^
Visceral nociceptors such as periosteal, pleural, peritoneal*	Size and site of stone burden^
Musculoskeletal pain receptors*	Location of shockwave focal stone^
Pain tolerance	Size of focal zone^
Pre-existing injury	Cavitation effects^
	Shockwave peak pressure^
* (Weber A, 1998)	Entry of shockwaves at skin^
	Coupling
	(Basar H, 2003)

To achieve the desired number of shockwaves delivered to a stone, at a suitable power, to generate a reasonable level of energy delivery to treat the stone requires the practitioner to limit the pain experienced by the patient.

Although many papers have been written on ESWL and pain relief, to date a consensus on what to prescribe has not been reached. The search for the ideal pain medication regime therefore continues.

Pain Medication ESWL pathway Craigavon Stone Treatment Centre (still active October 2017)

Current Medication:

a. Prior to treatment: **1 gram oral Paracetamol**
20mg Piroxicam oral (FELADINE MELT)

These are both given as long as there are no contraindications prior to procedure. Currently there is no set time prior to treatment for when given, hence a patient may take the medication and proceed straight to ESWL treatment.

b. Post Procedure : **Paracetamol 1 gram oral, QDS, 3 days**
Diclofenac 50mg, oral, tds, PRN, 3 days
(Alternative to diclofenac is codeine phosphate 30-60mg, oral, QDS, PRN, 3 days)

Pre-medication Onset of action

Paracetamol:

Paracetamol is readily absorbed from the gastrointestinal tract with peak plasma concentrations occurring about 30 minutes to 2 hours after ingestion. It is metabolised in the liver (90-95%) and excreted in the urine mainly as the glucuronide and sulphate conjugates. Less than 5% is excreted as unchanged paracetamol. The elimination half-life

varies from about 1 to 4 hours (emc+, 2016)

Piroxicam:

Piroxicam is a Non-steroidal Anti-inflammatory, with a half-life of 3-4 hours, and duration of action of up to 2 days, with some effect being reported up to 7-10 days (British Medical Association , Fourth edition, 2012). The Piroxicam Melt has a fast absorption and is not influenced by the fasting state (Gorham, 2013).

The FDA gives two explicit warnings on the use of NSAIDS (Not Aspirin) (DRUGS.COM , 2017)

WARNING: RISK OF SERIOUS CARDIOVASCULAR AND GASTROINTESTINAL EVENTS

Cardiovascular Thrombotic Events

- Nonsteroidal anti-inflammatory drugs (NSAIDs) cause an increased risk of serious cardiovascular thrombotic events, including myocardial infarction and stroke, which can be fatal. This risk may occur early in treatment and may increase with duration of use. *[see Warnings and Precautions (5.1)]* .
- Piroxicam Capsules USP is contraindicated in the setting of coronary artery bypass graft (CABG) surgery *[see Contraindications (4) and Warnings and Precautions (5.1)]*.

Gastrointestinal Bleeding, Ulceration, and Perforation

- NSAIDs cause an increased risk of serious gastrointestinal (GI) adverse events including bleeding, ulceration, and perforation of the stomach or intestines, which can be fatal. These events can occur at any time during use and without warning symptoms. Elderly patients and patients with a prior history of peptic ulcer disease and/or GI bleeding are at greater risk for serious GI events *[see Warnings and Precautions (5.2)]* .

Pubmed Search for Piroxicam use for ESWL

Search terms included 'ESWL', 'SWL', 'Extracorporeal shockwave lithotripsy' and 'Piroxicam'

9 papers were returned

7 papers were discarded as they did not directly compare piroxicam in a trial or present study evidence for its use.

The remaining 2 papers were clinical trials, a randomized placebo-controlled study and a randomised comparison trial.

Andreou et al undertook a Randomized study comparing piroxicam analgesia and tramadol analgesia during outpatient electromagnetic extracorporeal lithotripsy, 2006. They randomised 171 patients into 2 groups of 40mg IM Piroxicam and 100mg IV tramadol. The tramadol group had more side effects, but both forms of medication were deemed suitable pain relief for ESWL according to the visual pain score and researches analysis (Andréou A, 2006).

Aybek et al undertook a randomized, placebo-controlled study, comparing 30 patients receiving IM Piroxicam 40mg

vs 30 patients receiving IM saline as the placebo control. Medications were given as IM injection to the gluteal muscle 45 minutes before ESWL. Medication vs no medication demonstrated a significant difference on a verbal rating pain scale (Aybek Z, 1998).

The 2 papers which looked at piroxicam and ESWL did not look at the oral route and were not using the current generation or modality of shock generation used at Craigavon Area Hospital.

Outcome:

Data is therefore required for oral Piroxicam use as a pre-medication for ESWL. We conducted a prospective study in Craigavon, comparing 100 patients in relation to energy received to stone and premedication given.

Comparison Study of Piroxicam and Paracetamol vs Paracetamol

for ESWL pain relief medication.

Craigavon Stone Treatment Centre

Aim

Does the combination of oral Piroxicam and Paracetamol premedication for ESWL increase the power and energy delivered to renal and ureteric stones when compared to Paracetamol alone?

Background

The Craigavon Area Hospital Stone Treatment Centre generally follows the recommendations for ESWL based on the European Urology guidelines for Urolithiasis (European Association of Urology , 2017). It was noted the most common reason for limitation of ESWL treatment was pain experienced by the patient. The department had been traditionally using the NSAID piroxicam 20mg oral fast tab and 1 gram of oral paracetamol as pre-medication for ESWL. This had been given to the patient on average 30 minutes before their ESWL treatment.

Piroxicam is non-selective non-steroidal anti-inflammatory drug (NSAID), meaning it has action on COX-1 (Cyclo-oxygenase-1) and COX-2 enzyme inhibition. The COX-1 and COX-2 enzyme catalyzes the synthesis of cyclic endoperoxides from arachidonic acid to form prostaglandins. Prostaglandins mediate the inflammatory, fever and pain sensation (Day RO, 2013). COX-1 is distributed throughout the body, with higher concentration in kidney, stomach, endothelium and platelets. Prostaglandins produced via this pathway control renal perfusion, promote platelet aggregation and gastric protection. Whilst COX-2 is found in macropharges, leukocytes, fibroblasts and synovial cells, with the prostaglandins produced mediate inflammation, fever, and pain and inhibit platelet aggregation (Longo D, 2012).

There are several non-prostaglandin pathways NSAIDS may act upon, but further study in required to explain the mechanism of action and the importance (Soloman, 2017). The combination of paracetamol and the NSAID