Kent & Medway Cancer Collaborative

The Management of Renal Cancer

Pathway of Care

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Table of Contents

1.0 Advice for Primary Care

PATIENT HAS DIPSTICK URINE TEST

1. When basing results on Dipstick testing – the kit must be "in-date"
2. Dipstick testing should only be carried out on "fresh" specimens
3. If there is any doubt (borderline results) about the result the test should be repeated after an interval of 2 weeks
4. If the patient has an infection the test should be repeated after treatment at an interval of 2 weeks
5. Women presenting with haematuria who are menstruating should be retested after an interval of 2 weeks

Dipstick is Positive

- History
- Examination
- FBC, E&Cr & eGFR
- **MSU Performed**

Dipstick/MSU is Negative = STOP

- Manage Symptoms
- Investigate other signs
- Refer if appropriate
- Re-test in 6 months

MSU

MSU SHOWS

- Non-visible haematuria
- No casts
- No proteinuria

MSU SHOWS UTI

TREAT UTI

RE-TEST

Any patient who has

- Persistent UTI
- Recurrent UTI
- Is Male

MSU SHOWS

- Non-visible haematuria
- Casts
- Proteinuria
- No infection

CHECK

- Blood pressure
- Creatinine
- eGFR
- FBC

PATIENT HAS

- Elevated creatinine
- Hypertension
- Micro Haematuria
- Casts
- Proteinuria

REFER NEPHROLOGY

ENCLOSE

- E&Cr
- eGFR

Any patient who has had macroscopic haematuria

REFER UROLOGY

FORMS AND ENCLOSURES

- Rapid Access Proforma
- Covering letter (if desired)
- Enclose E&Cr, eGFR, FBC, MSU & PSA (in men)

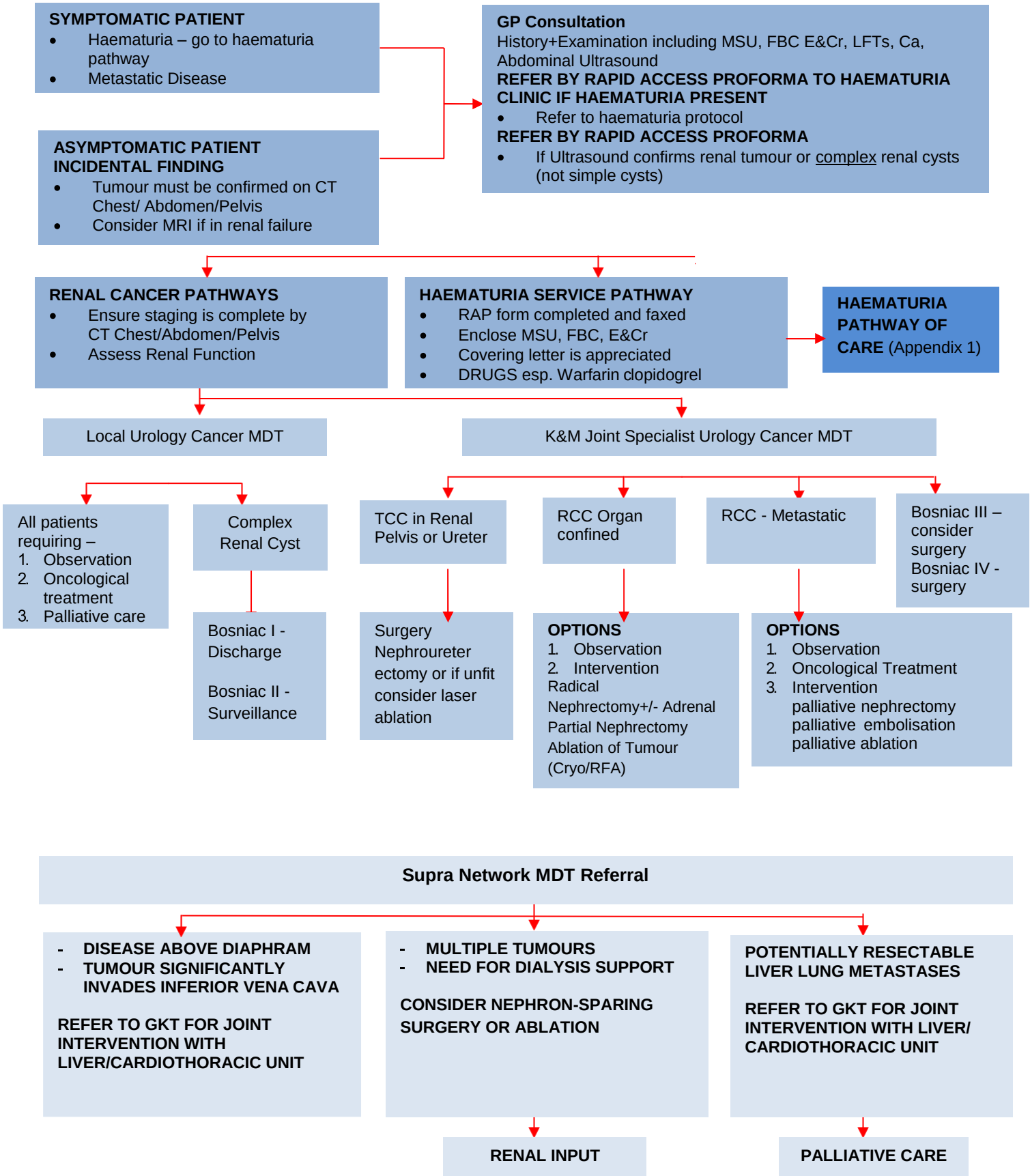
URGENT 2 WEEK RAPID ACCESS PROFORMA – Referral suspected cancer

- Macroscopic haematuria in the absence of infection
- Persistent or recurrent UTI with haematuria in patients aged >40 years
- Unexplained persistent non-visible haematuria, confirmed on MSU and without infection in patients aged >50 years

NON URGENT 8 WEEK REFERRAL

- Patients with non-visible haematuria, with no evidence of infection, aged ≤50 years
- Any male patient who has had a UTI requires Urological assessment

2.0 Renal Cancer Pathway



3.0 Purpose

To describe the process for ensuring that all Renal Cancer cases diagnosed within the Kent & Medway Cancer Collaborative (KMCC) region are managed by the East and West Kent & Medway Urology Specialist Teams and the GKT Supranetwork MDT achieving a coordinated seamless patient pathway, in accordance with the best possible evidence based practice, and to facilitate advancement in the specialty in the field of renal cancer management.

4.0 Scope

This Standard Operating Procedure (SOP) applies to all cases, and suspected cases, of renal cancer within Kent & Medway (K&M). The Kent & Medway renal cancer specification of delivery of care requires all Trusts within the area to adopt an agreed policy for the delivery of care. The policy relates to the expected pathway of care / treatment regimes for patients diagnosed with renal cancer.

5.0 Referral Pathway

5.1 General Principles

- Both K&M Urology Teams function at both Local & Specialist levels and the flow chart in section 2.0 reflects this two tier approach to care
- Patients should be referred according to the agreed referral criteria set out in section 4.0
- All patients with a new diagnosis of a urological cancer should be discussed by urology MDTs which will function in compliance of the IOG, recommendations of the K&M Urology Tumour Site Specific Group (TSSG) and the operational policies of those MDTs as well as within the bounds of good practice
- Any K&M secondary care NHS haematuria service or clinic must be provided, or lead by, a clinician who:
    - Is a member of a recognised K&M Urology MDT and attends Multidisciplinary Team Meetings (MDMs) at least to levels (2/3rd) specified in the Quality Measures
    - Is a member of the KMCC Urology TSSG and attends at least 75% of Urology TSSG meetings in any 2 year period
- Patients diagnosed with renal cancers will be managed in accordance with the management principles agreed by the KMCC Urology TSSG as set out in this document
- Radical surgery for all urological cancers will be undertaken at one of 2 surgical centres:
    - Kent and Canterbury Hospital (East Kent)
    - Medway Foundation Trust Hospital (For West Kent and Medway)
- Patients with potentially resectable Liver /Lung Metastases should be considered by the MDT for referral to a Supranetwork Centre (King's/Guy's)
- Patients with disease above the diaphragm and/or where tumour significantly invades the inferior vena cava should be considered by the MDT for referral to a Supranetwork Centre (GKT)
- Following radical surgery, patients with renal cell carcinoma will undergo regular follow up with chest x-rays, abdominal ultrasounds, and CT scans at intervals determined by stratification into recurrence risk groups
- Patients with transitional cell carcinoma of the kidney will undergo regular cystoscopic surveillance
- Patients will be offered a Key Worker and should expect to receive clinical and supportive care of the highest standards at all stages along the Pathway of Care
- All patients should be considered for entry into an approved clinical trial
- Where patients fall into the Children's & Young Peoples (CYP) age group *(Please see section 10.0)* an appropriate referral will be made

5.2 Agreed Referral Criteria

The following should be referred to be seen within 2 weeks. The 2 week referral proforma should be used and sent or e-mailed to the relevant central referral office:

- **Frank haematuria**
- **Palpable renal mass on examination**
- **Solid renal mass defined on imaging**

Patients with frank haematuria will be seen in a haematuria clinic. Patients with a renal mass will be seen in a urology clinic.

Patients with non-visible haematuria, with no evidence of infection, age <50 years should be referred to the haematuria clinic NON-URGENTLY and will be seen within 8 weeks.

Patients with non-visible haematuria, with no evidence of infection, age > or equal 50 years should be referred to the haematuria clinic and will be seen within 2 weeks.

Non-visible haematuria accompanied by proteinuria, red cell casts on microscopy, and hypertension is suggestive of a nephrological disorder. The patient should be referred to a Nephrologist.

6.0 Imaging

Radiology imaging guidance for Renal Cancer can be found on the KMCC website: http://www.kmcc.nhs.uk/resource-library/diagnostics-ccag/

7.0 Pathology

All K&M reporting pathologists follow The Royal College of Pathologists Histopathology Reporting on Cancers guidelines – a copy of which is available through the KMCC website:- http://www.kmcc.nhs.uk/resource-library/pathology-ccag/

8.0 Kidney Cancers

8.1 Staging

1. **CT chest and abdomen and pelvis unenhanced and enhanced**
2. **MR/ CT or doppler ultrasound**
   If IVC invasion suspected consider above to clarify upper level

8.2 Surveillance

***Note**: Please refer to Table 13.1. The full guidance document is located on the KMCC website: http://www.kmcc.nhs.uk/resource-library/radiology-ccag/*

9.0 MDT Discussion

The following outcomes are possible:

1. *Transitional cell carcinoma of the renal pelvis or calyces.* Usually treated by nephro-ureterectomy. An endourological approach should be considered for nephron-sparing surgery. Laparoscopic surgery should be offered to all patients.
2. *Transitional cell carcinoma of the ureter.* Can be managed by nephro-ureterectomy, local excision or endoscopically, depending on the grade, size and position.
3. *Organ confined renal cell carcinoma* is usually treated by radical nephrectomy (+/- adrenalectomy). Robotic Partial nephrectomy should be considered for tumours less than 4 cm in diameter. A laparoscopic robotic approach is the standard of care. Ablative therapy with radiofrequency ablation, or cryotherapy, is a treatment option for patients with tumours less than 3.5cm, or for patients with larger tumours if partial or radical nephrectomy is deemed high risk or inappropriate.
4. *Palliative therapy*. For patients with symptomatic tumours, which are unsuitable for excision, embolisation of the tumour should be considered.
5. *Metastatic / Recurrent disease*. Treatment options are tyrosine kinase inhibitors therapy, or immune-oncology (IO) therapy.
6. *High-risk tumours*. In the following situations, referral to a supraregional MDT should be considered:
   - Resection of metastatic disease
   - Resection of both primary and associated metastatic disease
   - Resection of bilateral primary tumours
   - Resection of any primary where it is predicted that the patient will subsequently require dialysis
   - Surgical management of patients of Von Hippel-Lindau disease or hereditary papillary tumours

7. *Consider biopsy* in the following:
   - before treatment with TKI's to confirm clear cell histology
   - in the presence of another primary tumour source
   - before ablative treatment
   - to assist in determining prognosis in patients undergoing surveillance
   - In patients undergoing NSS

10.0 Referral to the Supranetwork team

1. The team making the referral to the Supranetwork MDT is responsible for ensuring that appropriate notes, imaging and pathological slides are sent to the Supranetwork MDT. The local MDTs have key contacts outlined in their Operational Policies.
2. The Supranetwork team is responsible for:

   a. Returning notes, imaging and pathological slides
   b. Communicating with the referring MDT (with a copy to the GP) in a timely manner to outline:
      - MDM decisions
      - Treatment discussions and decisions held with the patient
      - Outcome of surgery
      - Discharge summary
   c. Communicating with the K&M Specialist MDT

11.0 Children & Young People

Children and Young People with renal cancers will be treated in accordance with principles set out in the CYP IOG.

All Children and Young People up to the end of their 18th year must be referred to the CYP Principle Treatment Centre which for K&M is based at the Royal Marsden Hospital.

All Young People between 19 and 24 years of age must be offered a choice of where they would like their treatment. This could either be their local adult service, or the TYA Principle Treatment Centre which for K&M is based at the Royal Marsden Hospital.

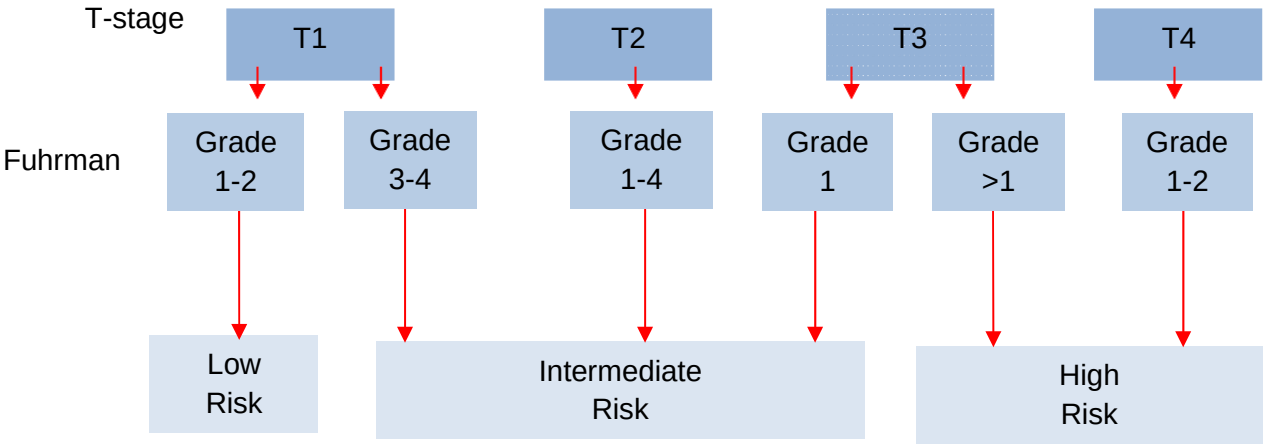
Referral to a Principle Treatment Centre does not necessarily mean that treatment will be undertaken at that centre; shared care management protocols may allow some treatments to be undertaken locally.

12.0 Oncology Provision

The Non-Surgical Oncological management of all patients with urological cancers defined by the Non-Surgical Oncology Sub Group (NOG) of the Urology TSSG is set out in the document entitled 'The Oncological Treatment of Urological Cancers which can be found on the KMCC website: http://www.kmcc.nhs.uk/resource-library/urology-tssg/

13.0 Follow up Protocols

Risk stratification:



Post nephrectomy follow up schedule for RCC:

Tumour Group	3M	9M	12M	15M	21M	3Yr	4Yr	5Yr	Thereafter
Low Risk			CT						Discharge at 1 year if CT clear
Intermediate Risk	CT	USS/ CXR		CT	USS/ CXR	CT	USS/ CXR	CT	Discharge At 5 years if CT clear
High Risk	CT	CT		CT	CT	CT	CT	CT	Discharge at 5 years if CT clear

14.0 Surveillance Guideline

All Patients

3-6 Weeks Post-operative Bloods
Physical Examination
Histology

Then:

Table 13.1 - Surveillance

Tumour	6/12	1yr	18/12	2yr	3yr	4yr	5yr	6yr	7yr	8yr	9yr	10yr	After
Low risk		CT C+A											Discharge at 1 year if CT clear
Intermediate	USS / CXR	CT C+A	USS / CXR	CT C+A	USS / CXR	CT C+A	USS / CXR	USS / CXR	USS / CXR	USS / CXR	USS / CXR	USS / CXR	Discharge
High	CT C+A	CT C+A	CT C+A	CT C+A	CT C+A	CT C+A	CT C+A	USS / CXR	CT C+A	USS / CXR	USS / CXR	CT C+A	Annual USS / CXR
Partial: Low Risk		CT C+A		USS / CXR	USS / CXR	USS / CXR	USS / CXR						Discharge at year 5
Partial: Intermediate Risk	CT C+A	CT C+A	CT C+A	CT C+A	CT C+A	CT C+A	CT C+A	USS / CXR	USS / CXR	USS / CXR	USS / CXR	USS / CXR	Biannual USS / CXR

Consider stopping surveillance if co-morbidity would preclude surgery or TKI/IO treatment
Consider specific investigations directed at symptoms
Annual FBC U&E's LTF and calcium – to be continued in primary care following discharge

If eligible for trial then CT within 3/12

CT C+A = CT Chest and Abdomen
USS / CXR = Ultrasound abdomen plus chest X-Ray

Follow up for UUT TCC pTa-1:
Cystoscopy at 3 months then annually
Annual CT-U or every 2 years
Follow up for UUT TCC >pT1:
Cystoscopy at 3 month then annually
6 monthly CTU for 2 years then annually

Patients post ablative therapy require early phase CT kidney at 3/12 – then surveillance as high risk

Note: *these patients need to be subject to audit as required by NICE*

15.0 Supportive & Palliative Care

Patients who have inoperable kidney cancer should be referred to the specialist supportive & palliative team. The prime aim of the treatment is to alleviate symptoms.

Open and frank discussions with patients should take place with patients at all stages of their journey so that patients are not confused about their prognosis or have unrealistic expectations of any of the forms of treatment offered to them.

Relatives and carers will need to be appropriately supported and given appropriate information. However, in accordance with the recommendations set out in various Improving Outcomes Guidance (IOG), relatives and carers should not be given information different to that given to the patient.

Palliative care provision should be made for all patients:
- Hospital teams, including the Clinical Nurse Specialists for urology patients
- Primary Health Care Team would provide for palliative care at home
- General Practitioner should be informed within 24 hours of the diagnosis, treatment plan and medication

The management of symptoms, psychological, social and spiritual issues, and the communication of the diagnosis, and any associated problems, should be within the domain of all health care professionals.

Referral to specialist palliative care services should be considered when these issues have not been resolved and in particular for patients with:
- Complex symptom management issues, which are difficult to manage
- Difficulties in adjusting to the diagnosis or disease progression
- Psychological and family issues – such as communication problems within the family
- Spiritual issues – such as the challenging of belief system/faith/cultural values as a result of the cancer

Consideration of specialist palliative care or support should be given throughout the patient pathway, particularly:
- At the Multidisciplinary Team Meeting
- When no active treatment is considered
- After active treatment
- At relapse
- In the terminal stages

16.0 Data, Data Collection

Collection of data at each stage of the pathway is the responsibility of the team looking after the patient at that time. The minimum dataset agreed by the TSSG will be a combination of those data items that meet national requirements, and additional items as agreed by the TSSG.

National data requirements will include:

- Cancer Waiting Times monitoring, including Going Further on Cancer Waits. The data items required will be as defined in ISB0147 at the time of referral and/or treatment.

  Details of the Cancer Waiting Times dataset are available from:
  http://nww.connectingforhealth.nhs.uk/nhais/cancerwaiting/documentation

  Cancer Waiting Times data will be submitted according to the timetable set out in the National Contract for Acute Services.

- The Cancer Outcomes and Services Dataset. The data items will be as defined in ISB1521, and any subsequent versions, at the time of diagnosis and/or treatment. The requirement will include those fields listed in the “Core” section of the dataset, and any additional tumour site specific sections, as applicable.

  Details of the COSD are available from:
  http://www.ncin.org.uk/collecting_and_using_data/data_collection/cosd.aspx

  Cancer Registration and Cancer Outcomes and Services (COSD) data will be submitted according to the timetable set out by the National Cancer Registration Service (NCRS).

- Where applicable, teams will also collect additional data items as defined in any corresponding National Clinical Audit Support Programme (NCASP) audit dataset.

  Details of these datasets are available from:
  http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/cancer

  Data for NCASP audits will be submitted, where applicable, according to timetables as agreed by the TSSG, and within the overall submission deadlines for each audit.

Submission of data to meet these national requirements will be the responsibility of each individual Trust.

Note that these standards are subject to variation from time to time, and where these requirements change, the data items required to be collected by the team will also change in line with national requirements.

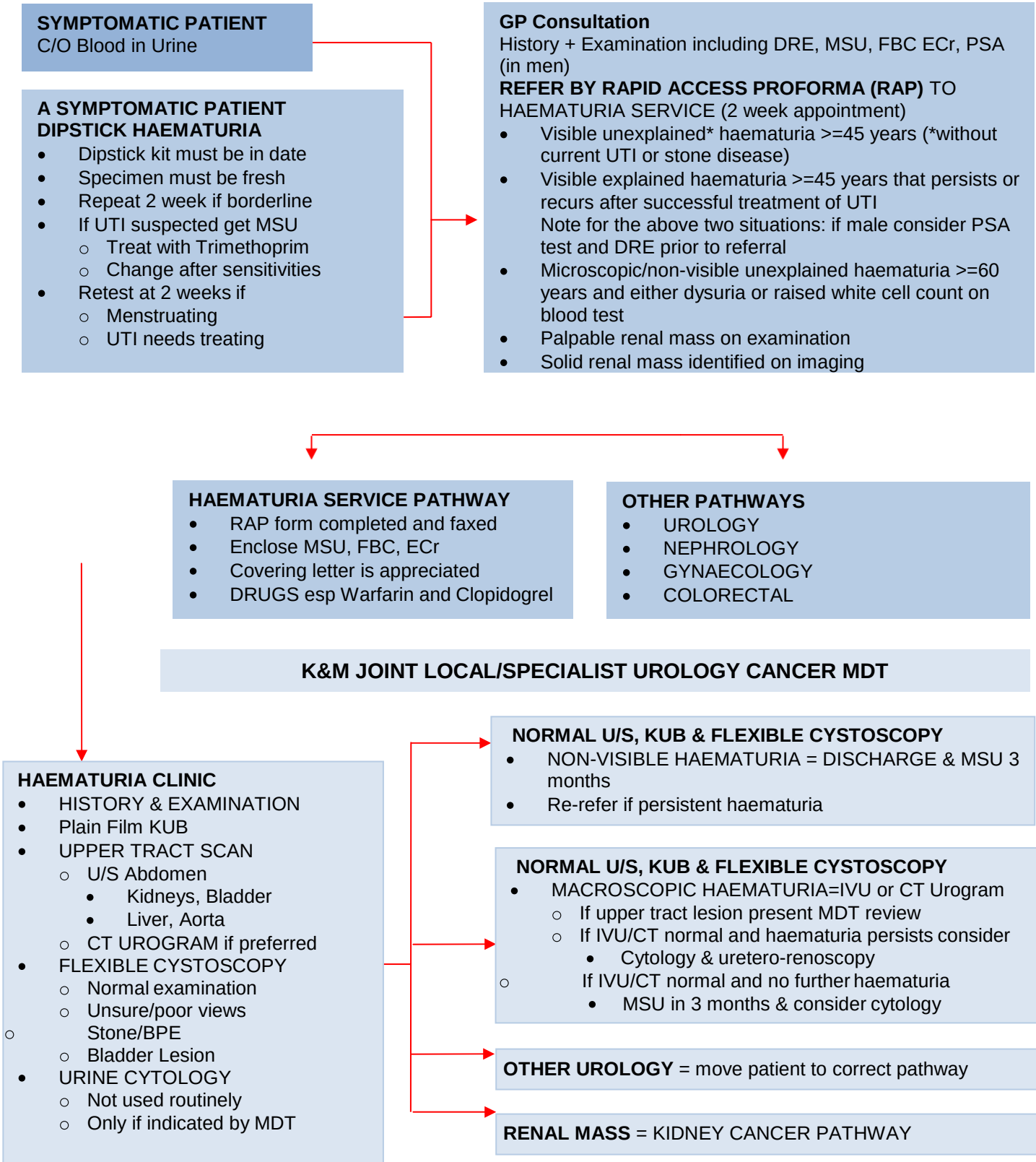
Local data requirements will include any additional data items as agreed by the TSSG. These must be selected to avoid overlap with any existing data items, and where possible must use standard coding as defined in the NHS Data Dictionary.

Where possible and applicable, InfoFlex will be used for the collection and storage of data.

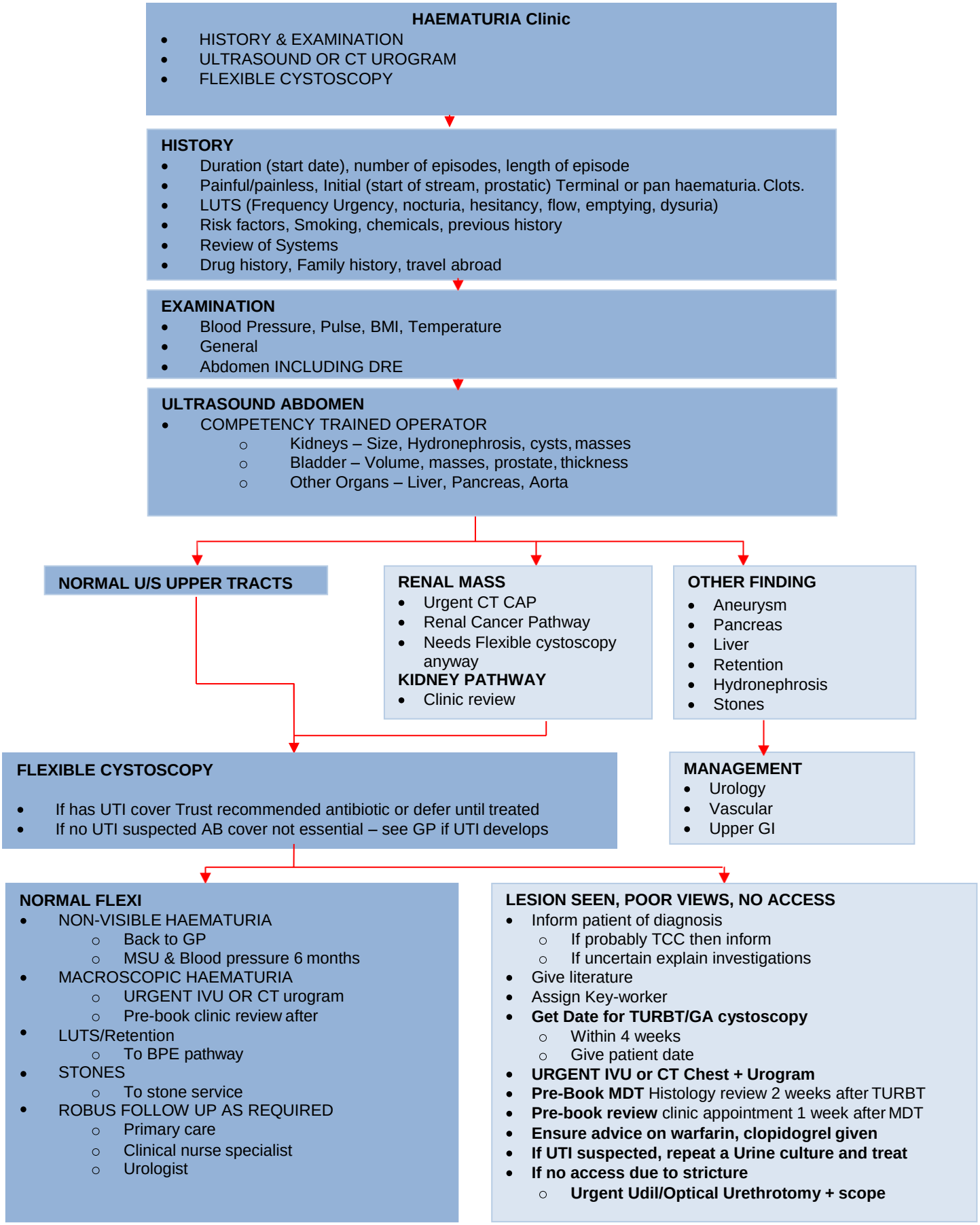
Additional areas of the COSD, relating to pathology, radiotherapy, SACT, diagnostic imaging and basic procedure details will feed into the dataset from other nationally mandated sources. It is the responsibility of each team to ensure that the whole of the relevant dataset is collected, and it is acknowledged that this may come from a variety of sources.

17.0 Appendix 1

GP HAEMATURIA AND DIPSTICK PATHWAY - extract



18.0 Appendix 2



19.0 Personnel and Contact Information

A comprehensive, up to date list of MDM contact details can be found on the KMCC website via the following link: http://www.kmcc.nhs.uk/resource-library/

20.0 Glossary

Acronyms in common usage throughout KMCC documentation:-

CNB	Cancer Network Board
CYP	Children & Young People (in relation to the IOG)
DCCAG	Diagnostic Cross Cutting Advisory Group
DOG	Disease Orientated Group (NSSG/TSSG/TWG)
DVH	Darent Valley Hospital
EK	East Kent
EKHUFT	East Kent Hospitals University Foundation Trust
HoP	High Level Operational Policy
IOSC	Improving Outcomes: A Strategy for Cancer
K&C	Kent & Canterbury Hospital, Canterbury, (EKHUFT)
KMCC	Kent & Medway Cancer Collaborative
KMCN	Kent & Medway Cancer Network
KMCRN	Kent & Medway Cancer Research Network
LSESN	London & South East Sarcoma Network
MFT	Medway Foundation Trust
MTW	Maidstone & Tunbridge Wells NHS Trust
NOG	Non-Surgical Oncology Group *(Permanent oncologist sub group of the TSSGs with a specific responsibility for chemo/rad pathways and advice to the TSSG, K&M and geographical locations on new drugs)*
PoC	Pathway of Care *(KMCC agreed disease site specific clinical guidelines)*
QEQM	Queen Elizabeth the Queen Mother Hospital, Margate (EKHUFT)
QoL	Quality of life
RAT	Research and Trial Group *(Permanent sub-group of the TSSGs with a specific responsibility for taking forward the clinical trials agenda)*
RMH	Royal Marsden Hospital
RNOH	Royal National Orthopaedic Hospital
QVH	Queen Victoria Foundation Trust Hospital East Grinstead
UCLH	University College Hospital London
WHH	William Harvey Hospital, Ashford (EKHUFT)
WK	West Kent

21.0 Document Administration

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