HIOW Consensus Statement for Locally Agreed Pathway for Investigating Non-Visible Haematuria for Suspected Bladder Cancer

This statement was developed in consultation with Hampshire and Isle of Wight (HIOW) Urology clinicians, Primary Care representatives, the Wessex Cancer Alliance and the Wessex Urology Clinical Advisory Group. The guidance is based on currently accepted and peer reviewed research. The purpose of this statement is to assist primary care clinicians in HIOW in decision making and is not intended to replace clinical judgement. This guidance is for HIOW only at this time and Dorset clinicians should refer to their local network guidance.

Background

Bladder cancer is the 11th most common cancer in the UK, accounting for 3% of all new cancer cases with around 10,500 new bladder cancer cases annually or 29 every day (2017-2019)[1]. Almost 1 in 2 (46.3%) people diagnosed with bladder cancer in England survive their disease for ten years or more, it is predicted (2013-2017).

There is considerable variation across the NHS in the diagnosis and management of bladder cancer and the provision of care[2]. There is evidence that the patient experience for people with bladder cancer is worse than that for people with other cancers[2].

What do we know about the risk of developing bladder cancer?

In males in the UK, bladder cancer is the 7th most common cause of cancer death, with around 3,800 deaths every year (2017-2019). In females in the UK, bladder cancer is the 14th most common cause of cancer death, with around 1,800 deaths every year (2017-2019). 1 in 130 UK females and 1 in 55 UK males will be diagnosed with bladder cancer in their lifetime (born in 1961). It is 3 to 4 times more common in men than in women[1].

Certain groups have different levels of risk of developing bladder cancer:

- **Deprivation:** Incidence rates in England in females are 47% higher in the most deprived quintile compared with the least, and in males are 23% higher in the most deprived quintile compared with the least (2013-2017).
- **Ethnicity:** Incidence rates for bladder cancer are lower in the Asian and Black ethnic groups, compared with the White ethnic group, in England (2013-2017).
- **Smoking History:** risk is up to 4 times that of someone who has never smoked. 45% of bladder cancer cases in the UK are caused by smoking and risk increases with the amount and duration of smoking.
- **Family History:** Bladder cancer is 1.8 times higher in people with an affected first degree relative, though shared smoking habits are thought to explain some of this association.
- **Ionising radiation:** 2% of bladder cancer cases are caused by ionising radiation, for example previous pelvic radiotherapy.
- **Occupational exposure:** There is an association with occupational exposure and bladder cancer and there can be a latency period of 30-40 years from exposure to cancerous change:

- **Dye and rubber industries:** These are significant sources of exposure to aromatic amines.
- **Textile and leather industries:** Workers in these sectors may encounter various hazardous chemicals, including aromatic amines.
- **Metalworking:** Machinists, turners, and drill press operatives have shown high risks due to exposure to metalworking fluids.
- **Printing:** Workers involved in printing processes may be exposed to chemicals that increase their risk of bladder cancer.
- **Chemical and petrochemical industries:** Exposure to organic solvents and other chemicals used in these sectors presents a risk.
- **Construction and transportation:** These occupations may involve exposure to diesel exhaust and other fumes or solvents.

Non-Visible Haematuria

Non-Visible Haematuria (NVH), also known as microhaematuria, is >10 RBC per microlitre on a midstream, clean-catch urine sample. Urine dipstick testing is more sensitive than microscopy[3], due to the ability of the dipstick test to detect haemoglobin even after RBC lysis and should be used in primary care where possible. More than a trace on dipstick should be considered positive[4].

Non-visible haematuria is independently associated with bladder cancer[2]. However, there is a lack of consensus in the assessment and management of non-visible haematuria with differing guidelines between bodies responsible for advising on the investigation of patients.

Wessex review of bladder cancer pathways

The Service Improvement Team at Wessex Cancer Alliance have provided support to conduct a deep dive into bladder cancer pathways as part of the national planning ask for 25/26. Following data analyses and meeting providers in Wessex, a common theme discussed was the variability in investigating non-visible haematuria between providers and clinicians. Consequently, a survey was sent to clinicians involved in bladder cancer pathways to better understand both current and aspirational practises.

A meeting was held with Consultant Urologists and Consultant Uroradiologists with an aim to reach an initial consensus on investigating non-visible haematuria before discussing with clinicians more widely including Wessex Cancer Alliance GP advisors. The aim of this consensus statement is to improve pathways and patient experience.

Referral guidance

1. **Fast-Track Urgent Suspected Bladder Cancer Referral requirements: Non-Visible Haematuria**

As per the NG12 guidance[2,] the requirements for primary care to refer a person on a fast-track urgent suspected cancer (USC) bladder pathway with non-visible haematuria are:

- ≥ 60 y with unexplained non-visible haematuria on urine dip and either dysuria or raised white cell count

The referral should include both symptoms and reason for referral (free text) and the following results which are essential:

- Positive urine dip (with more than a trace of blood or MSU (>10 RBC per HPF)
- FBC – haemoglobin and white cell count
- U&Es to include eGFR within 3 months for arranging imaging with contrast

2. Who and how to refer when USC criteria for non-visible haematuria are not met

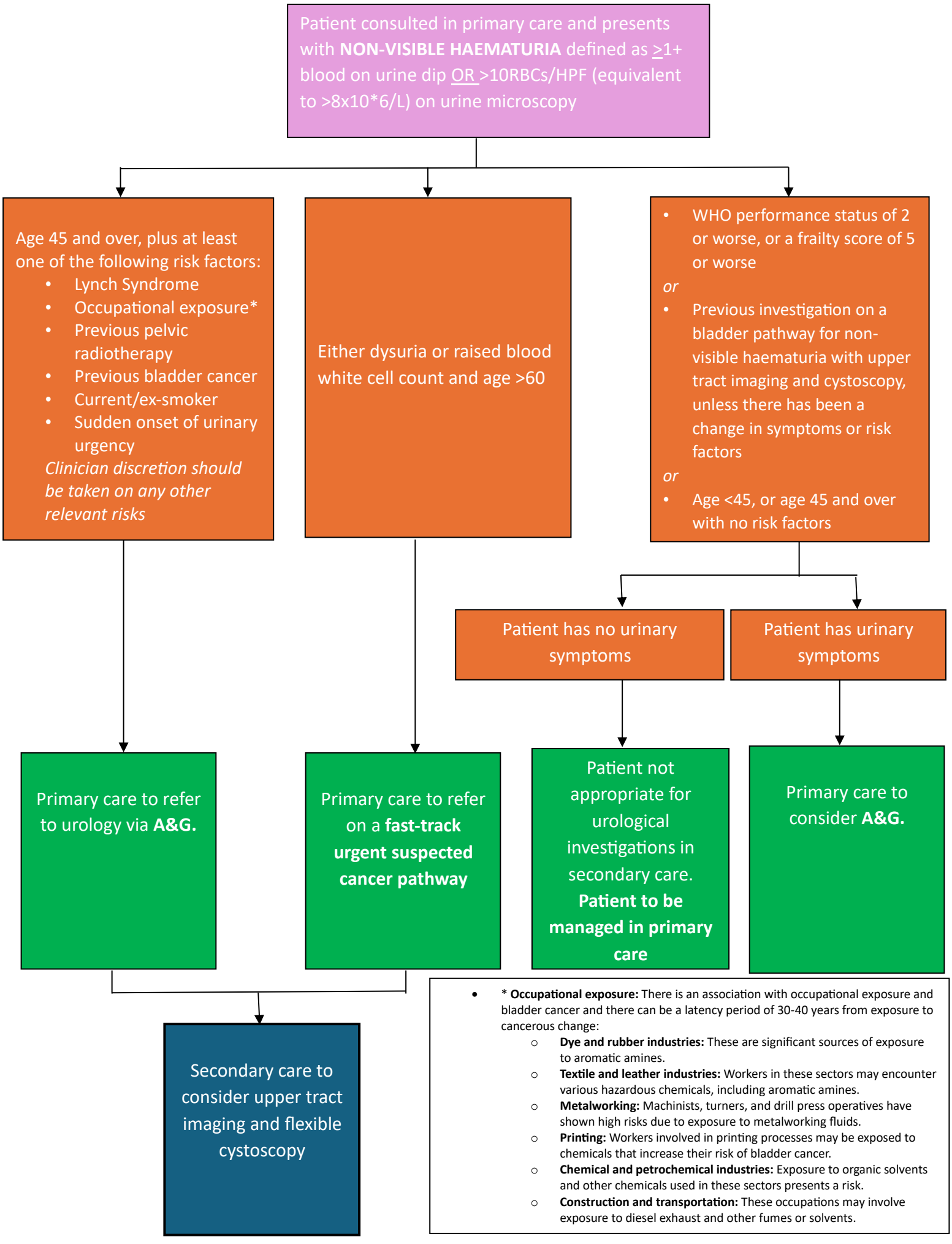
There was consensus amongst HIOW clinicians that patients aged 45 years and over with non-visible haematuria AND one or more of the following risk factors should be **referred to Urology via Advice and Guidance** to be considered by secondary care for a flexible cystoscopy and upper tract imaging:

1. Lynch syndrome
2. Occupational exposure
3. Previous pelvic radiotherapy
4. Previous bladder cancer
5. Current or ex-smoker
6. Sudden onset of urinary urgency
7. Clinician discretion on any other risks that may be relevant

3. Who not to refer (as no further investigations are required)

1. Patients with a WHO performance status of 2 or worse, or a frailty score of 5 or worse.
2. Patients who were previously investigated on a bladder pathway for non-visible haematuria with upper tract imaging and cystoscopy, unless there has been a change in symptoms or risk factors (as outlined above).
3. Patients who are under 45, or 45 and over with no risk factors (as outlined above).

Figure 1. Process map outlining the locally agreed bladder pathway for patients presenting with non-visible haematuria.



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