

## **FAQs**

### **1. Why was this research undertaken?**

In 2012 the frequency of pre-diagnostic consultations for patients with 24 cancers was first described. This previous work provided evidence of the variability in the diagnostic difficulty of different cancers in primary care. The current study extends this inquiry to rarer cancers with unpublished evidence.

### **2. What are its key findings?**

Variation in multiple consultations seems to reflect the cancer's 'symptom signature', therefore cancers where most patients present with non-specific symptoms tend to be harder-to-suspect. We found higher than average (i.e. >30%) frequency of multiple (three or more) pre-referral consultations among patients with small intestine, liver, bone sarcoma, gallbladder, cancer of unknown primary, ureteric and soft-tissue sarcoma. This suggests a higher than average level diagnostic difficulty for these cancers.

### **3. What do you hope to achieve with its publication?**

We hope to raise awareness of how challenging it can be to appropriately suspect the diagnosis of cancer and to provide researchers and research funding bodies with the evidence necessary to support research and initiatives to improve the timeliness of diagnosis.

### **4. How do you think we arrived at this situation, and what needs to be done to improve it?**

The findings are a poignant reminder that great advances in the treatment of cancer have not been matched by advances in diagnosis. Consequently, we do not currently have the scientific means (for example point-of-care biomarker-based tests) to enable a prompt diagnosis in many patients who will subsequently be diagnosed with cancer. Therefore, the root causes for the findings are scientific limitations in diagnostic technology. This can only be addressed by future research. Until the advent of novel tests and diagnostic technologies, changes in diagnostic pathways (e.g. multispecialty diagnostic services for patients with serious but non-specific symptoms) might help to improve the diagnostic process, although their effectiveness and cost-effectiveness will need to be evaluated.