

# Undiagnosed malignancy presenting to same-day emergency care: a single unit experience

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## Introduction

Routes to diagnosis of malignancy include 2-week wait referrals from primary care, secondary care referrals and emergency presentations.<sup>1</sup> Understanding the phenotypical presentations of malignancy to same-day emergency care (SDEC) units informs resource allocation and pathway development. We hypothesised that malignancies with less specific symptoms would more commonly present as emergencies.

## Methods

At a single SDEC unit in the UK, we identified patients admitted between April 2018 and July 2020 and newly diagnosed with a malignancy in the 30 days following admission. We extracted demographics and malignancy diagnosis from the electronic patient record system and examined the clerking documentation to determine presenting symptoms, and whether or not the referral was for a previously undiagnosed cancer. All presenting symptoms were recorded verbatim and classified by group (respiratory, cardiac, gastro-intestinal, constitutional, neurological etc.).

## Results and discussion

18,952 patients attended during the study period. 199 had a new malignancy with 139 (70%) not already under investigation for cancer, representing 0.7% of total patients. The average rate of new malignancy was five per month. The results are summarised in Table 1.

Pancreatic, liver and oesophageal cancers were over-represented in patients diagnosed following admission to the SDEC unit.

Many of these patients presented with non-specific constitutional or gastro-intestinal symptoms not easily identified by existing pathways such as two-week wait and, despite the development of complementary pathways such as SCAN,<sup>3</sup> it is likely that malignancy presentations to SDECs will increase with increasing throughput of patients.

The limitations of this study are that it was performed at a single unit with a relatively small sample size. Further studies are required to confirm the findings.

**Table 1. Newly diagnosed malignancies following presentation to a same day emergency care unit**

<b>Demographics</b>	
Gender	Female 72 (52%), male 67 (48%)
Age (median [IQR])	72.8 [60.7-80.5] years
<b>Primary site (UK rank)</b>	
Lung (3)	21 (15%)
Pancreas (10)	14 (10%)
Colon (4)	12 (9%)
Non-Hodgkin lymphoma (6)	10 (7%)
Breast (1)	8 (6%)
Oesophagus (14)	8 (6%)
Liver (18)	7 (5%)
Prostate (2)	7 (5%)
Brain (9)	6 (4%)
Stomach (17)	5 (4%)
<b>Presenting symptoms</b>	
Constitutional	64 (46%)
Gastrointestinal	64 (46%)
Respiratory	42 (30%)
Musculoskeletal	14 (10%)
Neurological	14 (10%)
Renal	4 (3%)
Psychological	2 (1%)
Urological	1 (1%)
Cardiac	1 (1%)
Pain	54 (39%)
Laboratory	26 (19%)
Venous thromboembolism	1 (1%)
Bleeding (any site)	9 (7%)

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Ethics approval was not required for this service evaluation study.

## Conclusion

Undiagnosed cancer is seen in 0.7% of patients presenting to the SDEC unit, at a rate of approximately one per week. Pancreatic, liver and oesophageal cancers were over-represented relative to their general incidence in the population.

When designing and resourcing SDEC units, it is important to take the presentation of undiagnosed malignancy into consideration with appropriate systems and adequate resources to ensure timely work-up and follow-up of these patients. ■

## References

- 1 National Cancer Registration and Analysis Service. *Routes to diagnosis*. [www.ncin.org.uk/publications/routes\\_to\\_diagnosis](http://www.ncin.org.uk/publications/routes_to_diagnosis) [Accessed 17 Jan 2022].
- 2 Office for National Statistics. *Cancer registration statistics, England Statistical bulletins*. [www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/cancerregistrationstatisticsengland/previousReleases](http://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/cancerregistrationstatisticsengland/previousReleases) [Accessed 30 Jan 2022].
- 3 Nicholson BD, Oke J, Smith CF *et al*. The Suspected CANcer (SCAN) pathway: protocol for evaluating a new standard of care for patients with non-specific symptoms of cancer. *BMJ Open* 8:e018168.