

EXPLORING THE CASELOAD, ACTIVITIES AND OUTCOMES OF A REGIONAL ACUTE ONCOLOGY SERVICE

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Background

Acute oncology (AO) services have been operating in the UK since 2010, after it was highlighted that cancer patients faced unclear and inappropriate care pathways when presenting in emergency departments¹. AO seeks to optimise care for these patients, with specific remits to reduce length of stay, avoid unnecessary admissions and improve patient experience for patients presenting as emergencies with complications of treatment, complications of disease or a new cancer diagnosis².

In Northern Ireland, a regional AO steering group was established in 2011 and the roll-out of AO across Northern Ireland commenced in 2013, with services operational across all five Health and Social Care (HSC) Trusts by March 2016.

The AO service specification requires that each service team records detailed monitoring data at the level of individual AO 'episodes', with data submitted quarterly to the Northern Ireland Cancer Network (NICaN).

Analysing this data can go some way towards:

- Profiling AO patients, who have previously been difficult to track and poorly understood as a group;
- Describing the day-to-day activities of AO teams;
- Quantifying the outcomes to which AO services contribute.

Methods

Anonymised AO monitoring datasets spanning October 2016-March 2018³ were provided by NICaN to Macmillan Cancer Support. After combining the data for all HSC Trusts and all quarters in a single dataset, the data were checked and cleaned. Descriptive statistics were run on the data and, where appropriate, data were benchmarked against official statistics on the wider cancer population in Northern Ireland.

Output statistics cover the clinical profile of patients who present to AO in Northern Ireland, the typical timeline of a patient's transition through an AO service, the day-to-day activities of AO teams and the outcomes to which AO services contribute.

Results

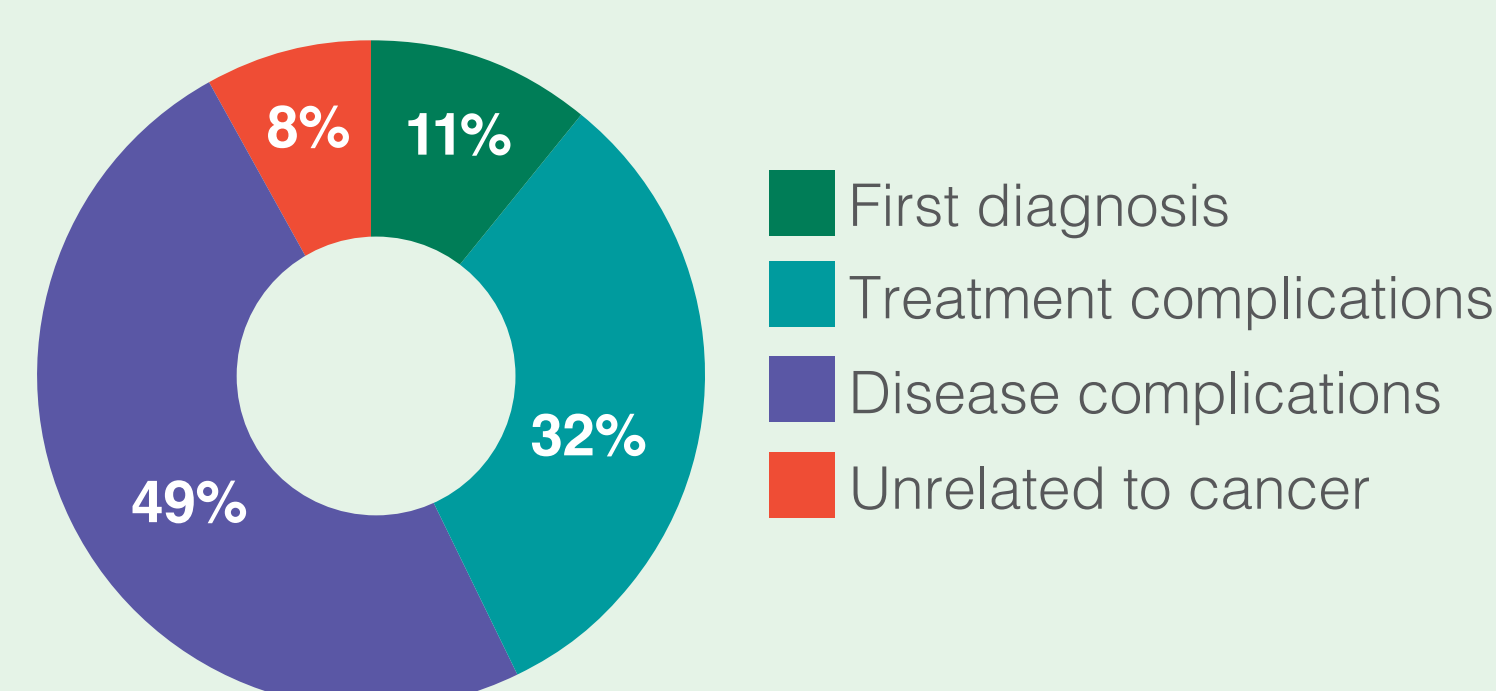
Age



The age profile of AO patients was broadly similar to that of the wider cancer population in Northern Ireland⁴ (N=984)

Patient type

AO episodes by patient type (N=2,815)



Treatment

At the point of referral to AO:

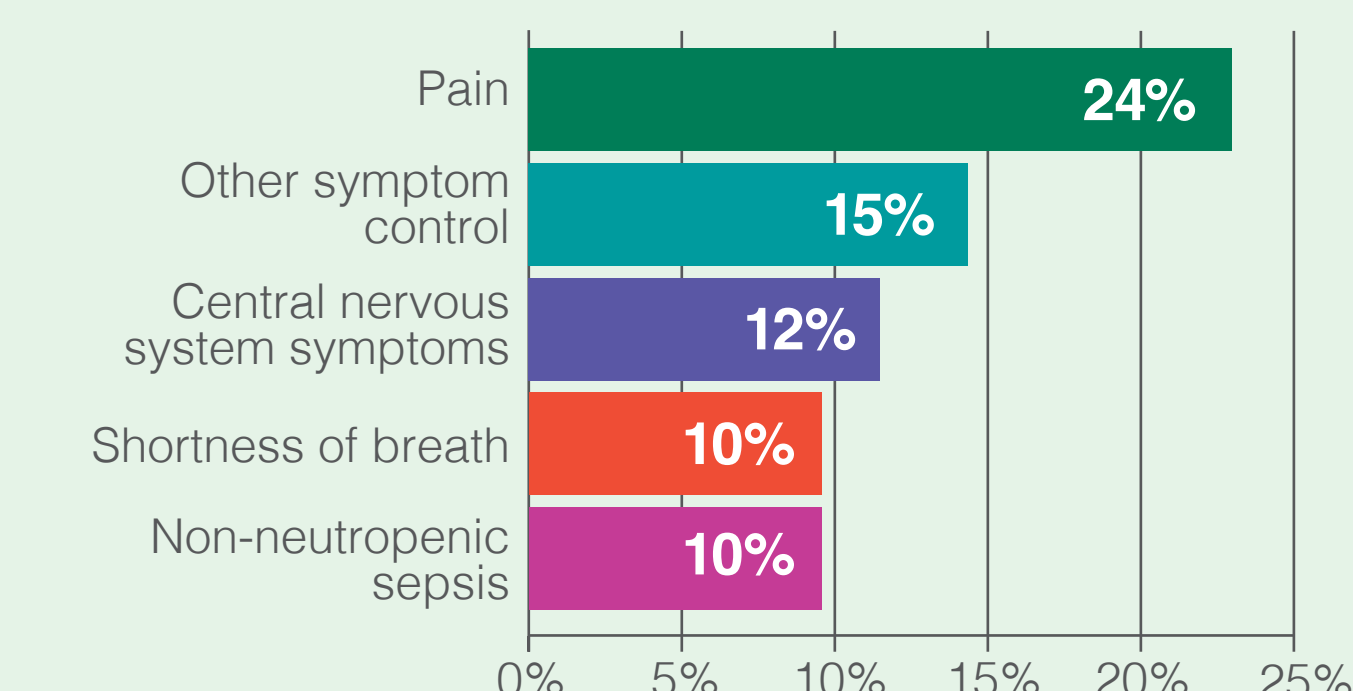
Half of patients were not on active treatment



Of those on treatment, four in every five were on SACT and the rest were on other treatments, including radiotherapy

Reasons for presentation

Most common reasons for presenting to AO



In almost **two-thirds** (62%) of AO episodes, the patient presented with **at least one** of these issues

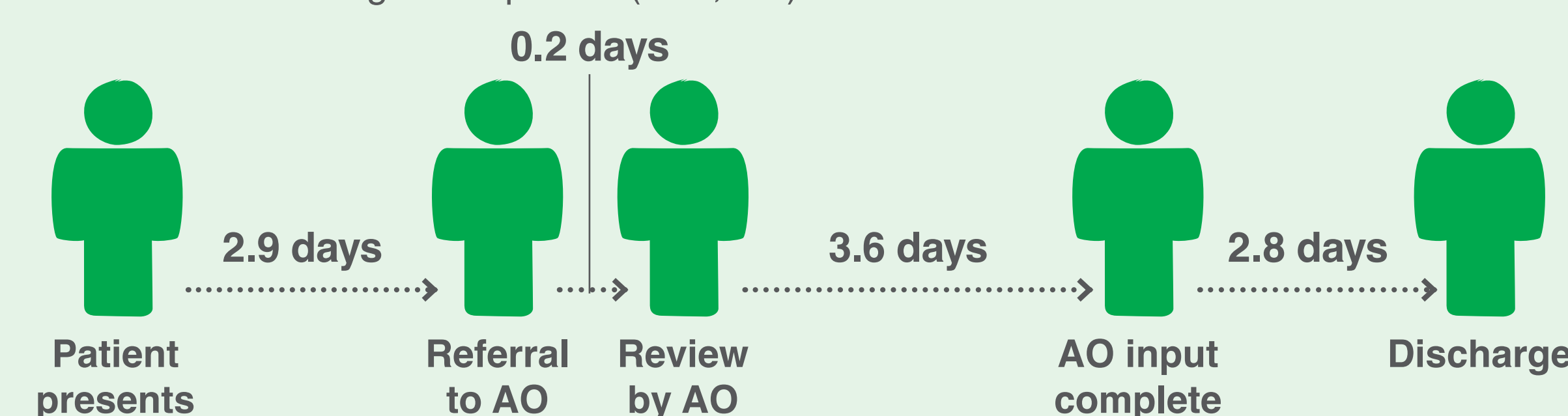
Number of episodes

Between October 2016 and March 2018, AO service teams in Northern Ireland dealt with:



AO episode timeline

Timeline of an average AO episode (N=2,534)



The average length of stay in hospital was **9.5 days** and patients had an average of **3 contacts with AO staff**

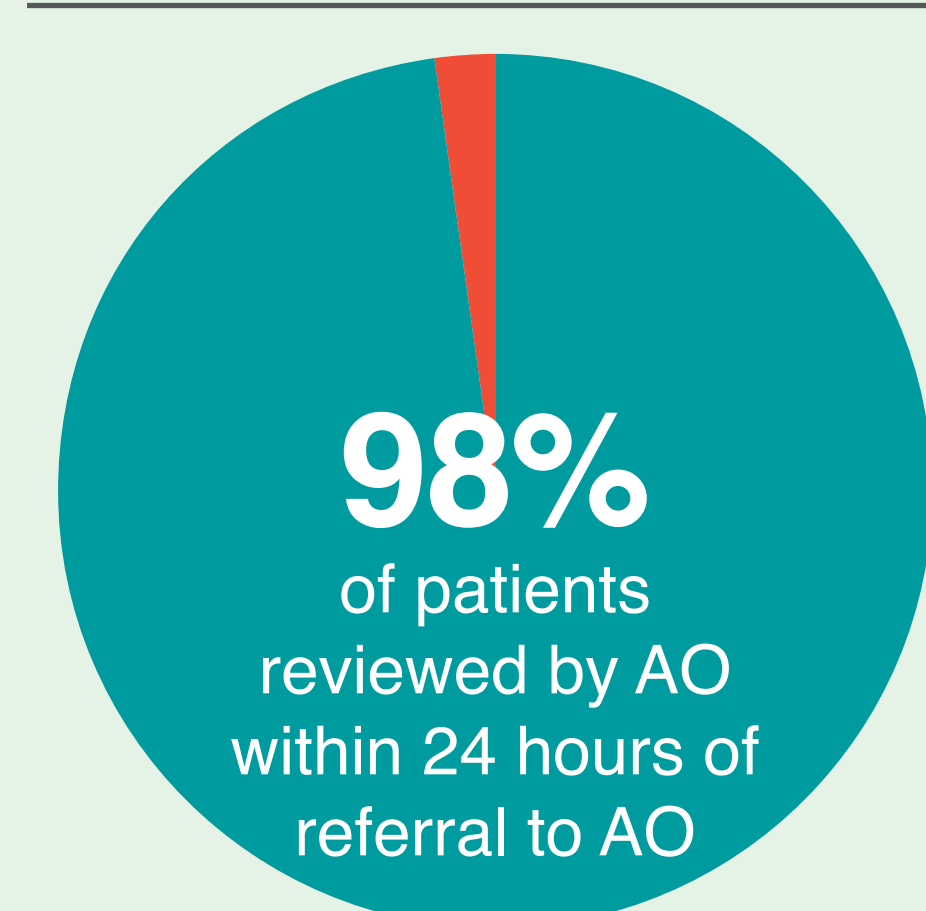
AO interventions

The five most common interventions delivered during AO episodes were:

1. Medication review/recommendation (65%)
2. Liaison with site-specific oncology team (62%)
3. Psychosocial support/counselling (46%)
4. Liaison with/referral to other disciplines (40%)
5. Holistic Needs Assessment (38%)

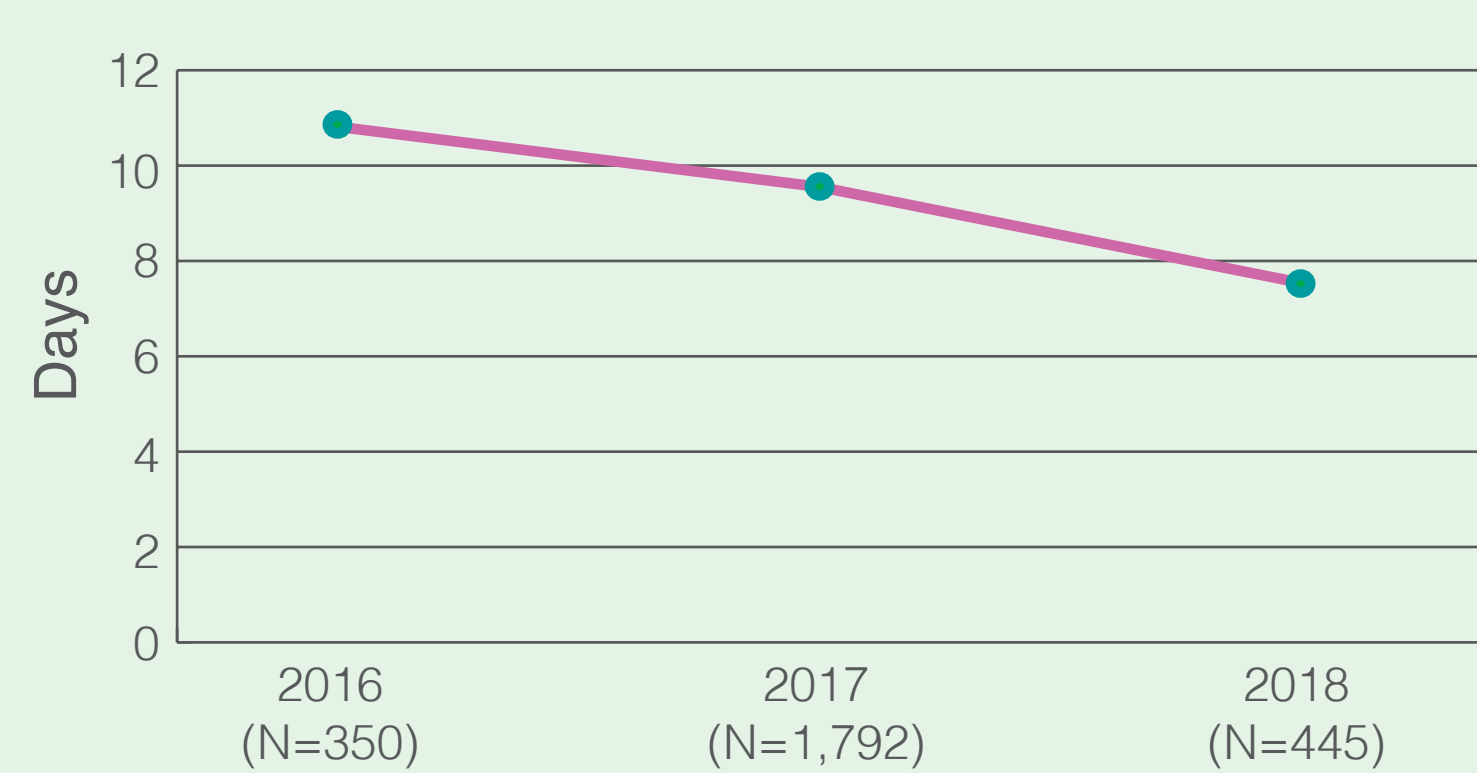
Over **70% of episodes** involved liaison with other teams or disciplines.

Time to AO review



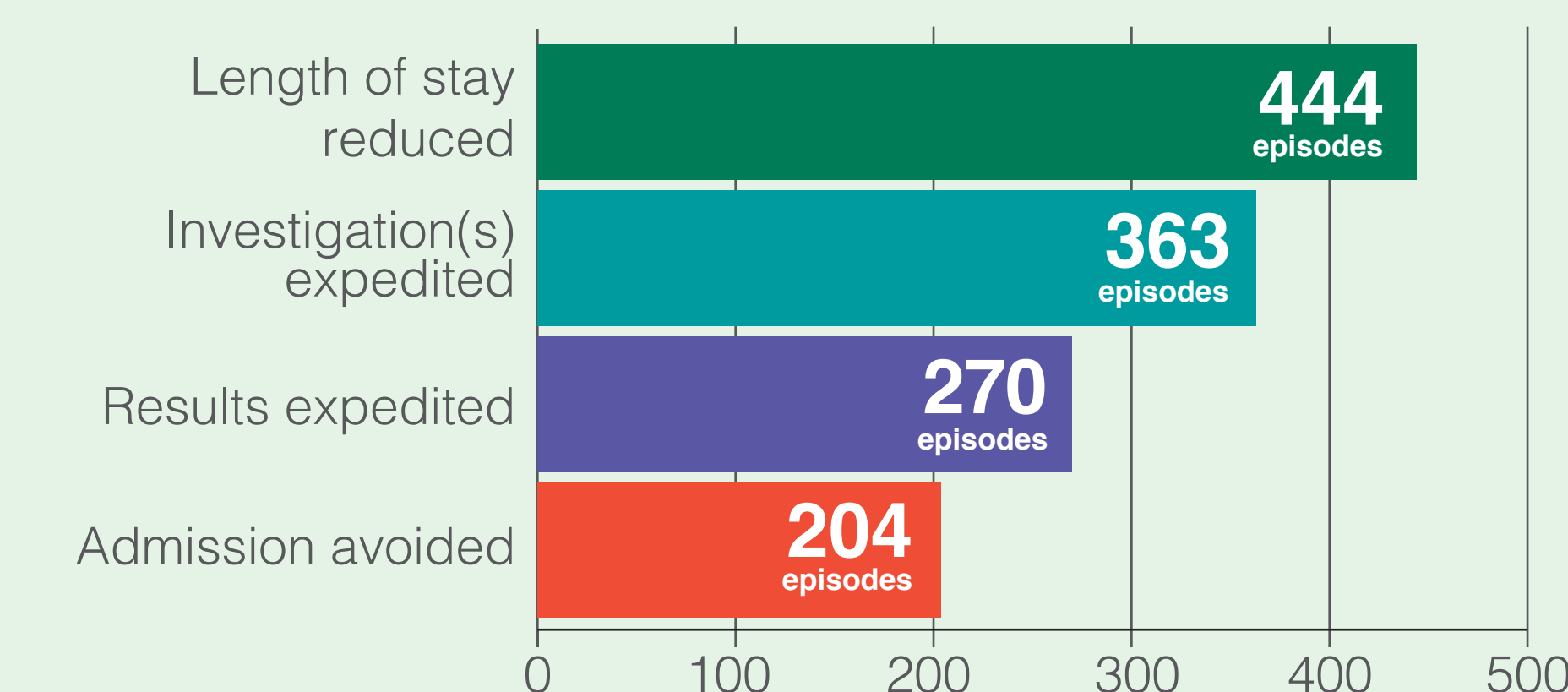
Length of stay

Average length of stay for AO episodes by year



Other outcomes

Common outcomes of AO input



Based on self-reported data, the most common outcome of AO input (reported in 86% of episodes) was ensuring the appropriate management of patients with cancer. (N=2,839)

Conclusions

Users of AO services have historically been difficult to identify and track. The work presented here improves understanding of AO patient characteristics and should be of use in developing new – and improving existing – AO services, to ensure they address the high levels of need within this patient group.

Insights into the day-to-day activities of AO service teams are also of value. In particular, the analysis clarifies the timeline of a typical AO episode and highlights the importance of collaborative working in AO, through liaison with other healthcare professionals.

We also demonstrate the impact that a regional AO service can have by reducing the time taken for people presenting as emergencies to be identified as cancer patients and to be seen by cancer specialists. Through this, AO services help to ensure that people are not in hospital for any longer than necessary and that person-centred care is optimised.

The regional AO service in Northern Ireland shows strong compliance with several of the NHSE Chemotherapy Clinical Reference Group guidelines on AO² (e.g. time from referral until AO review, length of stay). However, the analysis also

highlights some areas for improvement, namely:

- Reducing the time between patients presenting and being referred to AO;
- More consistent collection of monitoring data, particularly around phone consultations and treatment of patients with neutropenic sepsis.

A greater focus on collecting feedback from AO service users would also be beneficial, to better understand their experiences and to use these patient insights to improve AO services.

Acknowledgements

Macmillan Cancer Support would like to thank the Northern Ireland Cancer Network for facilitating access to regional Acute Oncology monitoring data.

References

1. NCEPOD (2008) For better, for worse? A review of the care of patients who died within 30 days of receiving systemic anti-cancer therapy
2. NHSE Chemotherapy Clinical Reference Group (2017) Clinical Advice to Cancer Alliances for the Commissioning of Acute Oncology Services
3. Data were not submitted for all quarters by all AO teams – but we estimate that the data are approximately 98% complete, with data for the full 18-month period provided by four of the five HSC Trusts
4. 24-year prevalence (excluding non-melanoma skin cancer), based on analysis of N. Ireland Cancer Registry (2018) Cancer incidence, prevalence and survival statistics for Northern Ireland: 1993-2016 Available at: <http://www.qub.ac.uk/research-centres/nicr/CancerInformation/official-statistics/BySite/#>
5. AO telephone activity has not been consistently documented so this figure is likely to significantly underestimate the volume of phone consultations