

Description of performance and functional trajectory of acute oncology inpatients at a London tertiary centre – A Retrospective Review

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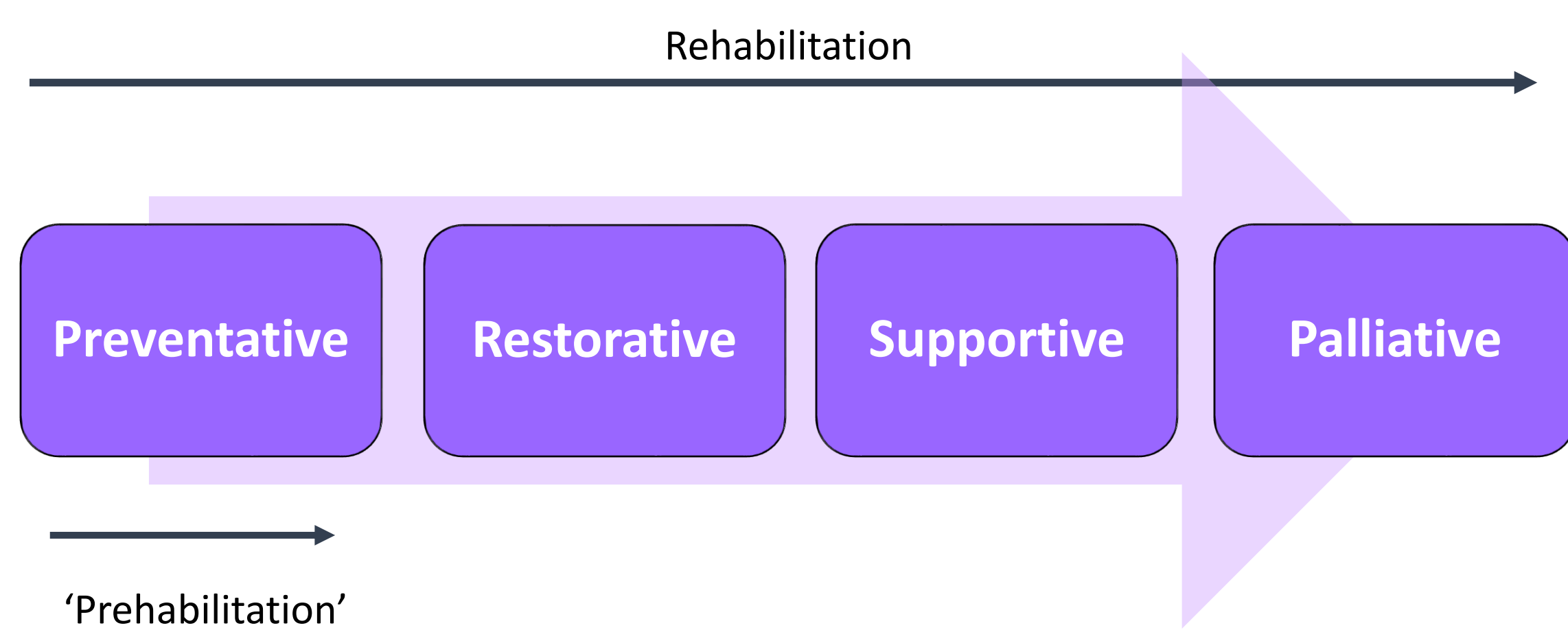
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 Physiotherapy UK CSP Conference and Trade Exhibition, 1st and 2nd November 2019

Introduction

Advances in cancer care and its treatment mean that people are living longer [1]. **National Patient Survey Reports** tell us that although living longer those with cancer are not necessarily living well [2]. 1 in 4 with cancer have unmet needs impacting on quality of life and/or physical function, 41% need more social health care support and 1 in 2 have 2 or more comorbidities [2].

Cancer Rehabilitation has an integral role in maximising the outcomes for those with cancer through alleviating the debilitating consequences of cancer and its treatment effects. Rehabilitation starts at the point of diagnosis, by supporting those with cancer prepare for cancer treatment(s) ('prehabilitation') through the rehabilitation continuum to palliative care [3] – figure 1.

Figure 1: Four main stages of cancer rehabilitation - Dietz model of care 1980



Purpose

To understand the functional trajectory and key needs of our acute inpatient population, in order to determine how cancer rehabilitation can be optimised in future proposed work.

Key Aims

- To describe the acute inpatient oncology population
- To describe the performance and functional trajectory of the acute inpatient population

Methodology

Design: A retrospective review of patient electronic medical records across two acute oncology wards was conducted over a 1-month period (July 2017) for inpatients under the care of the oncology physiotherapy team. Exclusion criteria included inpatients with; a non cancer diagnosis, post operative surgical care, end of life care needs or those that passed during admission. .

Data Collection: 123 case notes were reviewed with 77 cases meeting the inclusion criteria for analysis. Data was reviewed at two key time points – physiotherapy initial assessment and on discharge from hospital

Analysis: Descriptive analysis was reported on for; clinical characteristics, symptom profiles, performance ability (using the Performance Status (PS) scale), and functional ability (using the Barthel Index (BI)). In addition, discharge destination and referrals to rehabilitation services on discharge was captured to describe the ongoing rehabilitation needs.

Demographics and the diverse tumour characteristics are represented in figure 2 below.

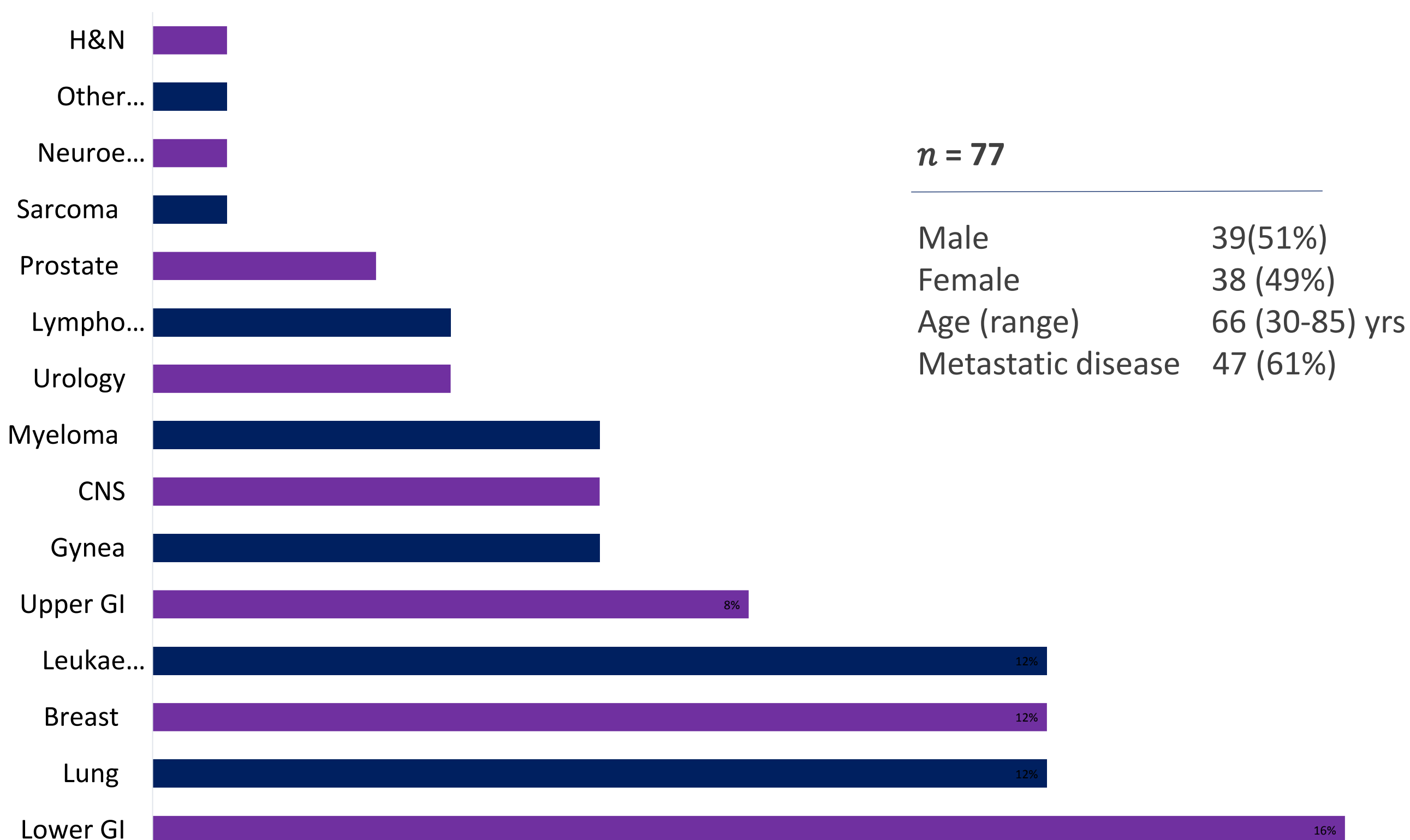


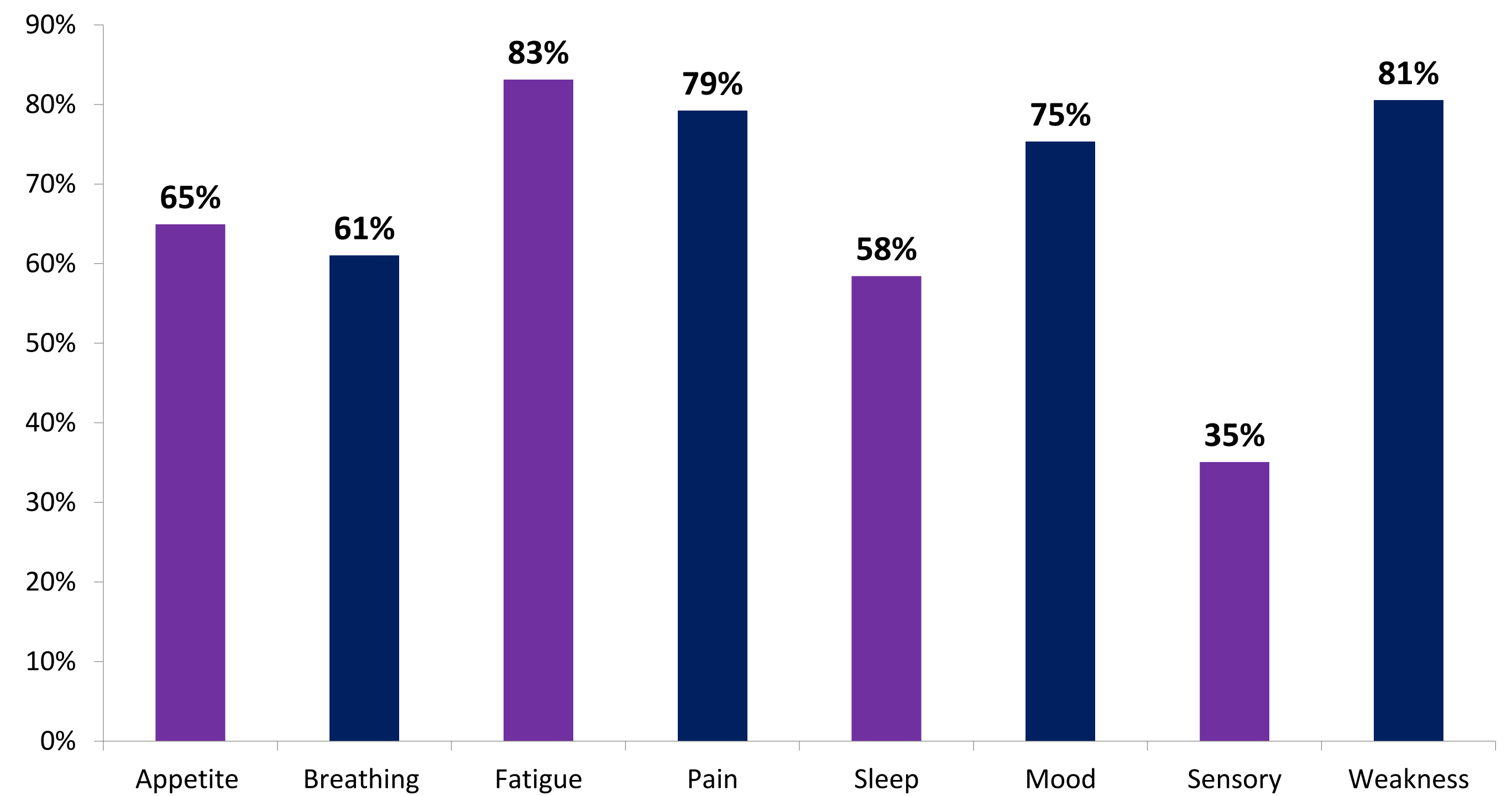
Figure 2: No of cases per tumour site and key characteristics

Results

A total of 76 (99%) cases were found to have symptomology likely to impact on physical performance or functional ability (figure 3).

In 71 (92%) of cases 3 or more symptoms were reported, demonstrating the multifaceted nature and potential patient burden.

Figure 3: Overall Symptom burden (n=76)



The mean change in PS = 0.3 (0-3) and the mean change in BI = 7.14 (0-50). The greatest functional improvements were seen in patients with PS scores 2-4 with a positive relationship shown between a higher PS score and Improvements in BI scores.

Functional Measure	Initial (average)	Discharge (average)	Change
Performance Status (Total Population)	2.1	1.8	0.3
PS 0	0	0.2	-0.2
PS 1	1	1.2	-0.2
PS 2	2	1.7	0.21
PS 3	3	2.5	0.32
PS 4	4	1	3

Table 1: Performance status (PS) scores (n=77)
 Higher PS score is associated with greater morbidity

Functional Measure	Initial (Average)	Discharge (Average)	Change
Barthel Index (Total Population)	74.68	81.82	7.14
PS 0	100	100	0
PS 1	92.7	93	0.33
PS 2	81.6	88.9	7.3
PS 3	58.4	66.2	7.8
PS 4	28.25	65	36.25

Table 2: Barthel index (BI) scores (n=77)
 Higher BI score is associated with less morbidity

Chart 1: Discharge Destination n=77

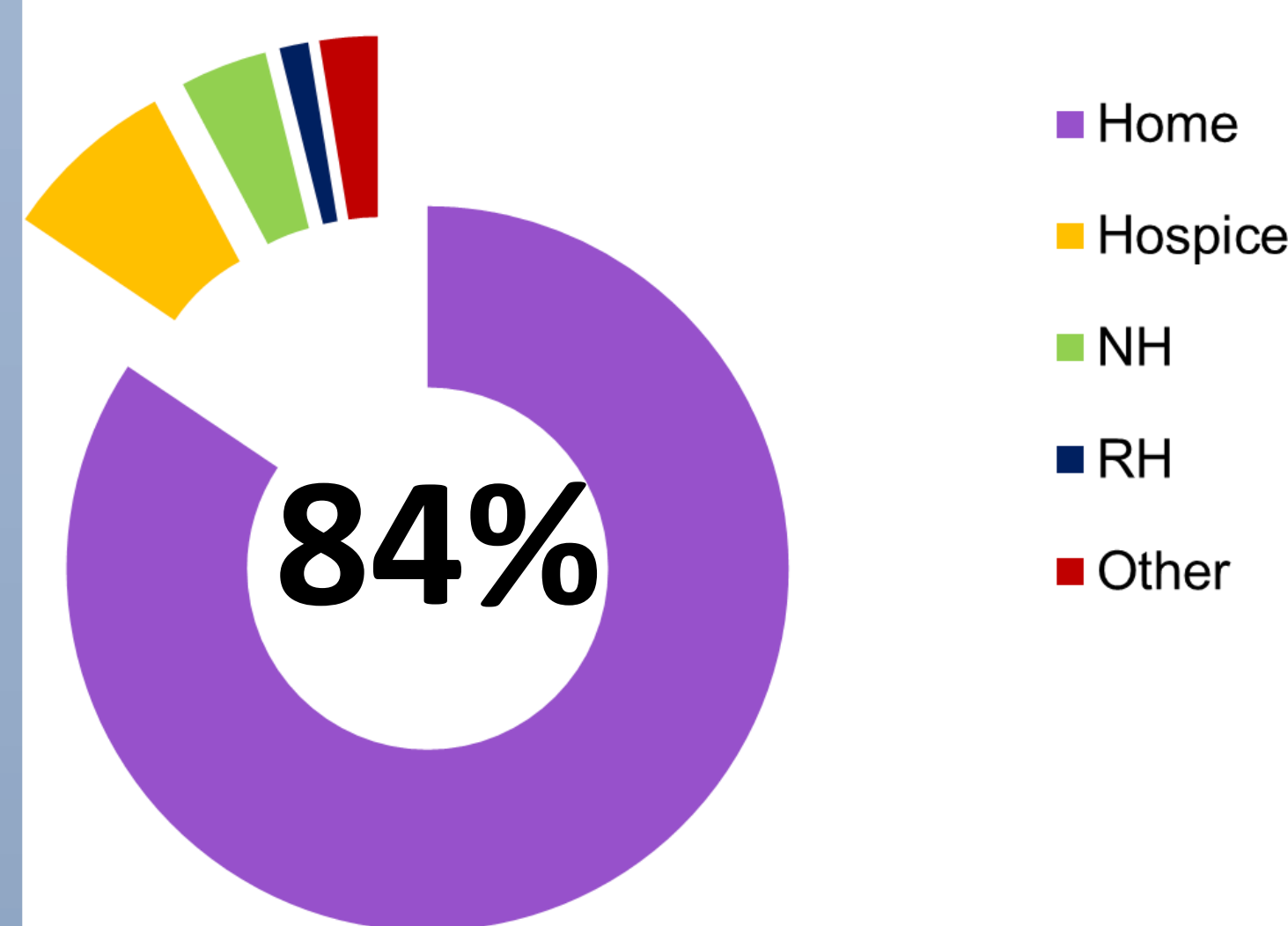


Chart 2: Onward referrals n=77

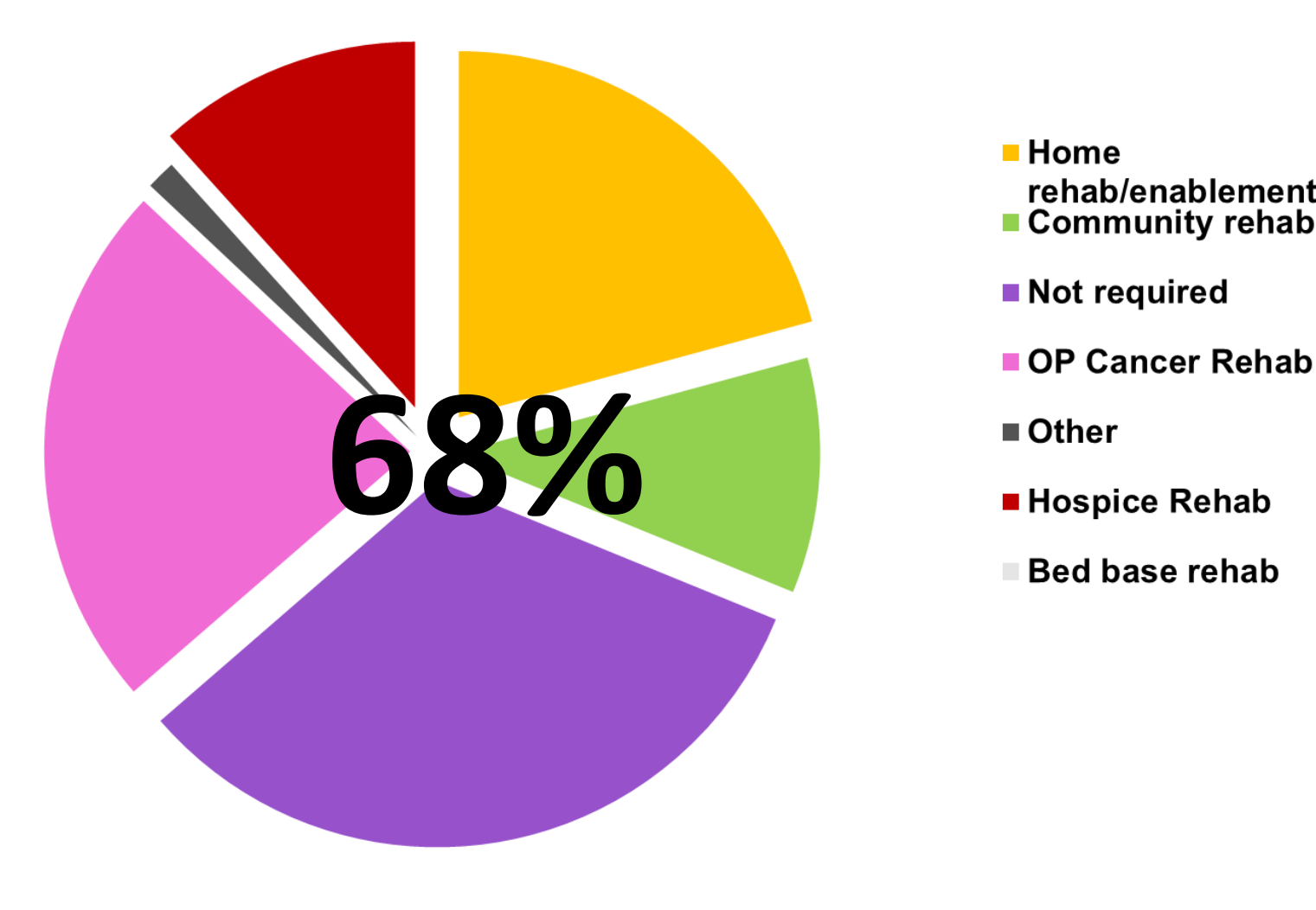


Chart 1 & 2: The majority of acute oncology inpatients were discharged home with over half requiring an onward community or outpatient therapy referral for ongoing rehabilitation

Conclusions

While greatest improvements in functional outcomes were seen in those with higher PS and functional needs, all PS subdivisions showed symptomology that was multifaceted in nature and with likely burden consequences on physical function/performance. Our findings highlight the need for cancer rehabilitation to meet the physical, functional and symptoms needs of acute cancer inpatients irrespective of PS score.

Implications

- Acute oncology inpatients benefit from the Dietz cancer rehabilitation model of care, to treat and or manage the multifaceted rehabilitation needs of cancer patients.
- Further review is required to identify intervention types and rehabilitation dosage to best meet acute oncology inpatient needs.

References:

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