

# NEMICS Supportive Care Audit Report 2024

## Acknowledgements

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NEMICS is a cancer services improvement network. NEMICS builds relationships between healthcare providers and other cancer care stakeholders to develop, implement and evaluate initiatives that improve the way our member health services provide care and support people affected by cancer. For more information, [www.vics.org.au/nemics](http://www.vics.org.au/nemics).

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## Contents

<b>Acronyms</b> .....	4
<b>Executive Summary</b> .....	5
<b>Background</b> .....	8
<b>Aim</b> .....	8
<b>Objectives</b> .....	8
<b>Methods</b> .....	8
<b>Findings</b> .....	10
<b>Limitations</b> .....	25
<b>Conclusion</b> .....	25
<b>References</b> .....	27
<b>Appendices</b> .....	28
<b>Appendix 1: Categories of problems reported per tumour stream</b> .....	28
<b>Appendix 2: Number of screens with problems reported per category per screen timepoint per tumour stream:</b> .....	29
<b>Appendix 3: Top subcategory problems reported per category per tumour stream</b> .....	36

## Acronyms

Acronym	Full text
CNS	Central Nervous System
CSPI	Cancer Service Performance Indicator
DT	Distress thermometer
MDM	Multidisciplinary meeting
NCCN	National Comprehensive Cancer Network
NEMICS	North Eastern Melbourne Integrated Cancer Service
Upper GI	Upper gastrointestinal
URN	Unit record number
VICS	Victorian Integrated Cancer Services

## Executive Summary

### Background

Cancer supportive care involves screening and assessing patients and families for the supportive care needs, providing access to a range of multidisciplinary support services, optimising referral pathways, and delivering culturally appropriate care. Supportive care includes five domains: physical, social, information, spiritual and psychological. Supportive care is included in the Optimal care Pathways (OCPs) and underpinned by the 'Providing optimal cancer care- supportive care policy for Victoria'. Supportive care is vital to delivering quality cancer care and should be available at all key stages in the cancer journey: cancer screening, diagnosis, treatment, survivorship, remission and/or end of life.

Supportive care screening rates across North Eastern Melbourne Integrated Cancer Service (NEMICS) member health services are below the Victorian Department of Health's (DH) target of 80%. For those with a new cancer diagnosis in 2022 and treated at a NEMICS member health service, only 32% of patients had evidence of supportive care screening tool documentation in their health record.

The supportive care screening tool captures patient distress and needs based on the five domains. Little is known about the supportive care needs of patients with cancer who attend NEMICS member health services and requires examination. The needs of patients with cancer should be known and inform supportive care service provision, the cancer workforce and their capabilities, and referral pathways.

### Aim

To understand the supportive care needs of patients with cancer treated at NEMICS member health services to inform supportive care service needs, cancer workforce planning, and internal and external referral pathways.

### Methods

During May to July 2024, a retrospective audit of NEMICS member health services patient's supportive care needs was conducted. All patients with supportive care screening documentation in the 2023 Cancer Services Performance Indicators (CSPI) audit were included in this study. As there were limited patient numbers from Mercy Hospital for Women (n=1) in the 2023 CSPI audit, all Mercy Hospital for Women cancer patients who received a screen in 2021 (as per the 2022 CSPI audit) were included in this study.

All NEMICS member health services use the National Comprehensive Cancer Network (NCCN) distress thermometer (DT), and problem check list screening tool. Patient health records were used to access supportive care screening tool documentation completed from 2022 onwards for each patient. Completed tools were reviewed to identify the distress level indicated, problems reported on the check list, the tumour stream, and timepoint the screen was completed, if available. Supportive care problem categories include emotional; family; practical; physical; and spiritual.

### Findings

#### *Number of patients, supportive care screens and screens per timepoint*

There were 213 patients with 305 screens across 13 tumour streams included in this study. Of the supportive care screens with a timepoint noted (n = 209, 69%), most screens occurred at commencement of new treatment (n=85, 41%) and during treatment (n=68, 33%). Only one (<1%) screen occurred at recurrence, five (2%) at conclusion of treatment and nine (4%) during follow-up.

### *Patient demographics*

Most patients (n=117, 55%) were born in Australia and 185 patient's (87%) preferred language was English, which is representative of the wider NEMICS population. Majority of patients were 50-79 years old, with a range between 20 and 89 years. The patients included in the audit skew younger than the NEMICS cancer population in 2022.

### *Level of distress*

The distress thermometer ranges from '0' (no distress) to '10' (extreme distress). Most screens with a completed DT score indicated a distress level of 5 (n=40, 13%), 3 (n = 39, 13%), 1 (n = 38, 12%), 0 (n = 34, 11%), and 2 (n = 33, 11%). There were 128 screens (42%) that indicated a distress level of four or more. Almost a third of the included screens (n= 96, 31%) were completed at an unknown timepoint. When all tumour streams are combined, the average DT score over the 209 screens with a known timepoint started higher at diagnosis and commencement of new treatment, decreased at during treatment and again at conclusion of treatment before increasing slightly again at follow up to recurrence.

### *Reported problems per category*

There are five categories in the NCCN DT and problem check list: emotional, family, practical, physical and spiritual. The majority of screens with problems reported were from the categories of physical (n = 212, 42%) and emotional (n = 180, 36%). All categories except spiritual have numerous subcategories of problems. The average number of subcategories problems reported per category were highest in the categories of physical (n=4.05) and emotional (n=2.82).

### *Top problems reported per category*

There were 212 screens that reported 859 physical subcategory problems. The most frequently reported subcategory problems were fatigue (n =126, 59%), sleep (n= 84, 40%), pain (n= 79, 37%) and eating (n = 60, 28.3%).

There were 180 screens that reported 507 emotional subcategory problems. The most frequently reported subcategory problems were worry (n = 125, 69%) and nervousness (n= 111, 62%).

There were 69 screens that reported 92 practical subcategory problems. The most frequently reported subcategory problems were insurance/financial (n = 28, 41%) and transportation (n= 25, 36%).

There were 32 screens that reported 42 family subcategory problems. The most frequently reported subcategory problem was dealing with children (n = 19, 59%).

### *Overall top subcategory problems*

The top ten most frequently reported subcategory problems are from the emotional (n=5) and physical (n=5) categories. Fatigue, worry, nervousness, fears, sleep and sadness were each reported in over eighty screens (>25%) with the top three reported in over one hundred and ten screens (>35%).

## Conclusion

Supportive care screening captures important information about patients with cancer, their level of distress, and problem-based needs. Screening rates are low across NEMICS member health services. However, when screening is completed, distress, physical, and emotional needs are high and require supportive care referral and intervention.

Screening rates and supportive care intervention across NEMICS must increase to ensure optimal cancer care. This study provides important evidence for NEMICS member health services to inform supportive care service provision, the cancer workforce and their capabilities, and referral pathways.

Recommendations to assist health services to achieve optimal cancer care include:

1. Increase number of patients receiving cancer supportive care screening, identification of problem-based needs, and provision of supportive care considering strategies that may include person-led completion of screening and referral
2. Develop a guideline to identify the appropriate destination (internal or external) and urgency of referrals
3. Develop clinician and consumer information about Medicare and other government funding support for community-based supportive care
4. Develop a list of external providers that are available to patients as well as clear instructions for staff and/or patients on when and how to refer
5. Promote resources that address the supportive care needs of cancer patients attending member health services e.g., [Cancer Mind Care | Exploring ways to look after your mind when you are affected by cancer](#)
6. Augment how supportive care screening rates and patient needs can be audited in the future, for example via more automated systems
7. Explore drivers to screens being completed at an unknown timepoint to help inform potential solutions to enable understanding of timing of patient's supportive care needs
8. Consider options including patient self-screening and referral to help ensure patients are screened at the right time and have access to the supports they need when they need them.

## Background

Cancer supportive care involves screening and assessing patients and families for the supportive care needs, providing access to a range of multidisciplinary support services, optimising referral pathways, and delivering culturally appropriate care. Supportive care includes five domains: physical, social, information, spiritual and psychological. [1]

The Optimal Care Pathways (OCPs) describe supportive care as involving screening and assessing patients and families for their supportive care needs, providing access to a range of multidisciplinary support services, optimising referral pathways and being aware of and delivering culturally appropriate care [2]. These principles are underpinned by the 'Providing optimal cancer care-supportive care policy for Victoria' (referred to as the Victorian supportive care policy). [3]

Providing supportive care is vital to delivering optimal cancer care [4] and should be available at all key stages in the cancer journey: cancer screening, diagnosis, treatment, survivorship, remission and/or end of life.

The four NEMICS member health services provide care across 13 tumour streams, including haematological, which encompasses multiple blood cancers. Currently documented supportive care screening rates are below the Department of Health's (DH) target of 80%. For those with a new cancer diagnosis in 2022 and treated at a NEMICS member health service, only 32% of patients had evidence of supportive care screening tool documentation in their health record. It is noted that this below-target rate is understood to be driven by multiple factors, including a gap in documentation of screening and not just the practice of screening.

It should also be noted that the completion rates of subsequent care steps (supportive care referral, further assessment and intervention) as well as cancer workforce data are not collected and reported at any of the member health services.

Despite these limitations, a review of the available screening data provides useful insights into the needs of patients with a new cancer diagnosis. The supportive care screening tool captures patient distress and needs based on the five domains. Little is known about the supportive care needs of patients with cancer who attend NEMICS member health services and this requires examination. The needs of patients with cancer should be known and inform supportive care service provision, the cancer workforce and their capabilities, and referral pathways.

## Aim

To understand the supportive care needs of patients with cancer treated at NEMICS member health services to inform supportive care service needs, cancer workforce planning, and internal and external referral pathways.

## Objectives

1. Determine the level of distress of patients with a supportive care screen
2. Determine the frequency of problems reported by patients per category and subcategory
3. Determine the frequency of supportive care screens per tumour stream
4. Inform identification of supports that could meet patients' needs
5. Inform the maintenance and establishment of referral pathways

## Methods

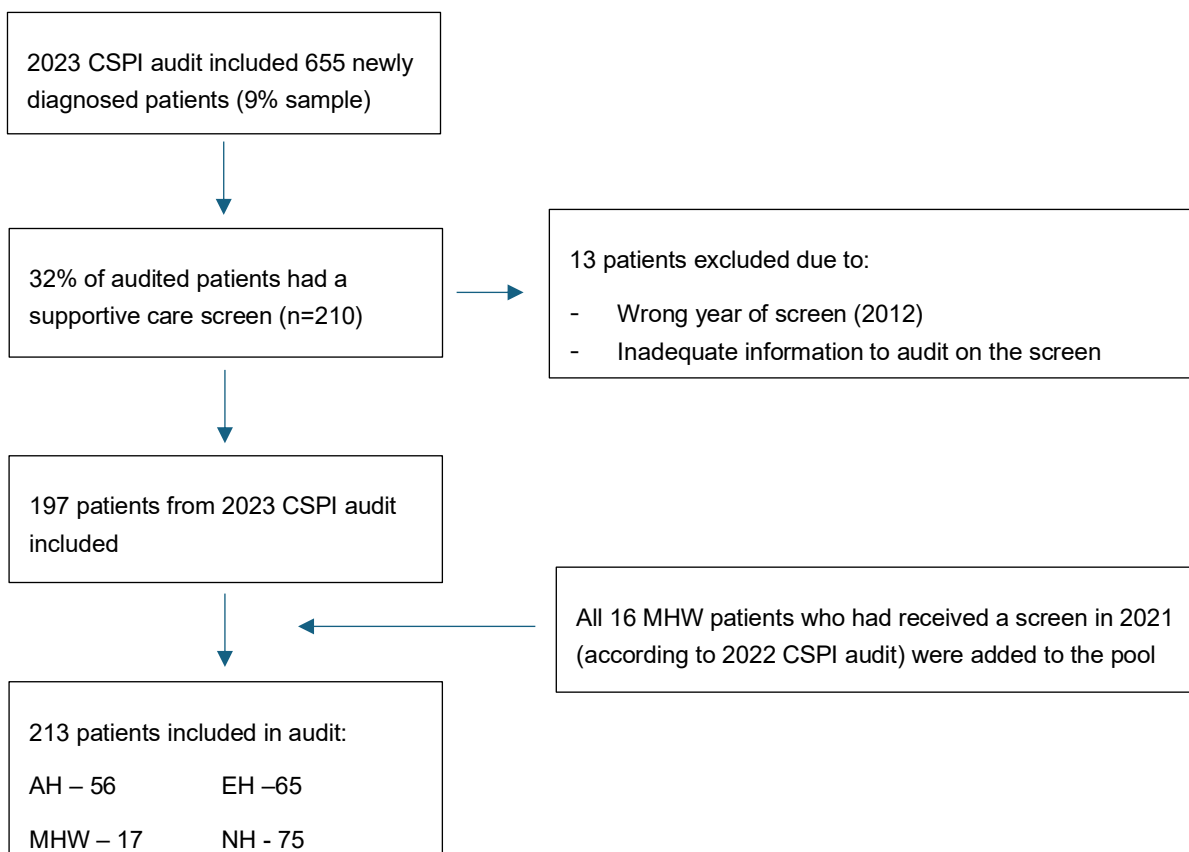
During May to July 2024, a retrospective audit of NEMICS member health services patients' supportive care needs was conducted. All patients with supportive care screening documentation in the 2023 Cancer Services Performance Indicators (CSPI) audit were included in this study. The

CSPI audit is a statewide audit conducted by the Victorian Integrated Cancer Services (VICS) and involves manual patient file review. The CSPI audit was last undertaken at NEMICS in 2023 and included patients with a new cancer diagnosis from 2022, auditing five key performance indicators. One of the performance indicators audited is the presence of a validated supportive care screen. This enabled the identification of patients for audit from NEMICS member health services who had received a supportive care screen. As there were limited patient numbers from Mercy Hospital for Women (n=1) in the 2023 CSPI audit, all Mercy Hospital for Women cancer patients who received a screen in 2021 (as per the 2022 CSPI audit) were included in this study. Please see Figure 1 for details of patients audited.

Patient health records were used to access their supportive care screens which were completed from 2022 onwards. All NEMICS member health services use the National Comprehensive Cancer Network (NCCN) distress thermometer (DT), and problem check list screening tool, however there was some variation in the problem check list between sites. Austin Health did not have the options of 'treatment decision' under practical problems, 'substance abuse' under physical problems or 'family health issues' under family problems, which were present for the other three health services. Northern Health are the only site that have an electronic supportive care screen as well as a paper version. Both versions were reviewed. Completed tools were reviewed to identify the distress level indicated, problems reported on the check list, the tumour stream, and timepoint the screen was completed, if available. Supportive care problem categories include emotional; family; practical; physical; and spiritual.

All data were entered into an excel spreadsheet, which were then imported into Power BI for analysis. Problems were categorised as per the Problem Checklist tool into emotional, family, practical, physical and spiritual concerns.

**Figure 1: Recruitment process for included patients**



## Findings

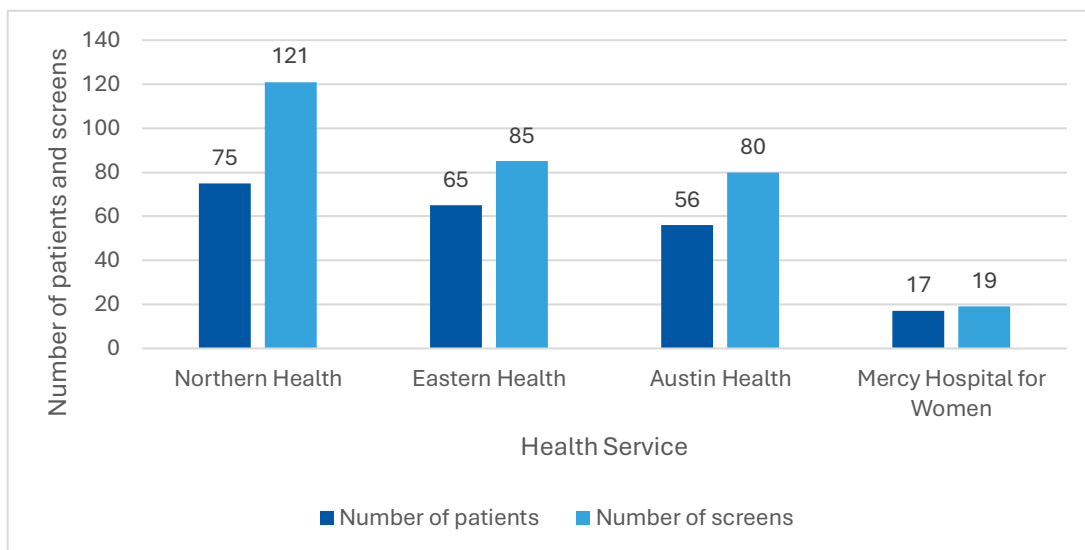
### Number of patients and supportive care screens

Of the 210 patients who received a supportive care screen in the 2023 CSPI audit, 197 were eligible and included in this further audit. All 16 MHW patients with a supportive care screen in the 2022 CSPI audit were also included in this audit. Therefore, a total of 213 patients were included from the four NEMICS member health services.

As seen in Figure 2, this was made up of 75 (35%) patients from Northern Health, 65 (31%) patients from Eastern Health, 56 (26%) patients from Austin Health and 17 (8%) patients from Mercy Hospital for Women. The number of patients included in this audit represent only 9% of potential patients screened in 2022, as there were 7500 newly diagnosed cancer patients admitted to NEMICS member health services in 2022. [6] Of the 213 patients, 75 (35%) had more than one screen offered, 60 (28%) patients had two screens, 13 (6%) patients had three screens, and two (1%) patients had four screens offered.

There was a total of 305 screens included, 25 (8%) of which the patient declined, and a further 6 screens missing page one, which includes the DT. These six screens were included in the audit, as they still had the second and third pages, which include the problem checklist. Therefore, there are 31 screens (10%) without a DT score.

**Figure 2: Number of patients and screens per health service**

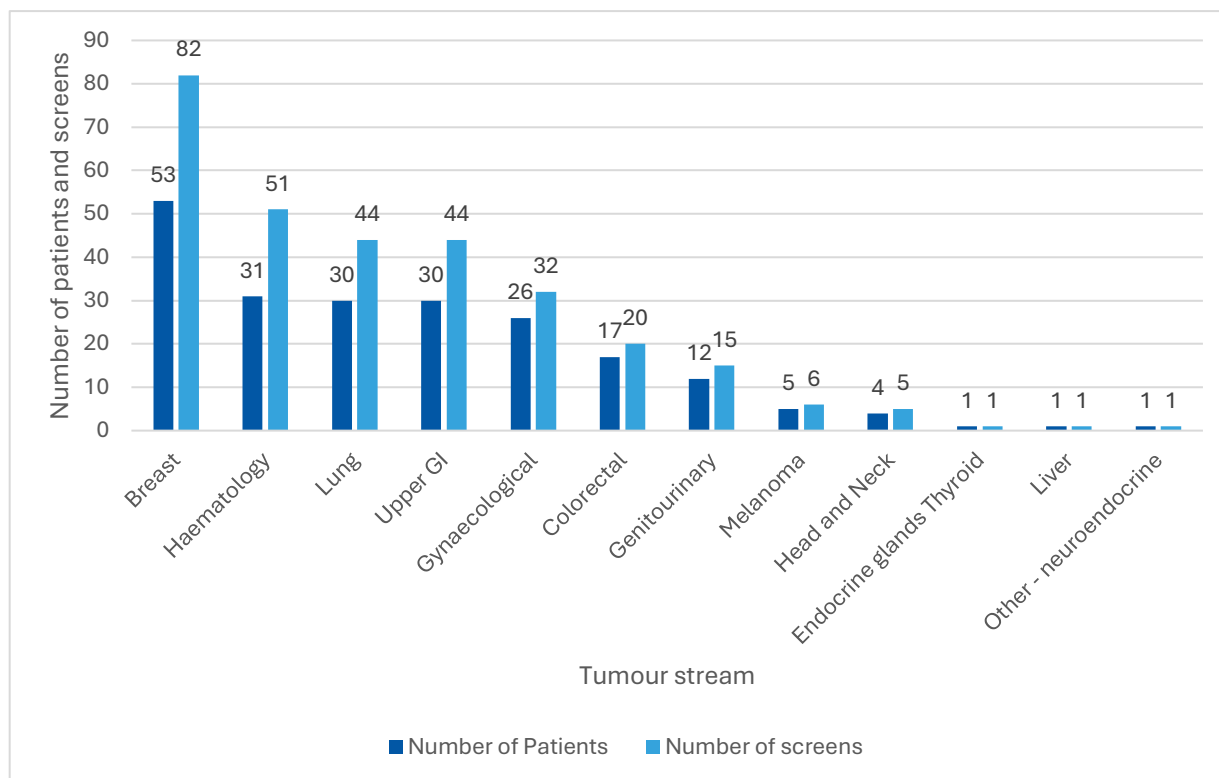


### Number of screens per tumour stream

Of the total 213 patients included in the audit:

- The tumour streams with the majority of patients included were Breast (n= 53, 25%), Haematology (n = 31, 15%), Lung (n= 30, 14%), Upper GI (n= 30, 14%) and Gynaecological (n= 26, 12%).
- These tumour streams also had the majority of screens completed as highlighted in Figure 3.
- Of the thirteen tumour streams, six of the tumour streams (46%) offered 90% (n=273) of the screens. There were three tumour streams (Endocrine glands Thyroid, Liver and Other – Neuroendocrine) that only had one supportive care screen.

**Figure 3: Number of patients and screens per tumour stream**

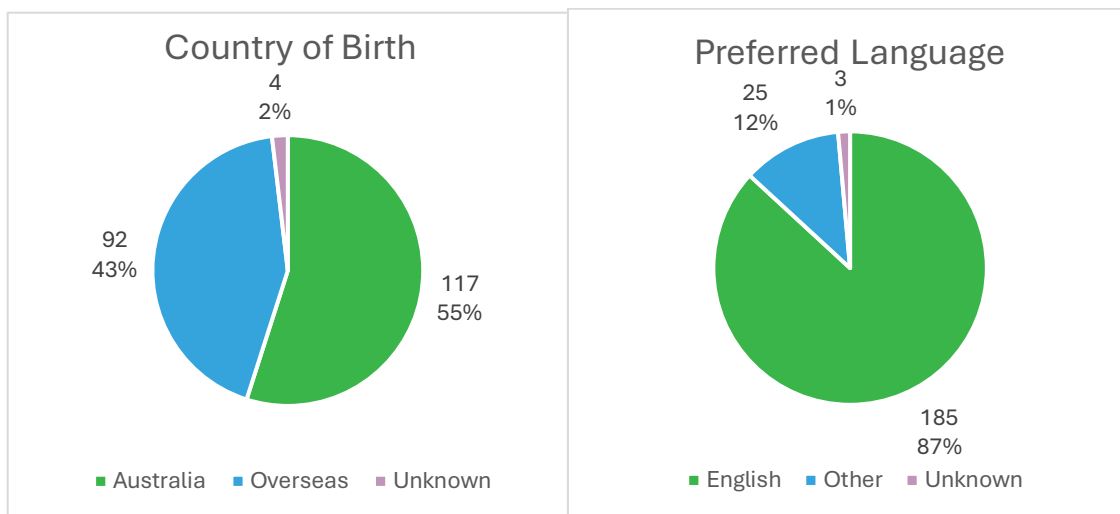


### Country of Birth and preferred language

**Of the total 213 patients included in the audit:**

- 117 (55%) were born in Australia, 92 (43%) were born overseas and 4 (2%) patients' place of birth was unknown or not recorded.
- The majority of patients' preferred language was English (n=185, 87%), 25 (12%) patients spoke another language and 3 (1%) patients' preferred language was unknown as outlined in Figure 4. This is representative of the wider NEMICS community, where 15% of patients admitted to NEMICS health services between 2019 – 2023 had a preferred language other than English. [7]

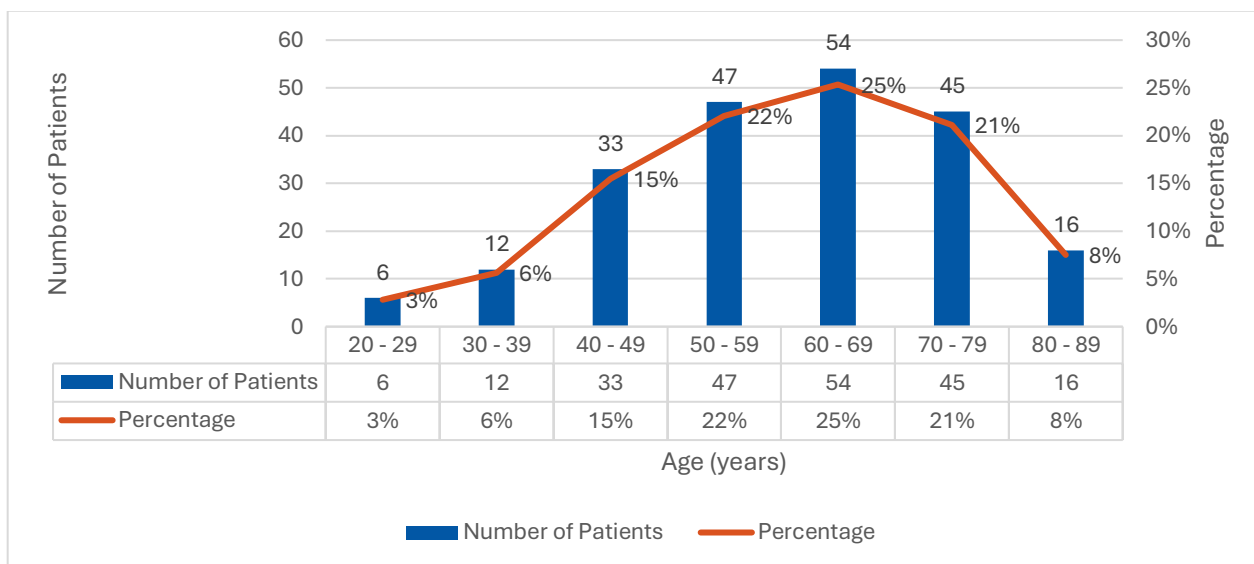
**Figure 4: Patient’s country of birth and preferred language**



**Age of patients**

Of the total 213 patients included in the audit, the majority (n = 146, 68%) of patients audited were between 50 and 79 years old at diagnosis as highlighted below in Figure 5. There were only six (3%) patients aged 20 – 29 years old, 12 (6%) aged between 30 – 39 years old and 16 (8%) aged over 80-years-old. The age of patients included in this audit is skewed more to the left (towards younger age groups) than the Victorian Admitted Data (VAED) of age at diagnosis for the NEMICS region in 2022.

**Figure 5: Age of patients at diagnosis**

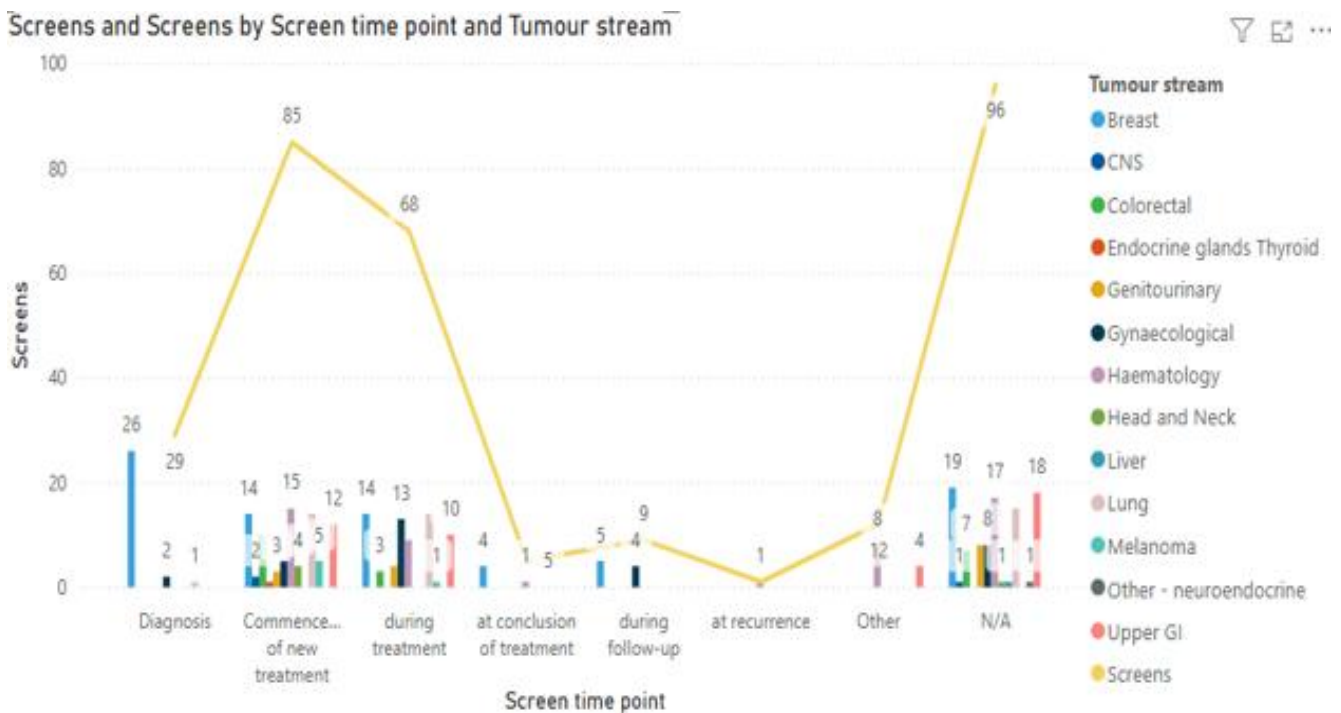


## Number of supportive care screens per screening timepoint per tumour stream

Of the supportive care screens with a timepoint noted (n = 209, 69%), most supportive care screens are occurring at commencement of new treatment (n=85, 41%) and during treatment (n=68, 33%). Only one (<1%) screen occurred at recurrence, five (2%) at conclusion of treatment and nine (4%) during follow-up.

Most tumour streams follow the same pattern as the overall screen timepoints, except for Gynaecology, which increases at 'during treatment' and Breast which has most screens at 'diagnosis'. This may be reflective of different models of care between tumour streams, however given the large proportion of screen at an unknown timepoint (N/A), patterns are difficult to analyse. The tumour streams with large proportions of screens at an unknown timepoint include Genitourinary (n=8, 53%), Upper GI (n=18, 41%), Colorectal (n=7, 35%), Lung (n=15, 34%) and Haematology (n=17, 33%), as seen in figure 6.

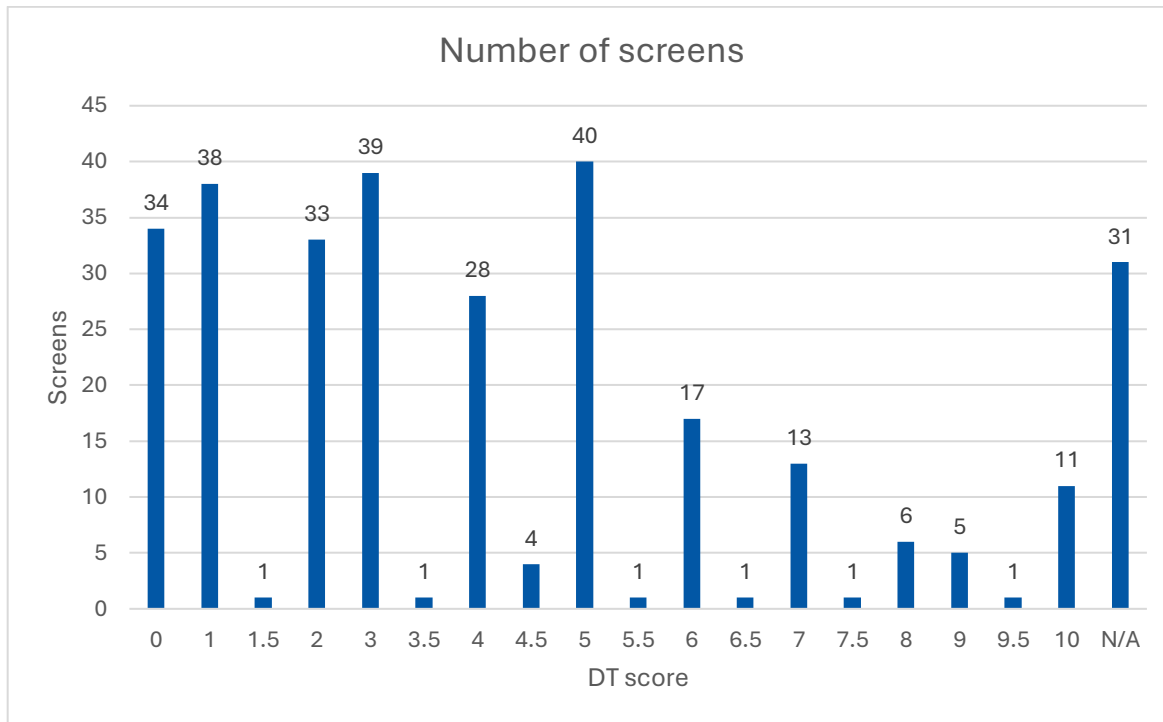
**Figure 6: Number of screens per timepoint per tumour stream**



## Level of distress

The DT included in the NCCN supportive care screen ranges from 0 to 10. The majority of screens with a completed DT score indicated a distress level of 5 (n=40, 13%), 3 (n = 39, 13%), 1 (n = 38, 12%), 0 (n = 34, 11%), and 2 (n = 33, 11%) see figure 7 for details.

**Figure 7: Level of distress per screen**

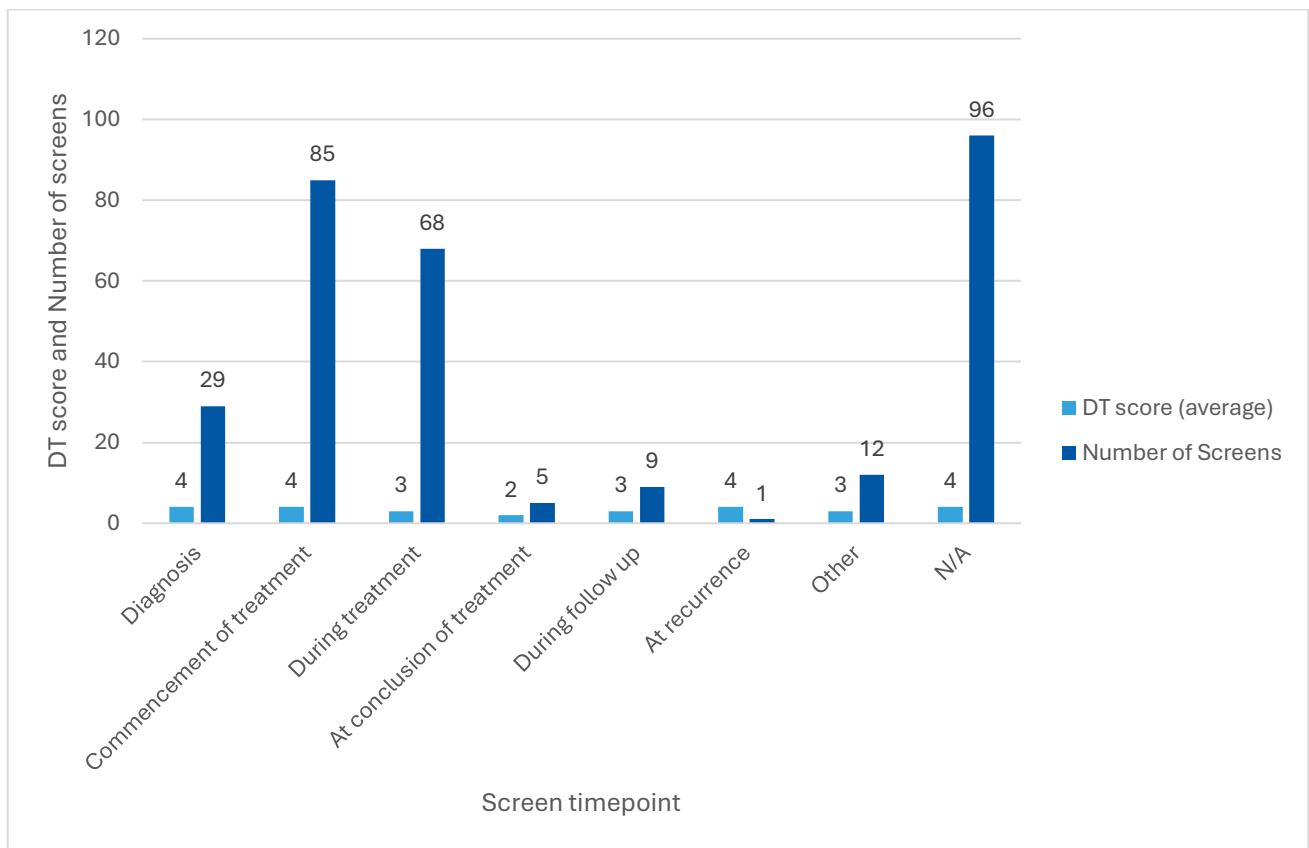


The level of reported distress is varied across the different timepoints and unfortunately 46% (n=141) of the screens were at an unknown timepoint. Of the 12 screens with the highest DT scores of 9.5 and 10, four were at an unknown timepoint. The eight screens at a known timepoint occurred at the start of the treatment journey with 38% at diagnosis and commencement of new treatment (n=3 each) and 25% at during treatment (n=2,). At conclusion of treatment the range of DT scores was narrow with score of 0 to 3. This range increases to 0-9 during follow up. It is important to note that there were more screens completed at during follow up than at conclusion of treatment (n=9 and 5 respectively), which may contribute to the difference in ranges.

## Average distress per timepoint

Figure 8 demonstrates that across when all tumour streams are combined, the average DT score over the 305 screens started higher at diagnosis and commencement of new treatment, decreased at during treatment and again at conclusion of treatment before increasing slightly again from during follow up to recurrence.

**Figure 8: Overall average DT scores per screen timepoint**



**Average distress per timepoints per tumour stream**

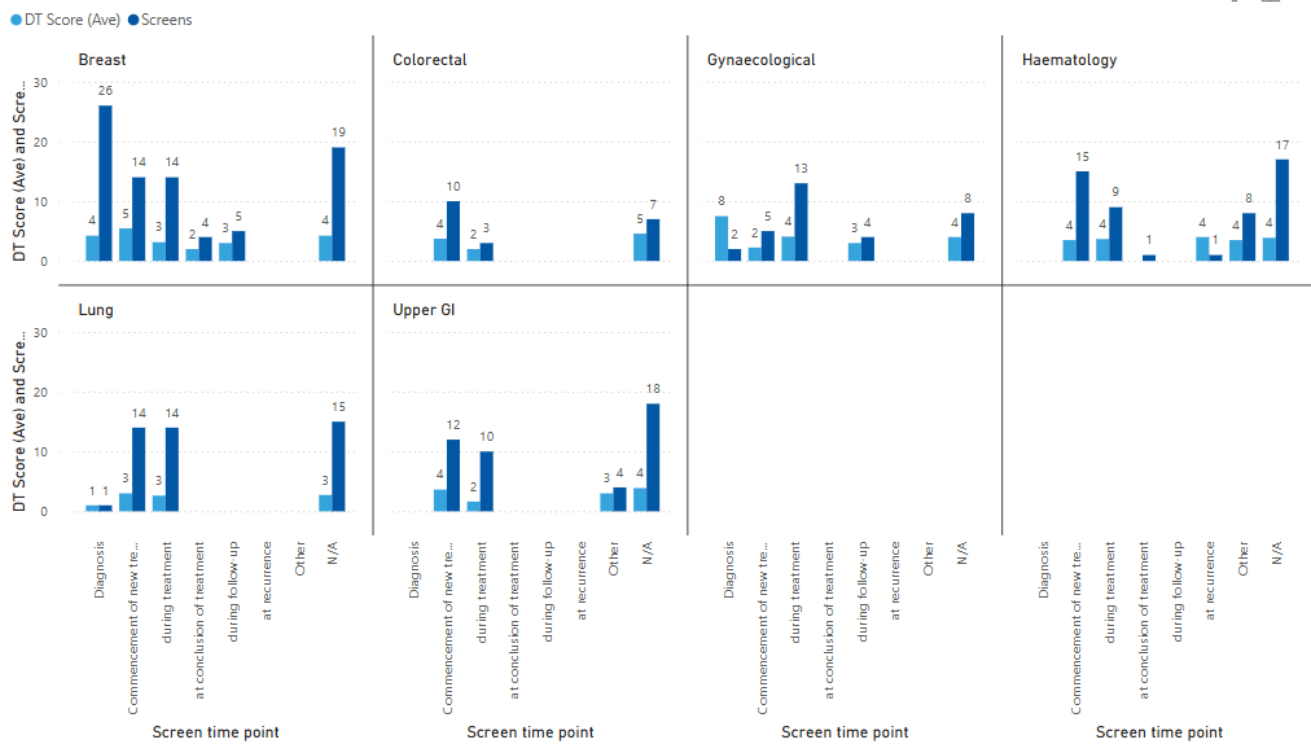
When distress per timepoint is examined at a tumour stream level, case numbers are too low to confidently assess trends.

However with this noted, of the six tumour streams with more than 20 screens:

- Four (Breast, Colorectal, Haematology and Upper GI) followed the overall time-line trends of average DT scores.
- Two tumour streams, Gynaecological and Lung, do not follow the overall trend, with Gynaecological average DT scores lower at commencement of new treatment from diagnosis and Lung average DT score starting lower at diagnosis than the overall trends, as seen in figure 9.

**Figure 9: Average DT scores per screen timepoint for tumour streams with 20 or more screens**

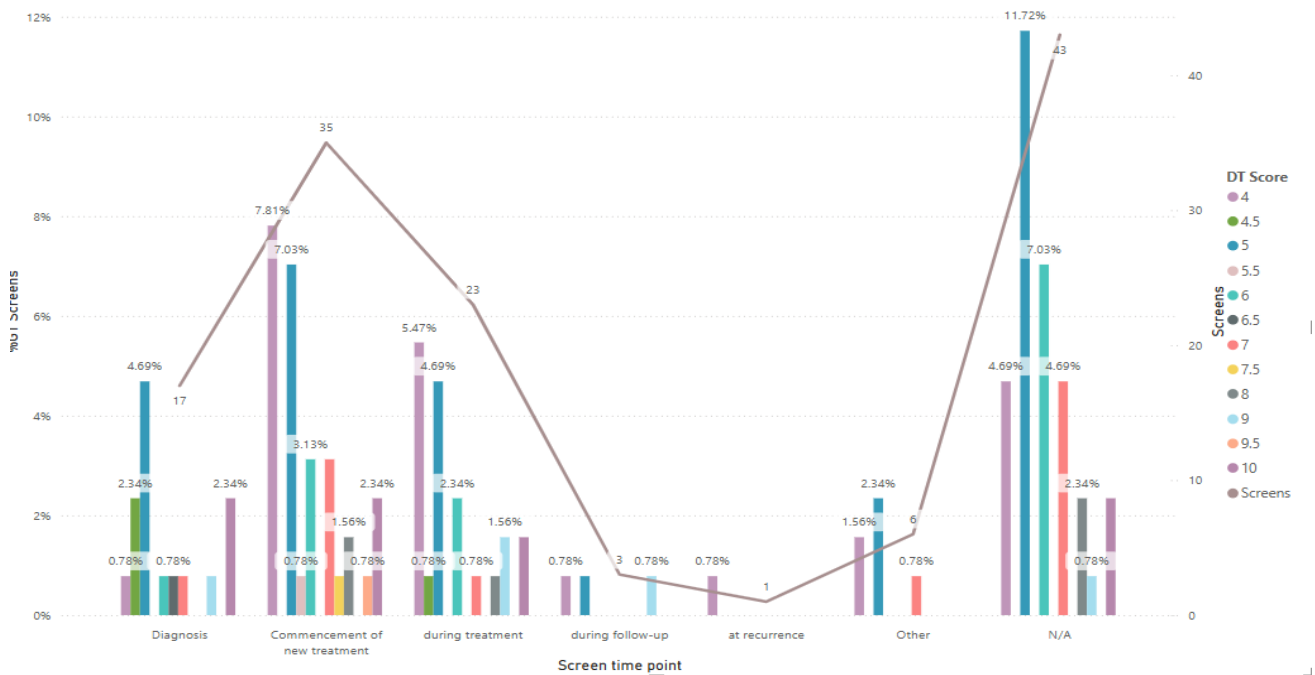
DT Score (Ave) and Screens by Screen time point and Tumour stream



### DT score of 4 and above

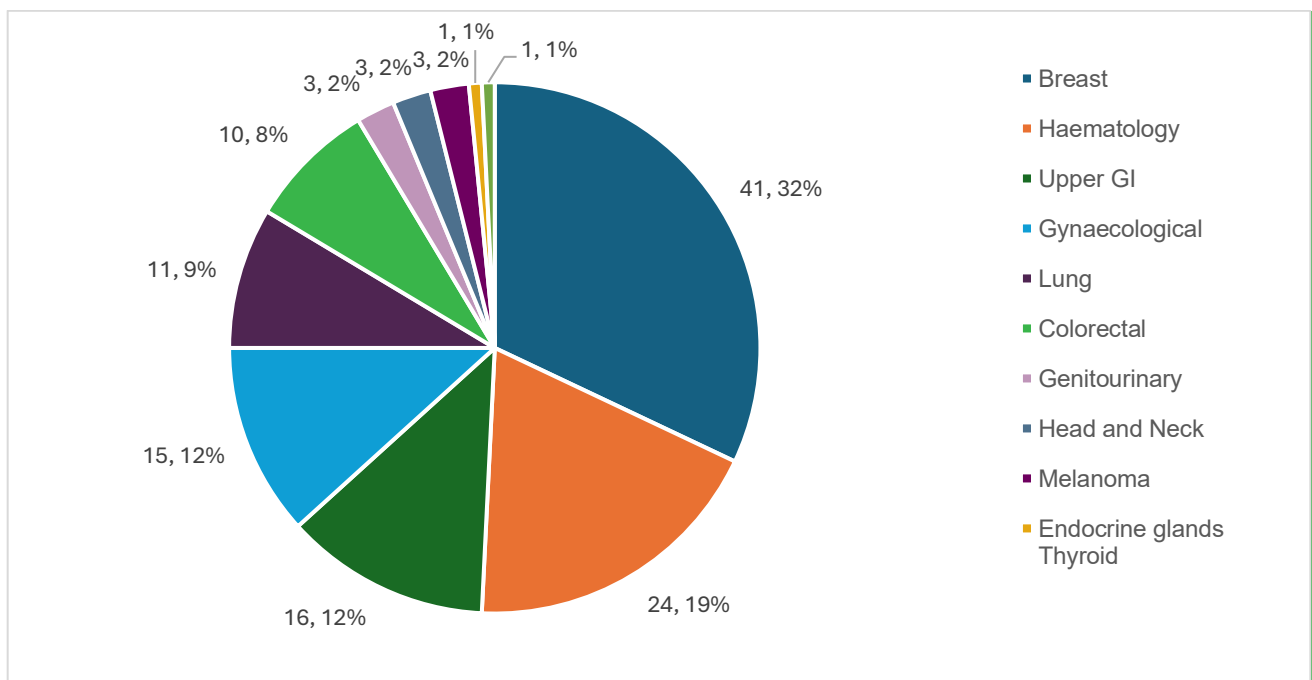
There were 128 screens (42%) that indicated a distress level of four or more, which is deemed the cut off for psychological distress, as per the distress thermometer. [8] Of the screens with a distress level of four or more and a known screen timepoint (n= 85, 66%), the majority were at commencement of new treatment (n = 35, 41%) and during treatment (n = 23, 27%) as highlighted in Figure 10. Unfortunately, 34% (n=43) of screens were at an unknown timepoint. There were twelve screens with reported distress of 9.5 or 10, occurring at diagnosis, commencement of treatment or during treatment.

**Figure 10: Proportion of screens with DT of 4+ per screen timepoint**



Of the 128 screens with a DT score of 4 or above, there are only eleven tumour streams represented, with CNS and Liver having no screens with DT scores 4 or above, as seen in Figure 11. The majority of DT scores of 4 or above were in Breast (n=41), which may be due to Breast having the highest number of overall screens. The proportion of screens with DT scores above 4 largely align with the number of screens, except for Lung, which has the 5<sup>th</sup> highest number of DT scores of 4 and above, but the third highest screens (n=44). Head and neck also had the 8<sup>th</sup> highest DT scores of 4 and above but the 9<sup>th</sup> highest screens, the reverse was seen for Melanoma.

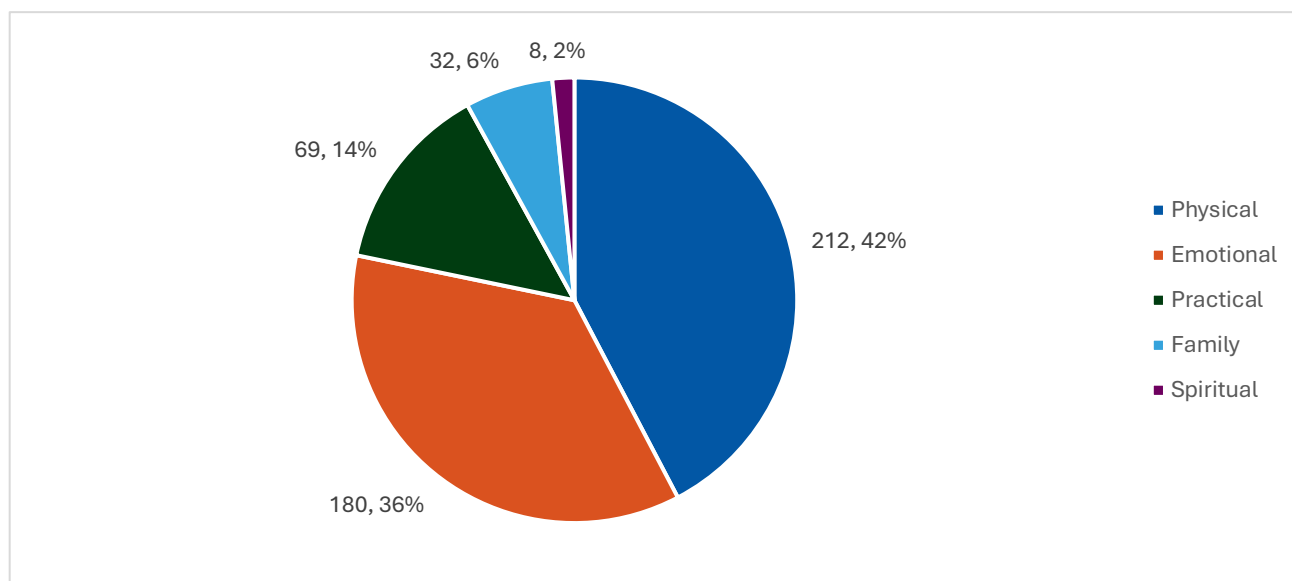
**Figure 11: Number of screens with DT score of 4 and above per tumour stream**



## Problems reported per category

There are five categories in the NCCN DT and problem check list: emotional, family, practical, physical and spiritual. The majority of screens with problems reported were from the categories of physical (n = 212, 42%) and emotional (n = 180, 36%) as seen in Figure 12. This was the case for each tumour stream. Spiritual problems were only reported in three tumour streams: Gynaecological, Haematology and Upper GI. Please see Appendix 1 for more tumour stream-specific information.

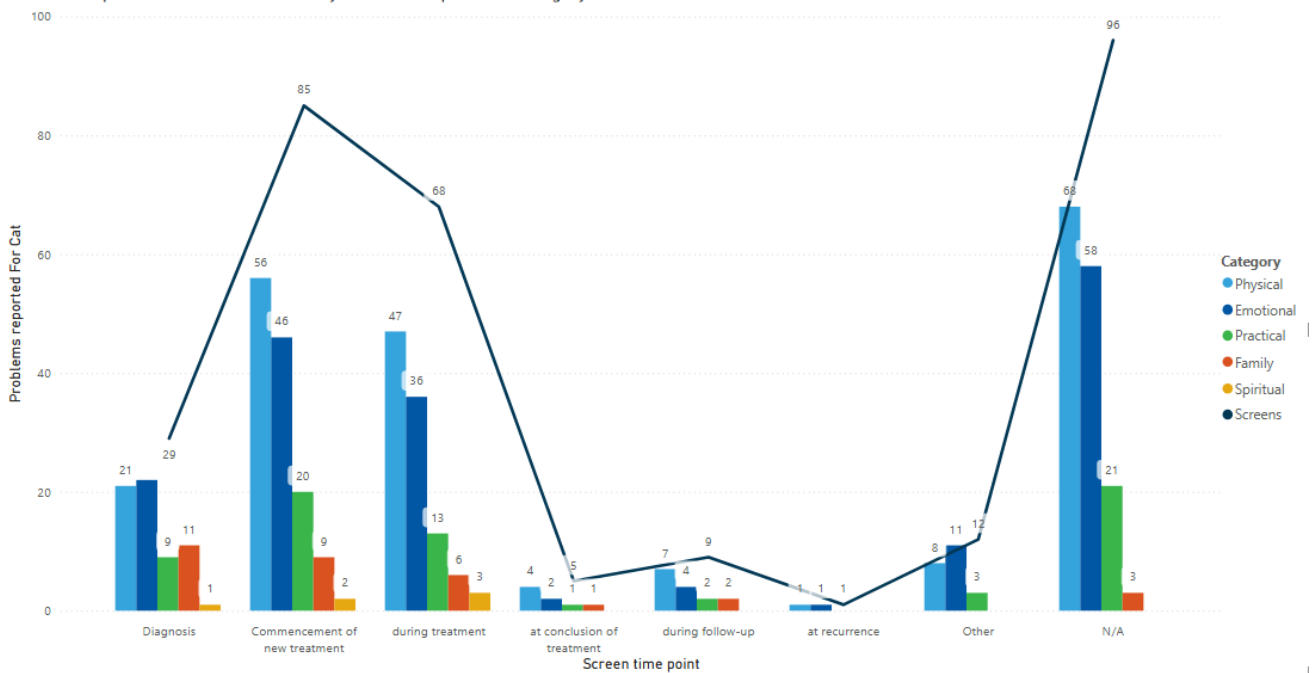
**Figure 12: Number of problems reported per category**



## Number of problems per timepoint

The number of screens with problems reported per category appear to relate to the overall number of screens completed across the screen timepoints, as seen in Figure 13. The only tumour stream that does not follow this trend is Lung, where there were the same number of screens at commencement of new treatment and during treatment, however the number of reported physical and practical problems increased, emotional problems decreased and family problems remained the same. Please see Appendix 2 for more information.

**Figure 13: Number of reported problems per screen timepoint**



### Problems reported per subcategory

Of the five categories, all have numerous sub-categories except for spiritual, which only has a yes/no option for reporting a problem. Table 1 highlights the average number of subcategory problems a patient identifies per category. The highest average number of subcategory problems reported were in the categories physical (n=4.05) and emotional (n=2.82). The category of spiritual only has a 'yes' or 'no' option, therefore there is an average of only one subcategory problem in this category.

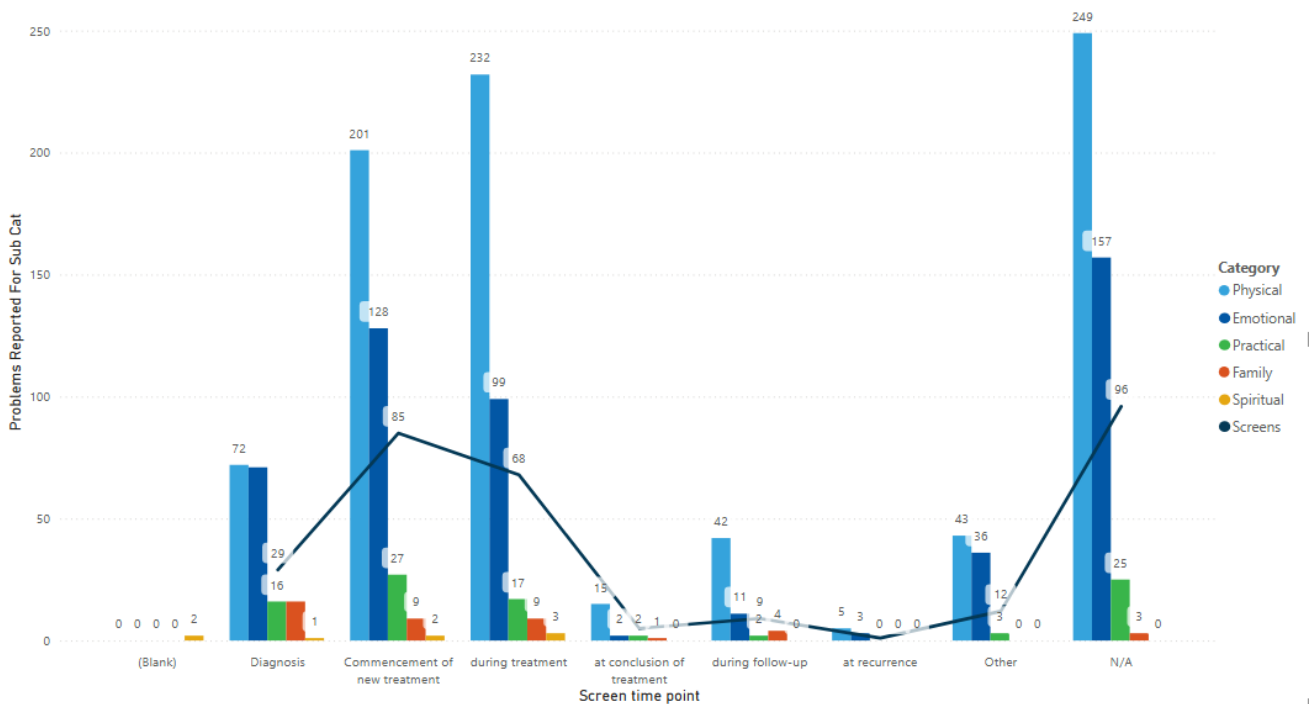
**Table 1: Average number of problems reported per category per patient**

Category	Total number of problems reported per category	Average number of subcategory problems per category per patient
<b>Physical</b>	859	4.05
<b>Emotional</b>	507	2.82
<b>Practical</b>	92	1.33
<b>Family</b>	42	1.31
<b>Spiritual</b>	8	1.00

As seen with the number of screens with problems reported per category, the number of screens with subcategory problems reported also appear to relate to the overall number of screens completed across timepoints, as seen in Figure 14.

**Figure 14: Number of subcategory problems reported per category per screen timepoint**

Problems Reported For Sub Cat and Screens by Screen time point and Category

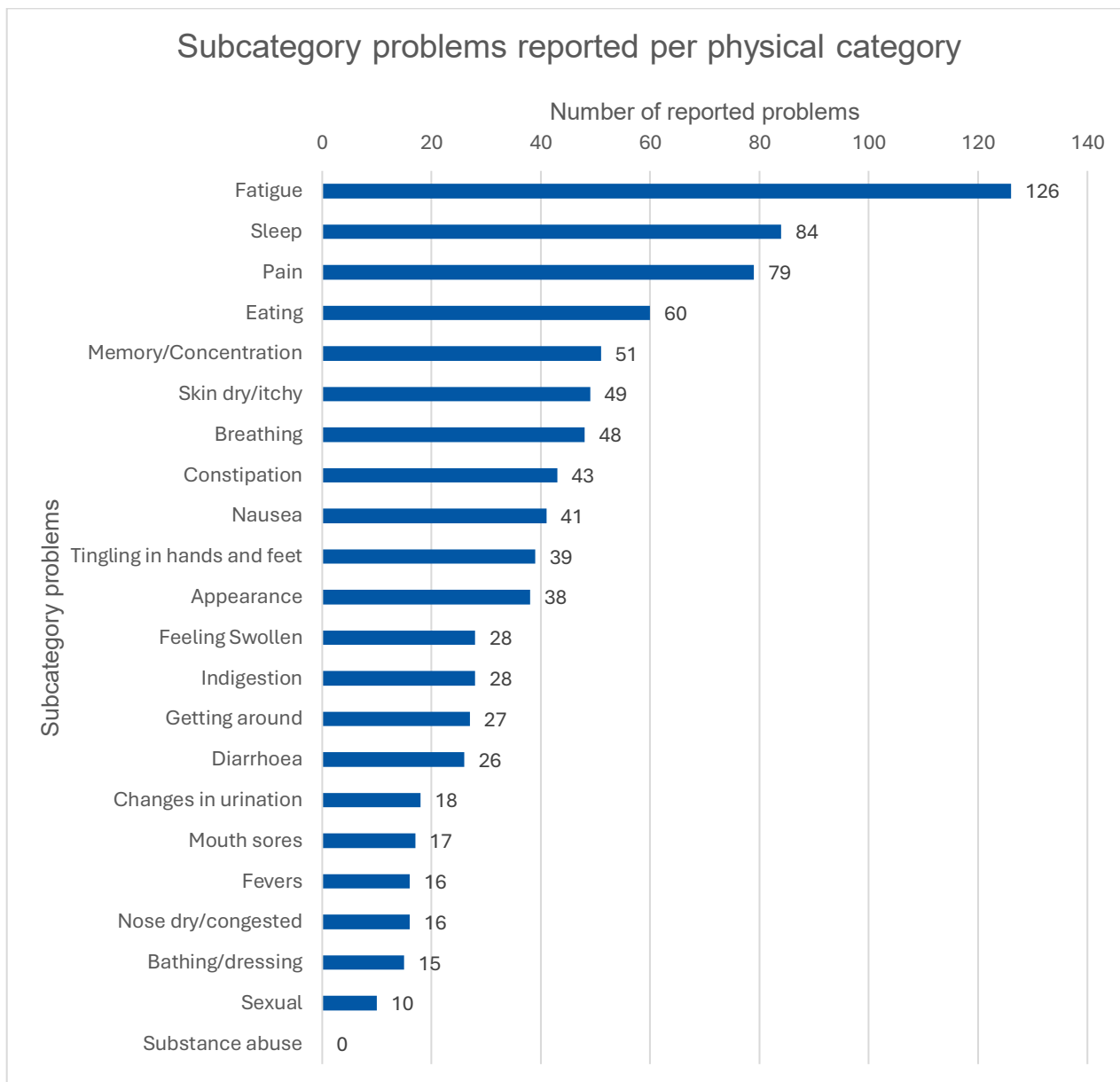


### Physical

There are 22 subcategories (21 for Austin Health) included in the category of physical. There were 859 subcategory problems reported across the 212 screens that reported a physical problem. The most frequent subcategory problems reported in the physical category were Fatigue (n = 126, 59%), Sleep (n= 84, 40%), Pain (n= 79, 37%) and Eating (n = 60, 28%). None of the screens audited reported substance abuse as a problem and only 10 screens (5%) reported the subcategory problem of sexual, as seen in Figure 15.

The top four subcategory problems reported for the physical category overall are seen in varying degrees in each tumour stream. Fatigue is in the top four subcategories for 11 tumour streams, sleep and pain are in the top four for 8 tumour streams and eating is only in the top four for 3 tumour streams. Memory/concentration is in the top four for five tumour streams and skin dry/itchy are in the top four for 4 tumour streams, which are seen overall as fifth and sixth respectively. Please see Appendix 3 for further tumour-specific information.

**Figure 15: Subcategory problems reported per physical category**

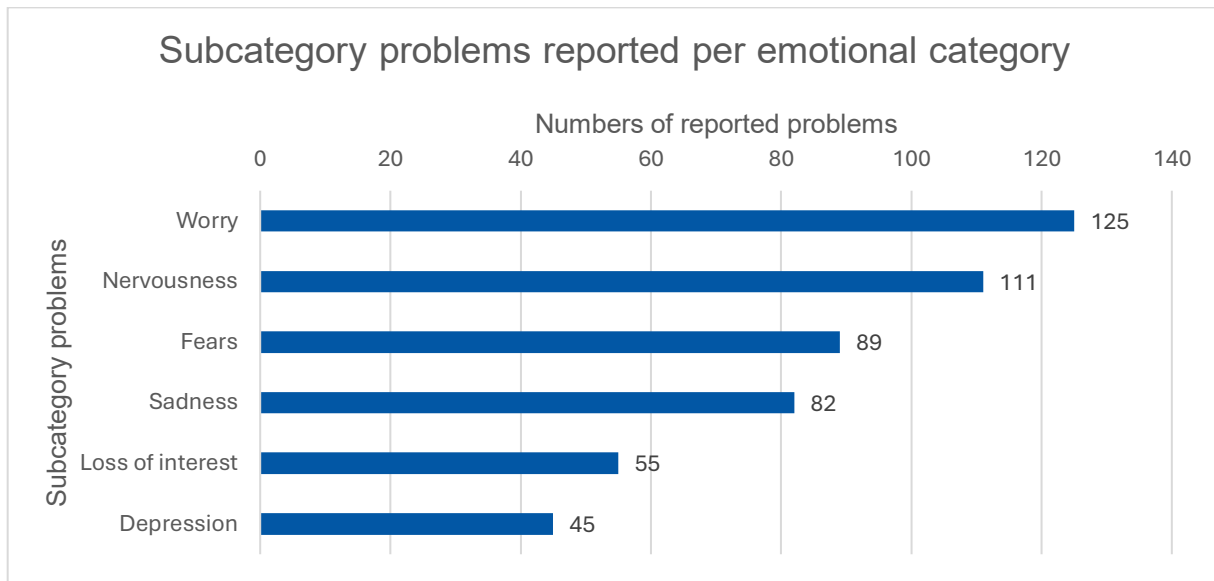


**Emotional**

There are 6 subcategories included in the category of emotional. There were 507 subcategory problems reported across the 180 screens that reported an emotional problem. The most frequent subcategory problems reported in the emotional category were worry (n = 125, 69%) and nervousness (n= 111, 62%). The least frequently reported subcategory problem was depression (n= 45, 25%) as seen in Figure 16.

The top two subcategory problems reported for the emotional category overall are reflective of the trends in each tumour stream. Both subcategory problems were reported in the top two emotional problems for ten tumour streams. Fears and sadness were in the top two emotional problems reported for three tumour streams. Please see Appendix 3 for more tumour-specific information.

**Figure 16: Subcategory problems reported per emotional category**

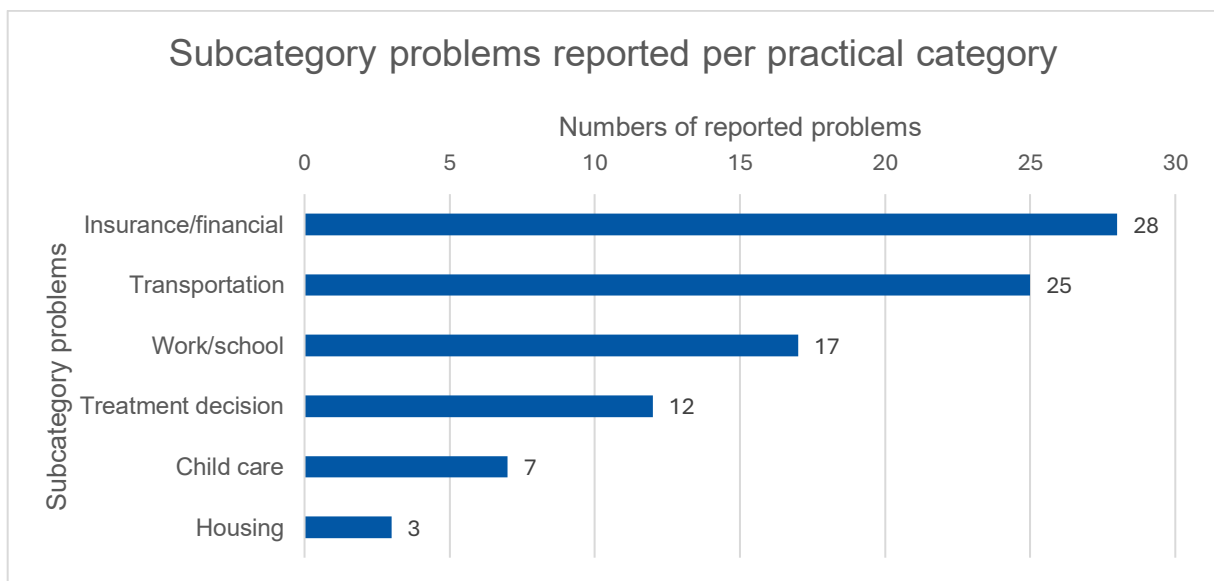


**Practical:**

There are 6 subcategories (5 for Austin Health) included in the category of practical. There were 92 subcategory problems reported across the 69 screens that reported a practical problem. The most frequent subcategory problems reported in the practical category were Insurance/financial (n = 28, 41%) and Transportation (n= 25, 36%). Only three (4%) people reported Housing as an issue, as seen in Figure 17.

The top two subcategory problems reported for the practical category overall are seen in varying degrees in each tumour stream. Insurance/financial is in the top two subcategories for 8 tumour streams and transportation is in the top two for 6 tumour streams. Work/school is in the top two for six tumour streams, which is seen overall as third. Please see Appendix 3 for further tumour-specific information.

**Figure 17: Subcategory problems reported per practical category**

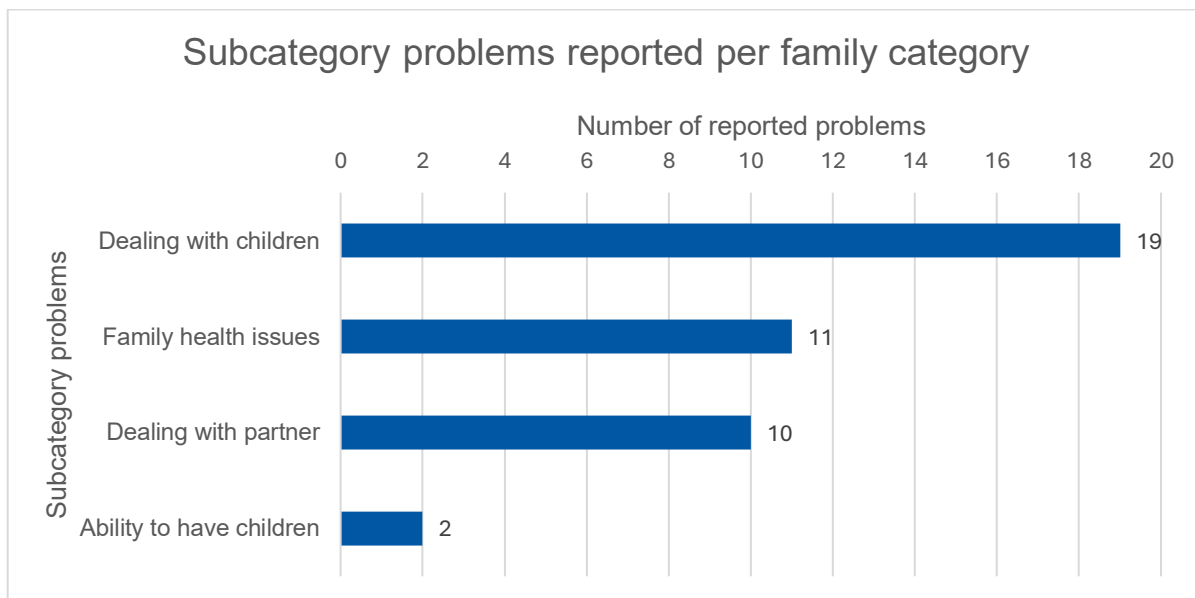


## Family:

There are 4 subcategories (3 for Austin Health) included in the category of family. There were 42 subcategory problems reported across the 32 screens that reported a family problem. The most frequent subcategory problem reported in the family category was Dealing with children (n = 19, 59%) and only two screens (6%) reported Ability to have children as a problem, as seen in Figure 18.

The subcategory problem reported for the family category overall is not reflected in each tumour stream. Dealing with children is the top family subcategory problem reported in three tumour streams only. Dealing with partner is the top family subcategory problem reported in five tumour streams and family health issues is the top subcategory problem reported in three tumour streams, however overall they are reported third and second respectively. Please see Appendix 3 for further tumour-specific information.

**Figure 18: Subcategory problems reported per family category**



## Overall problems reported across the subcategories

The top ten most frequently reported subcategory problems are from the Emotional (n=5) and Physical (n=5) categories. Fatigue, worry, nervousness, fears, sleep and sadness were each reported in over eighty screens (>25%) with the top three reported in over one hundred and ten screens (>35%), as seen in table 2. Please see appendix 3 for further tumour stream-specific information on subcategory problems.

**Table 2: Top ten subcategory problems reported**

<b>Subcategory</b>	<b>Emotional</b>	<b>Physical</b>	<b>Percentage of all screens</b>
<b>Fatigue</b>		126	41%
<b>Worry</b>	125		41%
<b>Nervousness</b>	111		36%
<b>Fears</b>	89		29%
<b>Sleep</b>		84	28%
<b>Sadness</b>	82		27%
<b>Pain</b>		79	26%
<b>Eating</b>		60	20%
<b>Loss of interest</b>	55		18%
<b>Memory/Concentration</b>		51	17%

## Limitations

A limitation of this audit is the use of a convenient sample, which included patients diagnosed with cancer in 2022. The screens included can be over two years old and many were completed during the COVID pandemic. This may have influenced patients' supportive care needs.

The low number of patients included in the audit is also a limitation. As summarised in *figure one "recruitment process for included patients"*; whilst there were 7500 newly diagnosed cancer patients admitted to NEMICS member health services in 2022 [6], only 9% of potentially screened patients could be included in the audit. It therefore must be remembered that the results may not be representative of the broader cancer patient population's needs.

Data regarding timepoints is impacted by large proportion of screens without a timepoint specified. It would be valuable to explore the drivers leading to no timepoint being recorded on the screens to inform future work on boosting screening rates and obtaining a more reliable picture of trends across the timeline.

The age of patients included in this audit is also skewed younger than the broader patients diagnosed with cancer admitted to NEMICS member health services. This may limit the application of the findings to the larger population, as patients in their 70's and 80's may have different supportive care needs as those in their 40's and 50's. It would be valuable to explore the significance of this further such as determining if younger people are more often offered screening and/or are more likely to engage in screening.

## Conclusion

Supportive care screening captures important information about patients with cancer, level of distress, and problem-based needs. Screen rates are low across NEMICS member health services. Screening is most commonly administered during commencement of new treatment and/or during treatment, with limited or no screening at end of treatment or recurrence. When screening is completed, distress, physical, and emotional needs are high and require supportive care referral and intervention. Practical and family needs also exist for some patients and require supportive care referral and intervention. Approximately 12% of patient's preferred language was other than English.

Screen rates and supportive care intervention across NEMICS must increase to ensure optimal cancer care. This study provides important evidence for NEMICS member health services to inform supportive care service provision, the cancer workforce and their capabilities, and referral pathways. Recommendations to assist health services to achieve optimal cancer care include:

1. Increase patients with cancer supportive care screening, identification of problem-based needs, and provision of supportive care considering strategies that may include person-led completion of screening and referral
2. Develop a guideline to identify the appropriate destination (internal or external) and urgency of referrals
3. Develop clinician and consumer information about Medicare and other government funding support for community-based supportive care

4. Develop a list of external providers that are available to patients as well as clear instructions for staff and/or patients on when and how to refer
5. Promote resources that address the supportive care needs of cancer patients attending member health services e.g., [Cancer Mind Care | Exploring ways to look after your mind when you are affected by cancer](#)
6. Augmenting how supportive care screening rates and patient needs can be audited in the future, for example, via more automated systems
7. Explore drivers to screens being completed at an unknown timepoint to help inform potential solutions to enable understanding of timing of patient's supportive care needs
8. Consider options including patient self-screening and referral to help ensure patients are screened at the right time and have access to the supports they need when they need them.

## References

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- [2] Cancer Council Victoria. Optimal Care Pathways [Internet]. [Updated 2022 July; cited 2023 June 16]. Available from: <https://www.cancervic.org.au/get-support/for-health-professionals/optimal-care-pathways>
- [3] Cancer Council Victoria. Optimal care pathway for Aboriginal and Torres Strait Islander people with cancer [Internet]. Cancer Council and Department of Health Victoria, 2021 [cited 2023 June 16]. Available from: [https://www.cancer.org.au/assets/pdf/optimal-care-pathway-for-aboriginal-and-torres-strait-islander-people-with-cancer#\\_ga=2.121629455.644853631.1693522993-911448703.1686873069](https://www.cancer.org.au/assets/pdf/optimal-care-pathway-for-aboriginal-and-torres-strait-islander-people-with-cancer#_ga=2.121629455.644853631.1693522993-911448703.1686873069)
- [4] Department of Health and Human Services. Victorian cancer plan 2020 – 2024 Improving cancer outcomes for all Victorians. Victorian State Government: Melbourne; 2020.
- [5] Dr. Ashley Macleod and Linda Nolte. NEMICS 2022 Cancer Services Performance Indicator Report. 2023. NEMICS, Melbourne, Australia
- [6] Victorian Integrated Cancer Services. NEMICS Annual Report 2022-23 [Internet]. [Updated 2022; cited 2024 October 14] Available from: [https://ed492f82-48ec-4169-8a4b-3c5f0d1cdad4.usrfiles.com/ugd/78ce4f\\_0fa4e8fdca3b40f9807183ddb7cea8da.pdf](https://ed492f82-48ec-4169-8a4b-3c5f0d1cdad4.usrfiles.com/ugd/78ce4f_0fa4e8fdca3b40f9807183ddb7cea8da.pdf)
- [7] Spira Stojanovik, Jesvinder Kaur, Ashley Macleod, Linda Nolte and Umbreen Hafeez. 2024. Identifying variation in Cancer Care for Culturally and Linguistically Diverse (CALD) Communities: data analysis report 2024. NEMICS, Melbourne, Australia.
- [8] Baken D. M., & Woolley C. Validation of the Distress Thermometer, Impact Thermometer and combinations of these in screening for distress. *Psycho-Oncology* 2011, 20(6), 609-614.

## Appendices

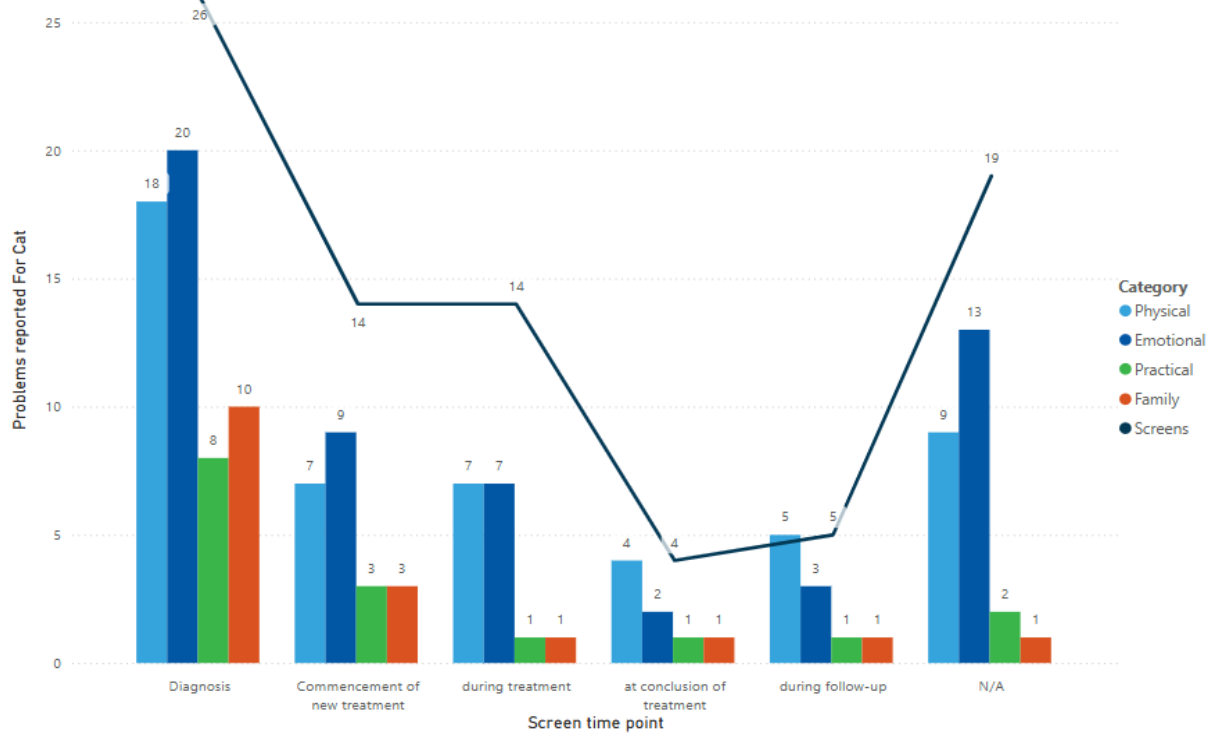
### Appendix 1: Categories of problems reported per tumour stream

	Physical	Emotional	Practical	Family	Spiritual
Overall (305)	212 (70%)	180 (59%)	69 (23%)	32 (10%)	8 (3%)
Breast (82)	50 (61%)	54 (66%)	16 (20%)	17 (21%)	0 (0%)
CNS (3)	3 (100%)	3 (100%)	2 (67%)	0 (0%)	0 (0%)
Colorectal (20)	13 (65%)	13 (65%)	8 (40%)	2 (10%)	0 (0%)
Endocrine glands Thyroid (1)	1 (100%)	1 (100%)	1 (100%)	0 (0%)	0 (0%)
Genitourinary (15)	9 (60%)	6 (40%)	1 (7%)	1 (7%)	0 (0%)
Gynaecological (32)	25 (78%)	19 (59%)	10 (31%)	6 (19%)	2 (6%)
Haematology (51)	37 (73%)	33 (65%)	15 (29%)	2 (4%)	4 (8%)
Head and Neck (5)	4 (80%)	2 (40%)	1 (20%)	0 (0%)	0 (0%)
Liver (1)	1 (100%)	1 (100%)	1 (100%)	0 (0%)	0 (0%)
Lung (44)	28 (64%)	19 (43%)	2 (5%)	2 (5%)	0 (0%)
Melanoma (6)	6 (100%)	4 (67%)	1 (17%)	1 (17%)	0 (0%)
Other – neuroendocrine (1)	1 (100%)	1 (100%)	1 (100%)	0 (0%)	0 (0%)
Upper GI (44)	34 (77%)	24 (55%)	10 (23%)	1 (23%)	2 (45%)

## Appendix 2: Number of screens with problems reported per category per screen timepoint per tumour stream:

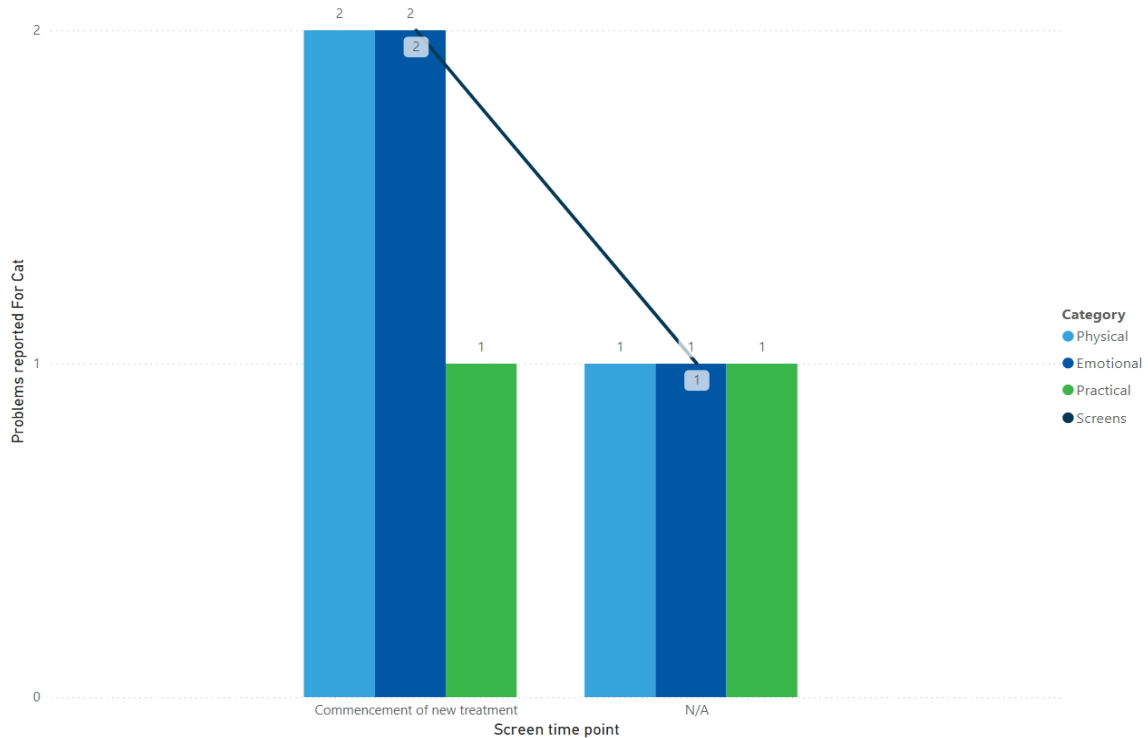
### Breast:

Problems reported For Cat and Screens by Screen time point and Category



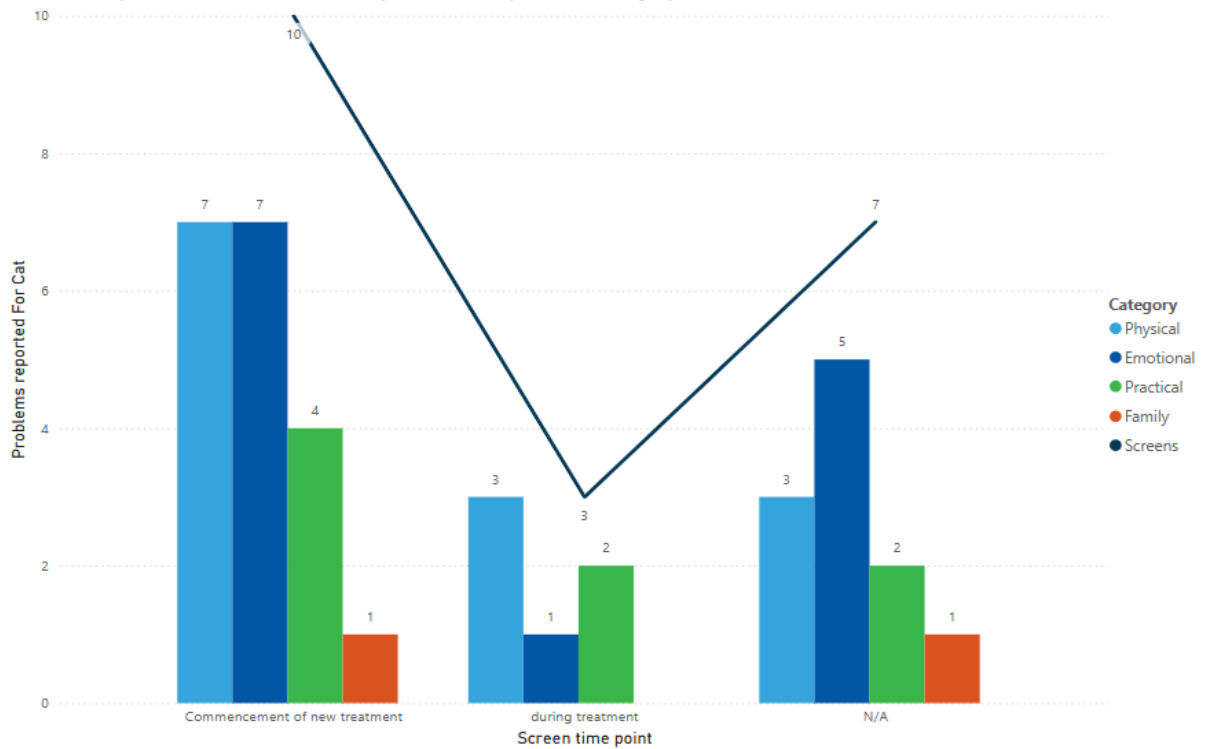
### CNS:

Problems reported For Cat and Screens by Screen time point and Category



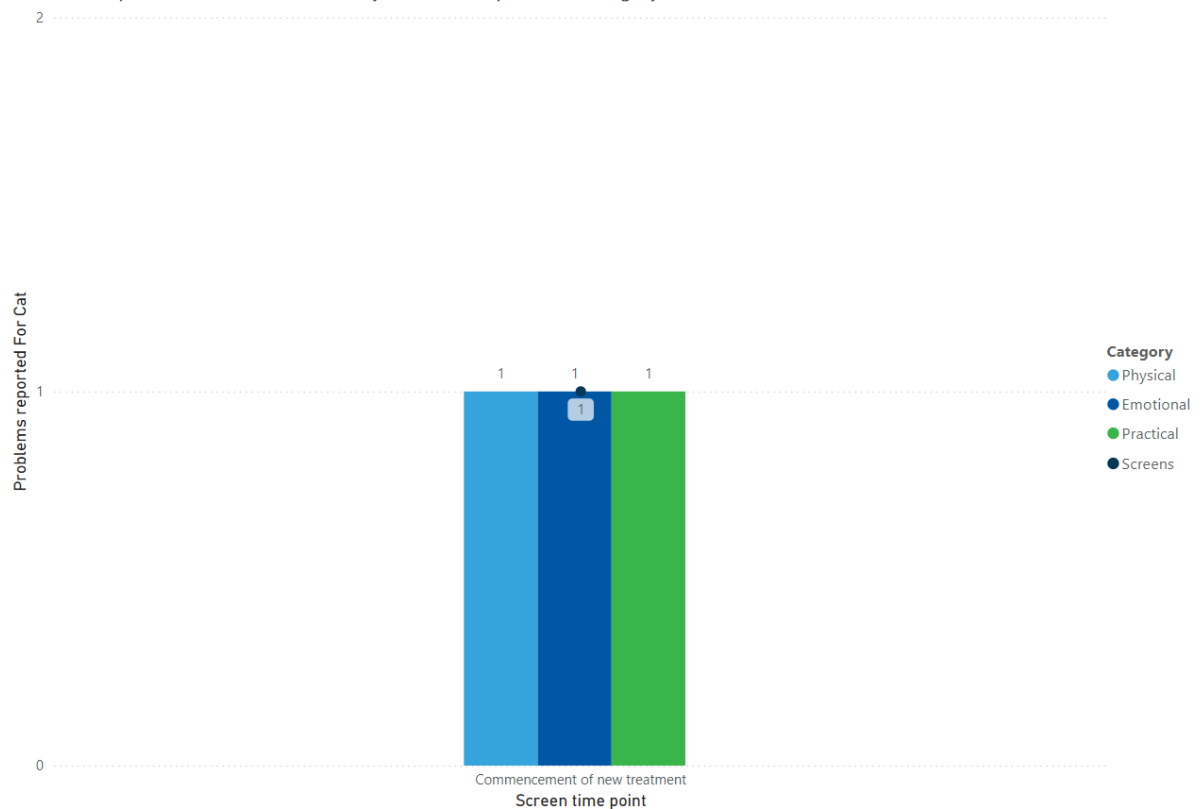
## Colorectal:

Problems reported For Cat and Screens by Screen time point and Category



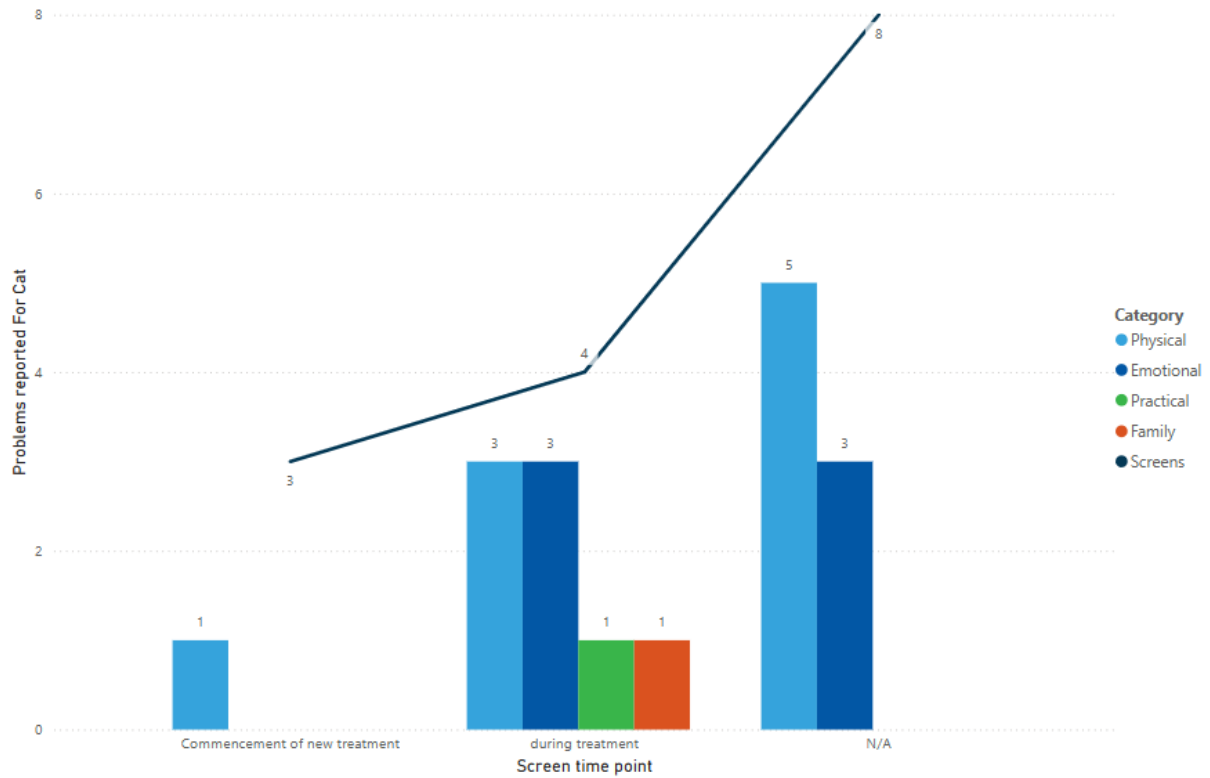
## Endocrine glands Thyroid:

Problems reported For Cat and Screens by Screen time point and Category



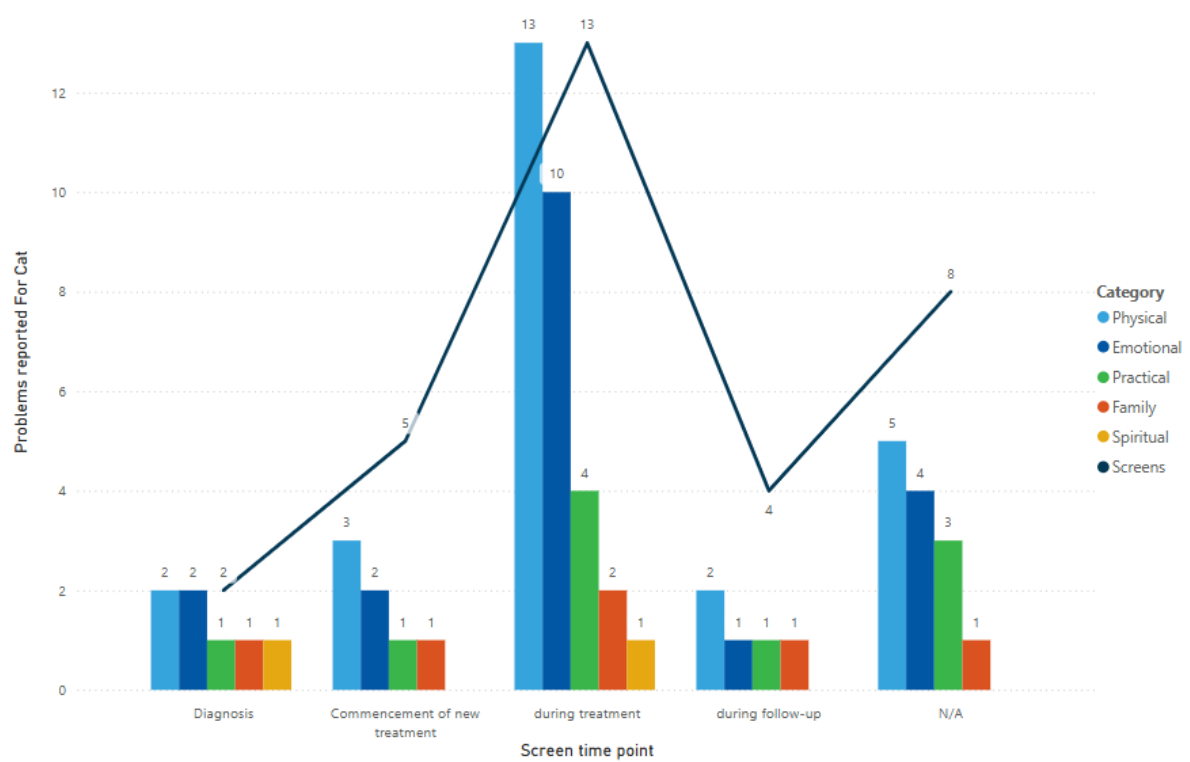
## Genitourinary:

Problems reported For Cat and Screens by Screen time point and Category



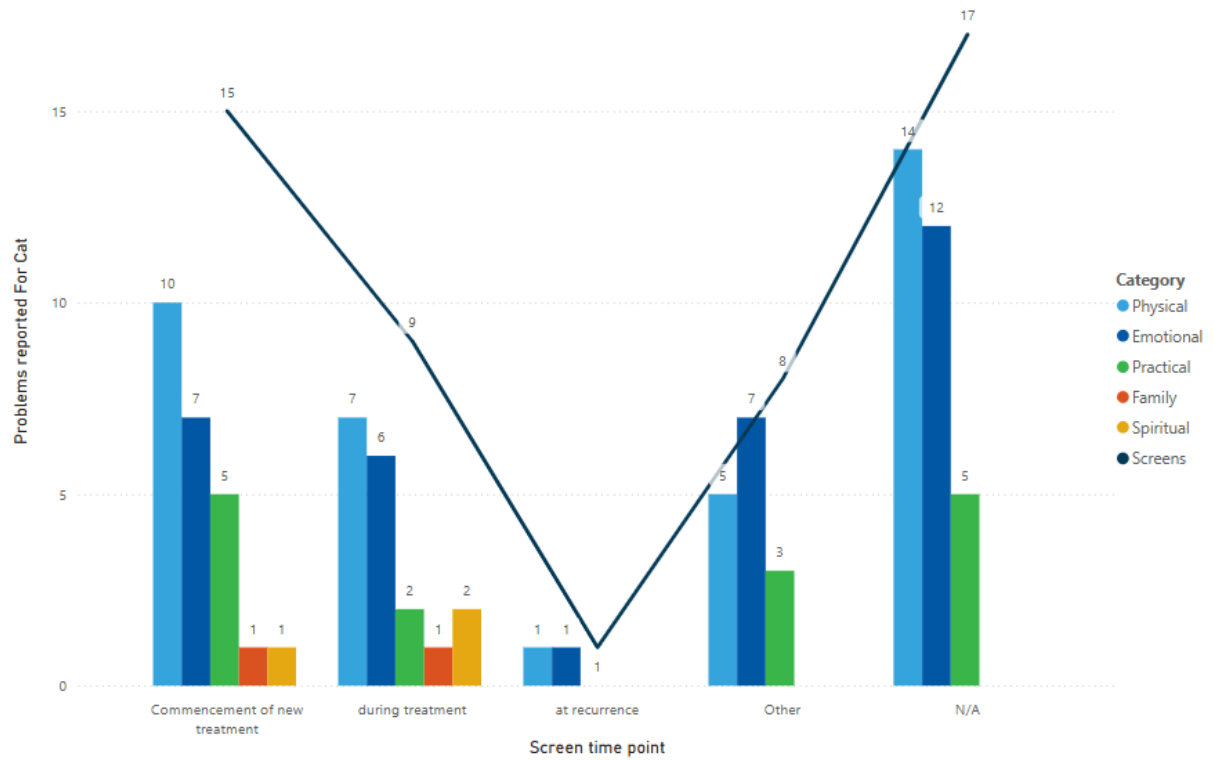
## Gynaecological:

Problems reported For Cat and Screens by Screen time point and Category



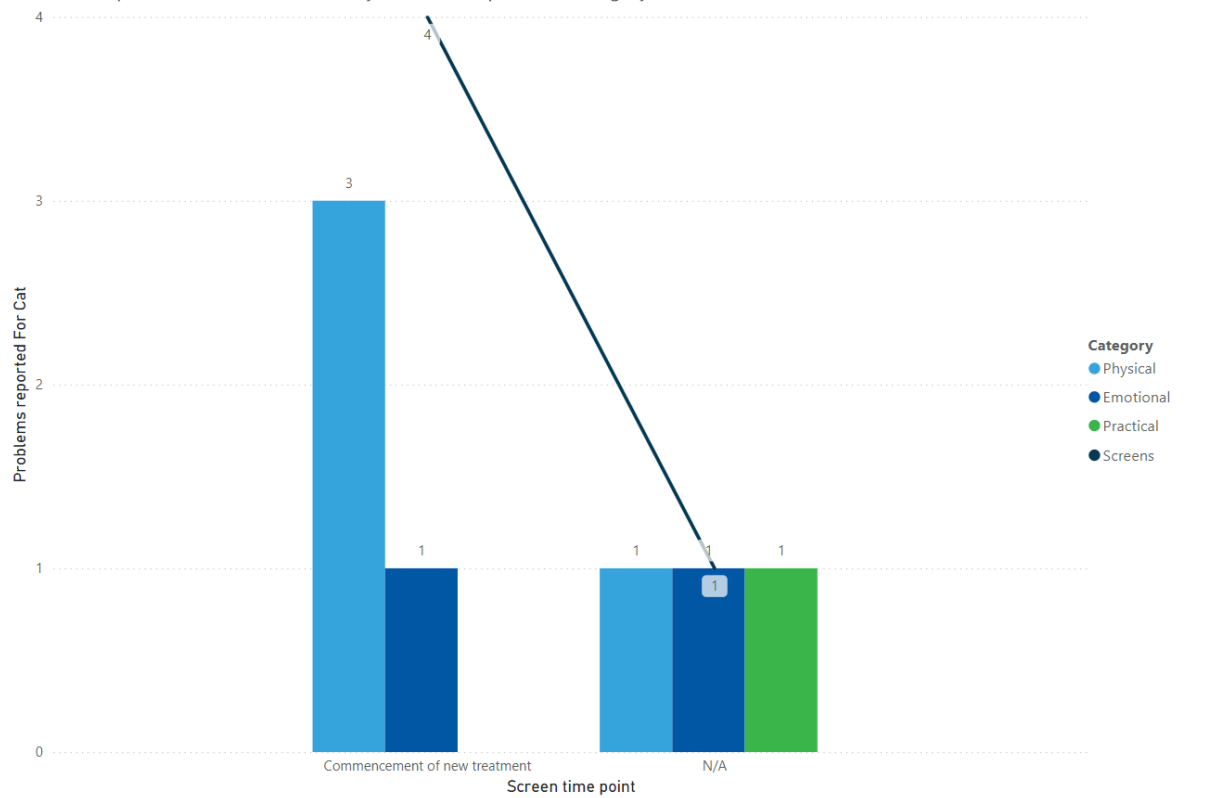
## Haem:

Problems reported For Cat and Screens by Screen time point and Category



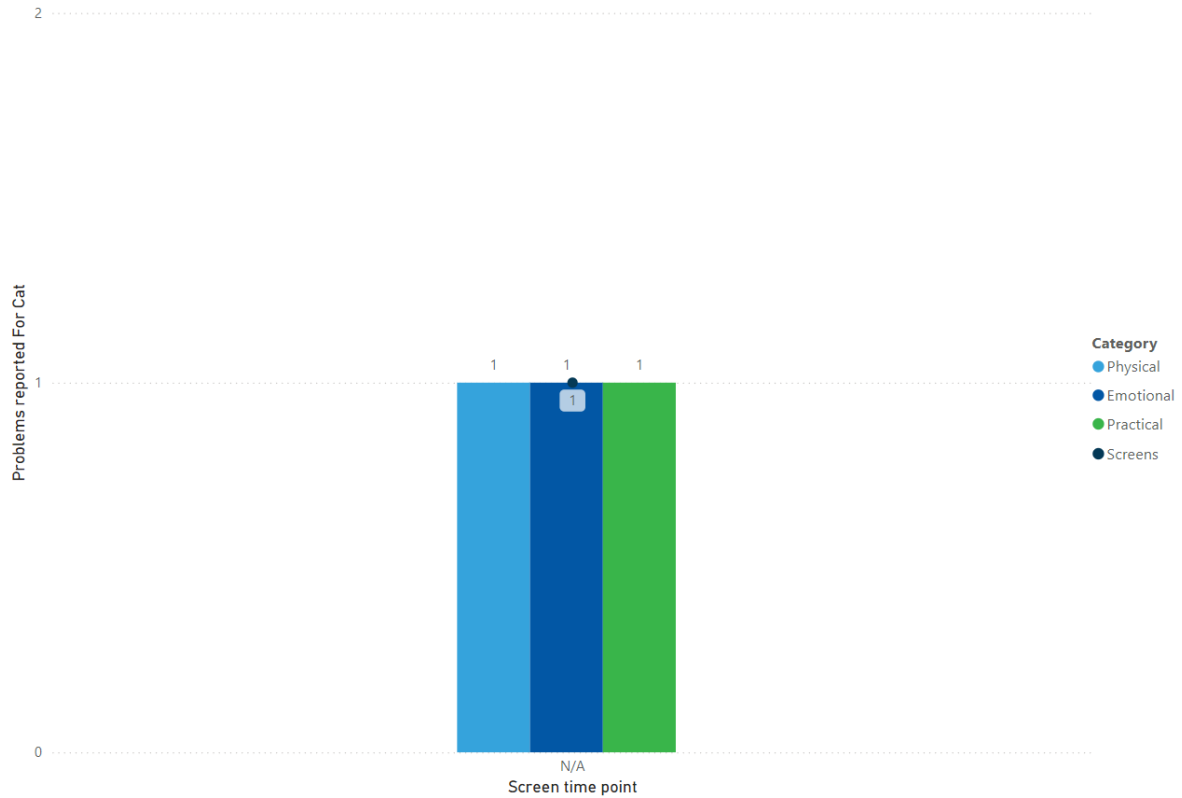
## Head and Neck:

Problems reported For Cat and Screens by Screen time point and Category



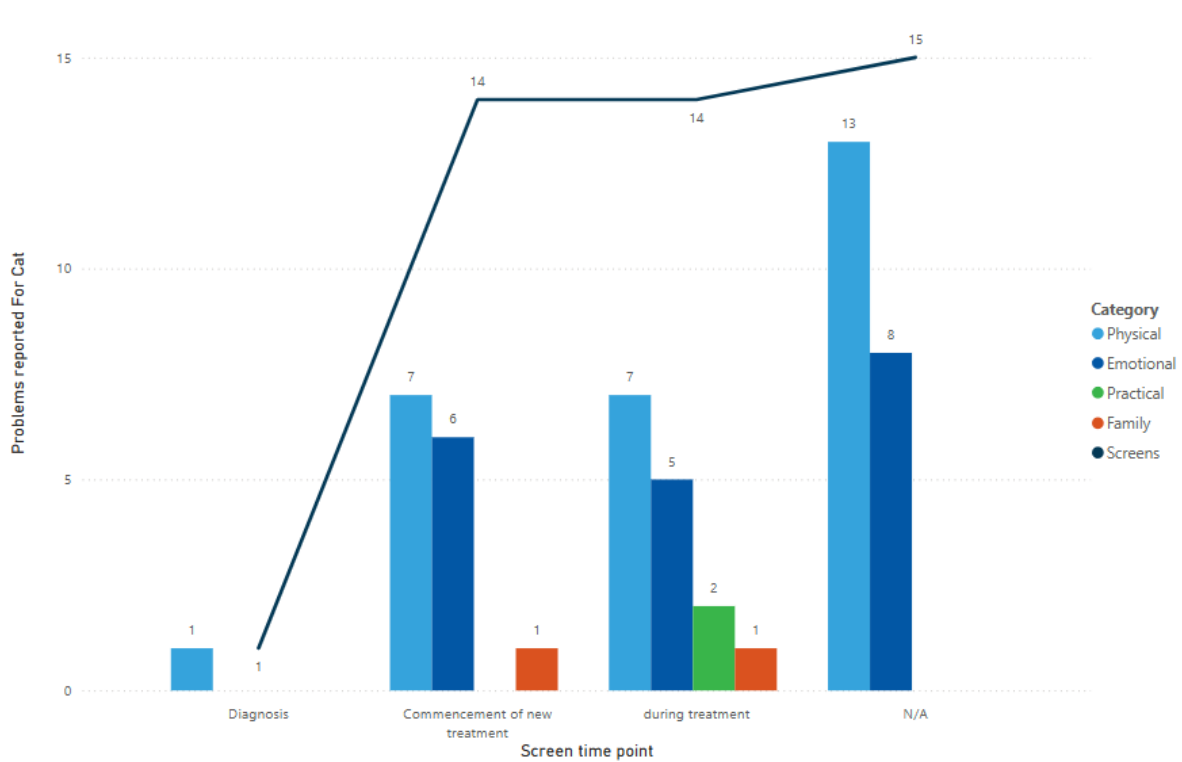
## Liver:

Problems reported For Cat and Screens by Screen time point and Category



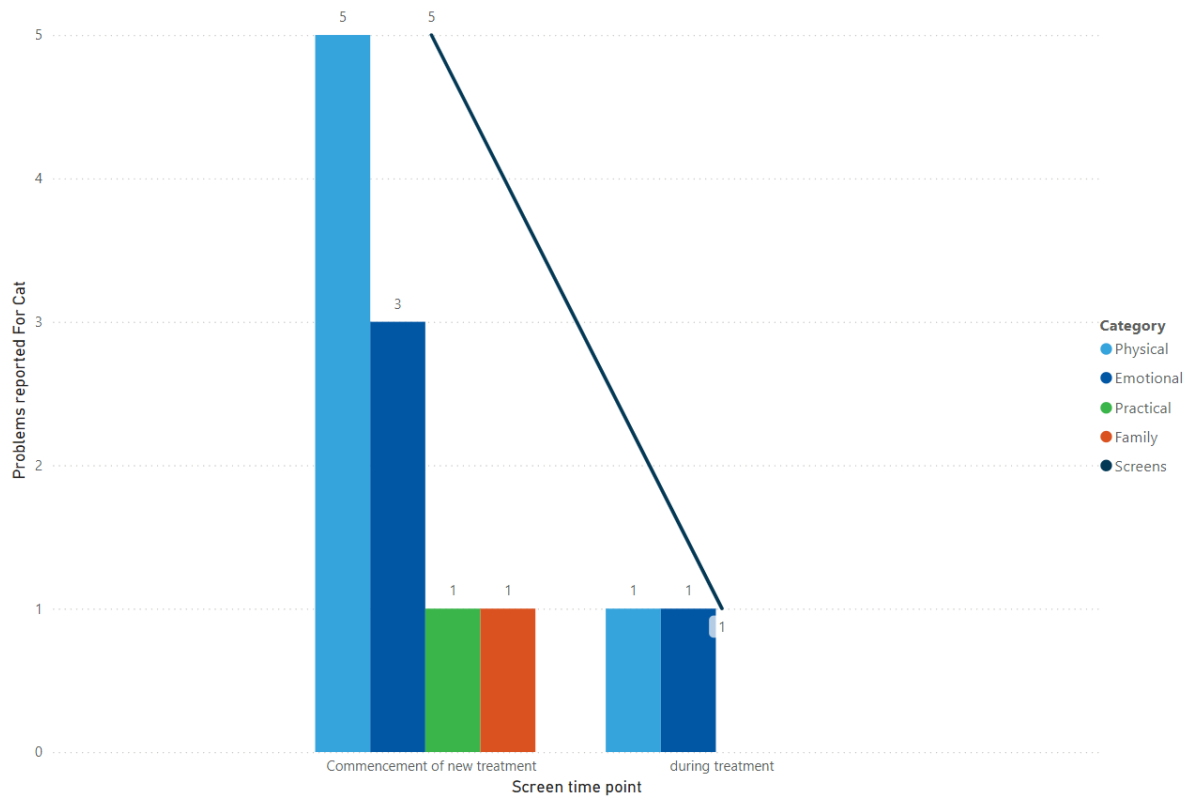
## Lung:

Problems reported For Cat and Screens by Screen time point and Category



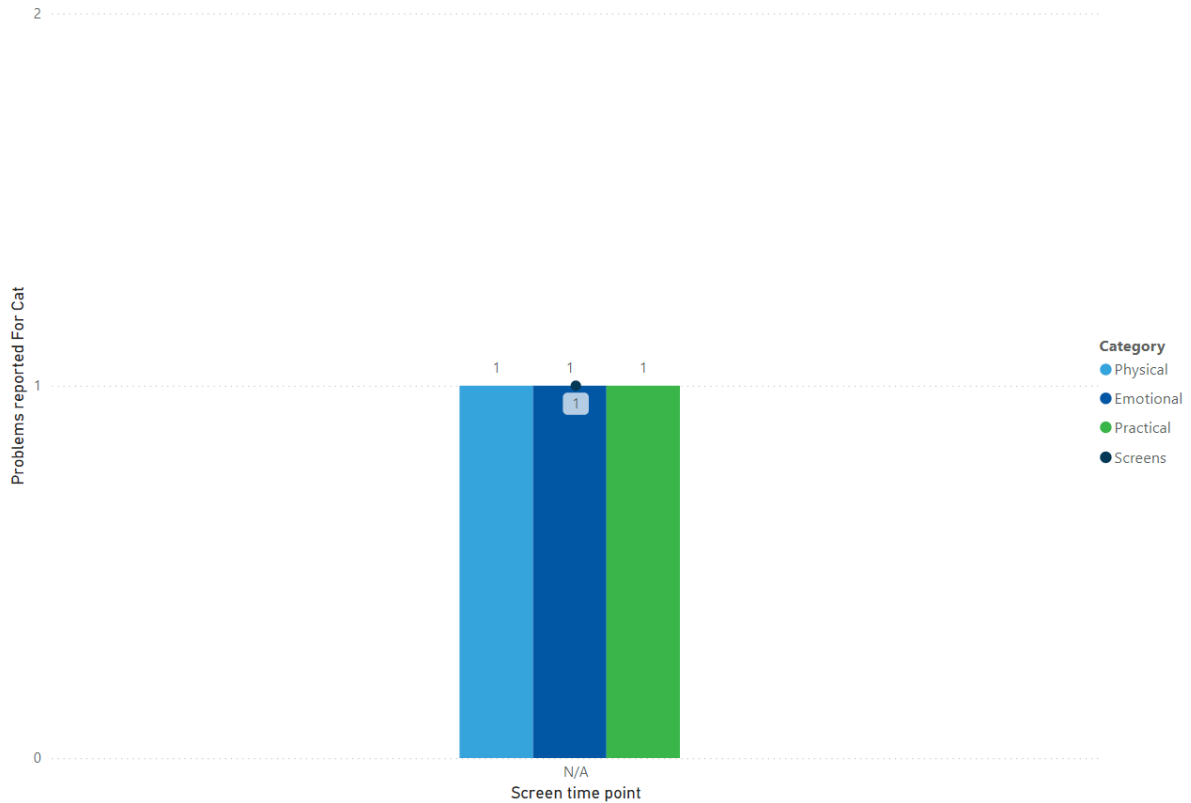
## Melanoma:

Problems reported For Cat and Screens by Screen time point and Category



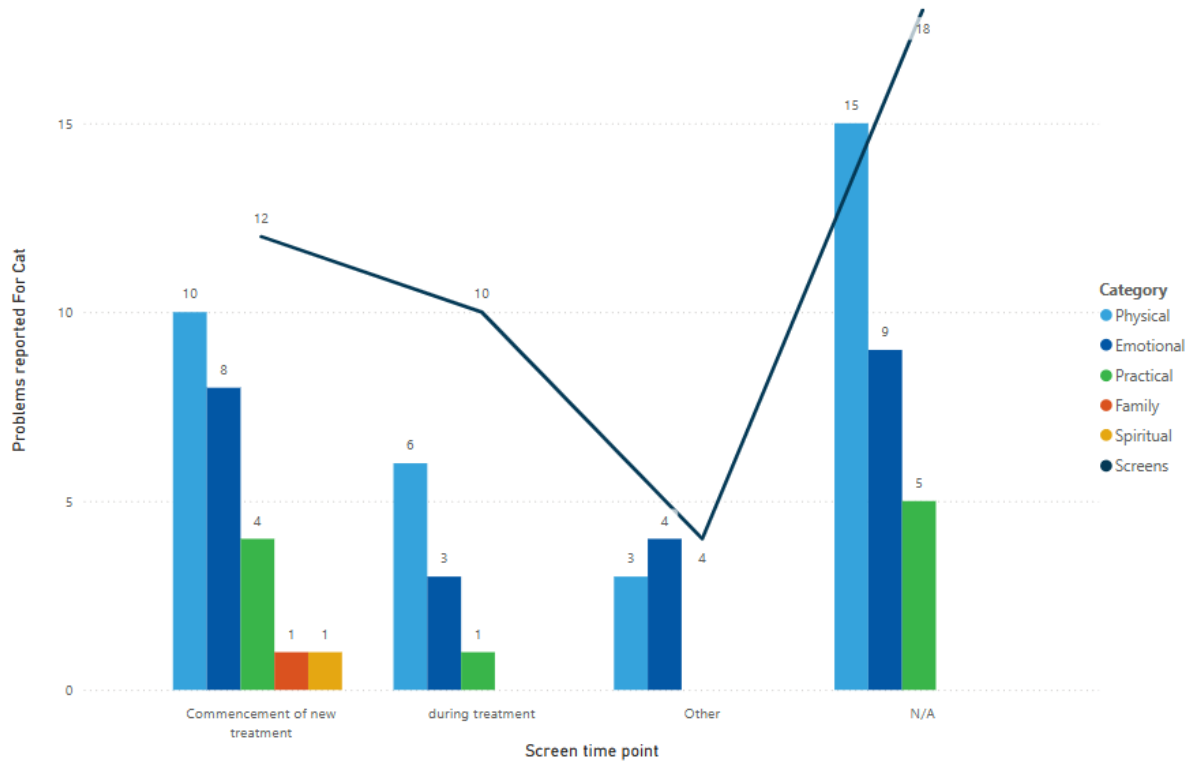
## Other – neuroendocrine:

Problems reported For Cat and Screens by Screen time point and Category



## Upper GI:

Problems reported For Cat and Screens by Screen time point and Category



### Appendix 3: Top subcategory problems reported per category per tumour stream

Tumour stream (No of subcategory problems)	Physical	Emotional	Practical	Family
Overall Physical: 212 Emotional: 180 Practical: 69 Family: 32	Fatigue ( <b>n=126, 59%</b> ) Sleep ( <b>n=84, 40%</b> ) Pain ( <b>n=79, 37%</b> ) Eating ( <b>n=60, 28%</b> )	Worry ( <b>n=125, 69%</b> ) Nervousness ( <b>n=111, 62%</b> )	Insurance/financial ( <b>n=28, 41%</b> ) Transportation ( <b>n=25, 36%</b> )	Dealing with children ( <b>n=19, 59%</b> )
Breast Physical: 50 Emotional: 54 Practical: 16 Family: 17	Fatigue (n=27, 54%) Sleep (n=21, 42%) Pain (n=19, 38%) Appearance/Skin dry/itchy (n=13, 26%)	Nervousness (n=39, 72%) Worry (n=36, 67%)	Treatment decision (n=6, 38%) Work/school (n=6, 38%)	Dealing with children (n=12, 71%)
CNS Physical: 3 Emotional: 3 Practical: 2 Family: 0	Tingling in hands and feet (n=3, 100%) Constipation (n=2, 67%) Fatigue (n=2, 67%) Memory/Concentration (n=2, 100%)	Loss of interest (n=2, 67%) Nervousness/Sadness (n=2, 67%)	Insurance/financial (100%)	Nil
Colorectal Physical: 13	Fatigue (n=7, 54%) Memory/concentration (n=6, 46%)	Worry (n=10, 77%) Nervousness (n=9, 69%)	Insurance/financial (n=5, 63%)	Dealing with partner (n=2, 100%)

Emotional: 13 Practical: 8 Family: 2	Sleep (n=5, 38%) Constipation/Diarrhoea/Nausea/Skin dry/itchy (n=4, 31%)		Transportation and Work/school (n=2, 25%)	
Endocrine glands Thyroid (1) Physical: 1 Emotional: 1 Practical: 1 Family: 0	Pain (n=1, 100%) Tingling in hands and feet (n=1, 100%)	Nervousness (n=1, 100%)	Transportation (n=1, 100%)	Nil
Genitourinary Physical: 9 Emotional: 6 Practical: 1 Family: 1	Fatigue (n=6, 67%) Pain (n=6, 67%) Memory/concentration (n=3, 33%) Bathing/dressing/Changes in urination/Feeling swollen/Getting around/Sleep (n=2, 22%)	Worry (n=5, 83%) Fears (n=4, 67%)	Work/school (n=1, 100%)	Family health issues (n=1, 100%)
<b>Gynaecological</b> Physical: 25 Emotional: 19 Practical: 10 Family: 6	Fatigue (n=20, 80%) Eating (n=10, 40%) Nausea (n=9, 36%) Pain (n=9, 36%)	Worry (n=15, 79%) Sadness (n=12, 63%)	Insurance/financial (n=4, 40%) Work/school (n=3, 30%)	Dealing with children (n=6, 100%)

<b>Haematology</b> Physical: 37 Emotional: 33 Practical: 15 Family: 2	Sleep (n=22, 59%) Fatigue (n=19, 51%) Pain (n=11, 30%) Eating and Skin dry/itchy (n=10, 27%)	Worry (n=24, 73%) Nervousness (n=23, 70%)	Insurance/financial (n=8, 53%) Transportation (n=5, 33%)	Dealing with children/dealing with partner and family health issues (n=1, 50%)
<b>Head and Neck</b> Physical: 4 Emotional: 2 Practical: 1 Family: 0	Sleep (n=2, 50%) Memory/Concentration (n=2, 50%) Pain (n=2, 50%) Fatigue (n=2, 50%)	Depression (n=2, 100%) Loss of interest and Worry (n=2, 100%)	Insurance/financial (n=1, 100%) Work/school (n=1, 100%)	Nil
<b>Liver</b> Physical: 1 Emotional: 1 Practical: 1 Family: 0	Fatigue (n=1, 100%) Sleep (n=1, 100%)	Nervousness (n=1, 100%)	Transportation (n=1, 100%) Treatment decision (n=1, 100%)	Nil
<b>Lung</b> Physical: 28 Emotional: 19 Practical: 2 Family: 2	Fatigue (n=17, 61%) Breathing (n=13, 46%) Sleep (n=11, 39%) Pain and Skin dry/itchy (n=9, 32%)	Worry (n=13, 68%) Loss of interest and Nervousness (n=9, 47%)	Insurance/financial (n=2, 100%) Housing and transportation (n=1, 50%)	Dealing with partner (n=1, 50%) Family health issues (n=1, 50%)

<b>Melanoma</b> Physical: 6 Emotional: 4 Practical: 1 Family: 1	Sleep (n=4, 67%) Breathing (n=3, 50%) Fatigue (n=3, 50%) Memory/Concentration (n=3, 50%)	Nervousness (n=3, 75%) Depression/fears/loss of interest/sadness/worry (n=2, 50%)	Transportation (n=1, 100%) Work/school (n=1, 100%)	Dealing with partner (n=1, 100%)
<b>Other – neuroendocrine</b> Physical: 1 Emotional: 1 Practical: 1 Family: 0	Feeling swollen (n=1, 100%)	Fears (n=1, 100%) Nervousness and Worry (n=1, 100%)	Insurance/financial (n=1, 100%)	Nil
<b>Upper GI</b> Physical: 34 Emotional: 24 Practical: 10 Family: 1	Fatigue (n=22, 65%) Pain (n=19, 56%) Eating (n=16, 47%) Sleep (n=12, 35%)	Worry (n=16, 67%) Nervousness (n=15, 63%)	Transportation (n=9, 90%) Insurance/financial (n=3, 30%)	Dealing with partner (n=1, 100%)

