Healthcare use in the last 2 years of life

Dr Ollie Minton

CD for cancer and consultant palliative medicine

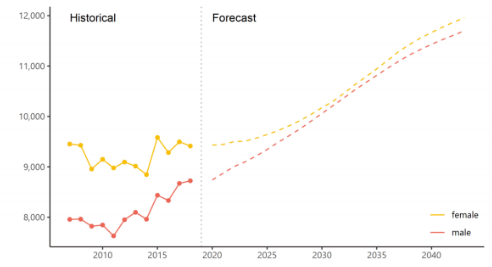
Background

- Over 80% attend A&E at least once in the two years prior to their death
- 90% access acute services
- 30% of all acute admissions are in the last year of life – 10% of which die on that admission (LOS median 2 days)
- Link to treatment escalation plans / respect / primary care communication

National Picture

- **29%** NHS spending is on patients in the **last year of their life**
- **1:3** of the adult inpatient population is in the last year of their life
- **1:10** is in their last admission
- Supportive and palliative care intervention is evidenced to **reduce cost of hospital admission by 14-24%**

66% of people say they would like to die at home. In Sussex Health and Care Partnership just 22% do so



3.2 Deaths will increase for both males and females

Trends and forecasts in Sussex Health and Care Partnership reflect those in England. Figure 2 shows the annual increase in deaths over the last decade. In 2018/19 16,894 adults died in Sussex Health and Care Partnership. Between 2020 and 2030 the number of deaths is expected to grow 19% to 20,170 per annum. As the size of the decedent population grows so too will demand on services.

There has also been a shift towards increasing numbers of deaths in males, narrowing the gap between genders. In future years deaths for males increase closer to deaths for females.

Figure 2 : Historical and forecast deaths by gender - Sussex Health and Care Partnership ICS

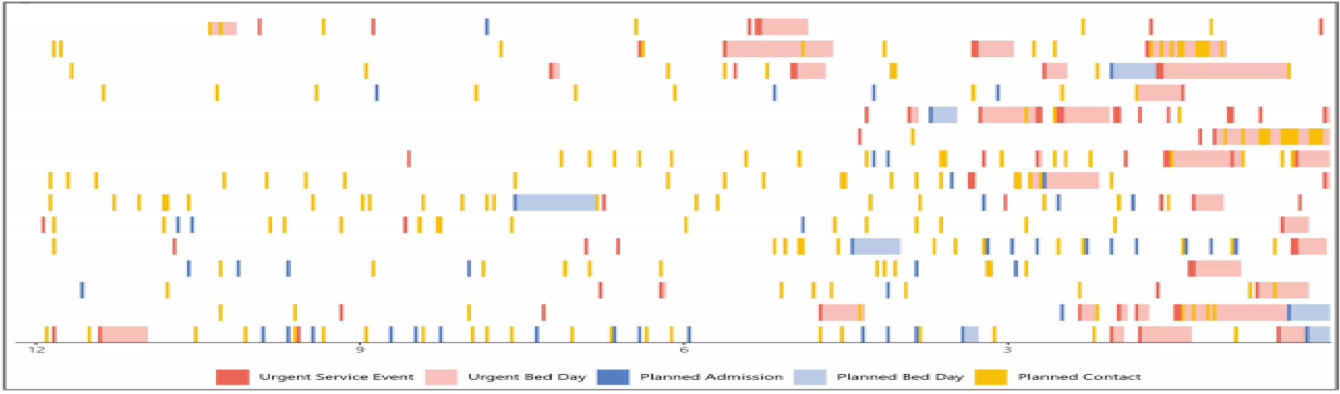
- Ageing population
- More co-morbidities
- Fits true north of reduction in crude mortality
- Earlier recognition of deterioration

Cancer as an example

5.4.2 Planned care features highly for those dying of cancer

Analysis of the sample of those dying from cancer (Figure 16) suggests frequent planned contacts and planned admissions. This group is also more likely to have a planned stay in hospital and experience more planned bed days than other cause of death groups. Urgent events and associated urgent bed stays are more likely to occur in the last six months of life.

Figure 16 : Patterns of service use for people dying from cancer

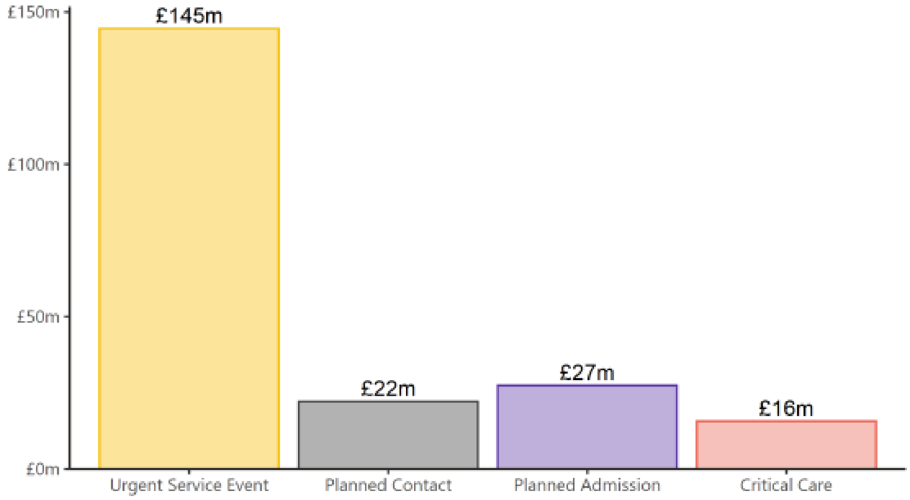


Opportunities

8.1 Urgent care accounts for two-thirds of expenditure

The calculated total hospital spend in the last two years of life in Sussex Health and Care Partnership is £210 million. Figure 51 shows spend by activity type. Urgent services dominate spend, consuming two-thirds of end of life resource.

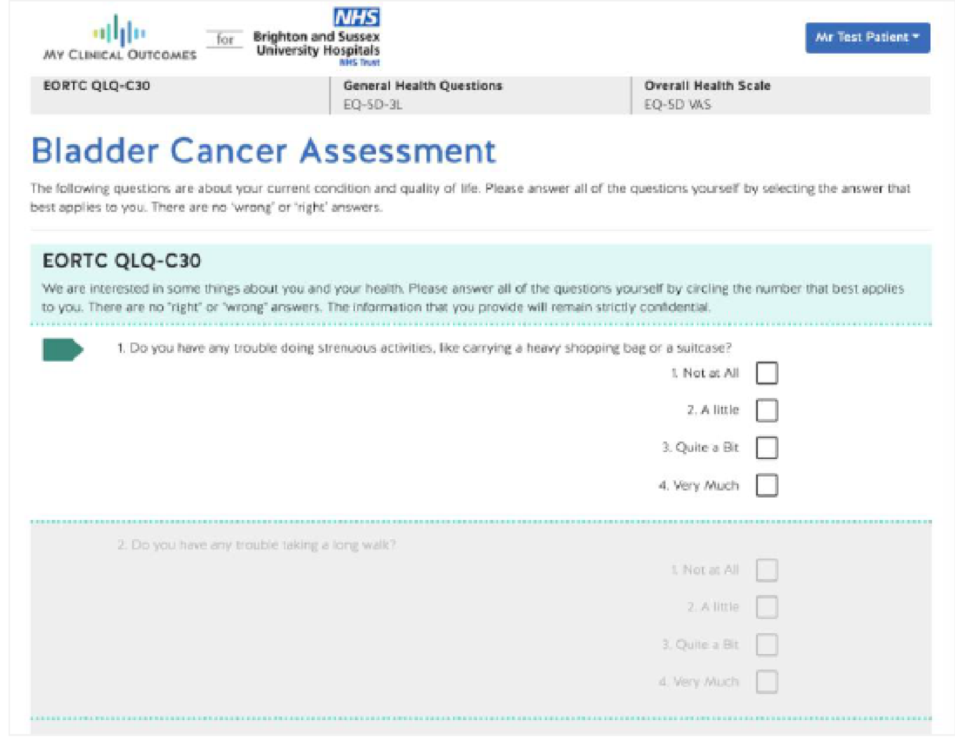
Figure 51 : Total spend by activity type in two years prior to death – Sussex Health and Care Partnership ICS



PROMS

MCO for BSUH

Assessment



My Clinical Outcomes for Brighton and Sussex University Hospitals NHS Trust

Mr Test Patient

EORTC QLQ-C30	General Health Questions EQ-5D-3L	Overall Health Scale EQ-5D VAS

Bladder Cancer Assessment

The following questions are about your current condition and quality of life. Please answer all of the questions yourself by selecting the answer that best applies to you. There are no 'wrong' or 'right' answers.

EORTC QLQ-C30

We are interested in some things about you and your health. Please answer all of the questions yourself by circling the number that best applies to you. There are no "right" or "wrong" answers. The information that you provide will remain strictly confidential.

1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase?
   - 1. Not at All
   - 2. A little
   - 3. Quite a Bit
   - 4. Very Much

2. Do you have any trouble taking a long walk?
   - 1. Not at All
   - 2. A little
   - 3. Quite a Bit
   - 4. Very Much

Assessments:

- EORTC QLQ-C30 (Questionnaire developed to assess the quality of life of cancer patients)
- EQ-5D-3L (General Health Questions)
- EQ-5D VAS (Overall Health Scale)

Patients receive an email reminder to complete scheduled assessments at 2-week intervals, regardless of their cancer type

MCO is a digital health platform for remote, long-term collection and real-time analysis of Patient-Reported Outcome Measures in routine clinical practice

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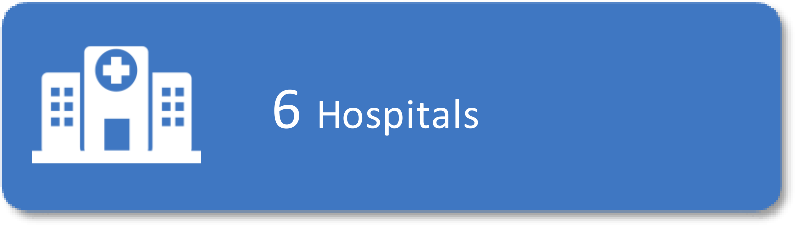
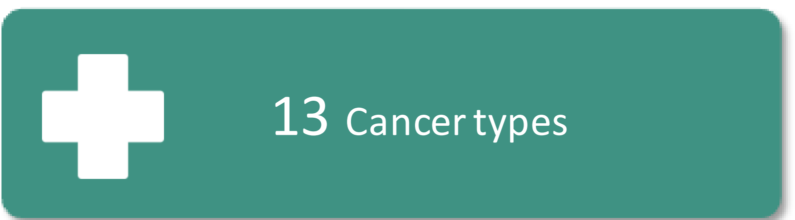
BSUH ESC Summary

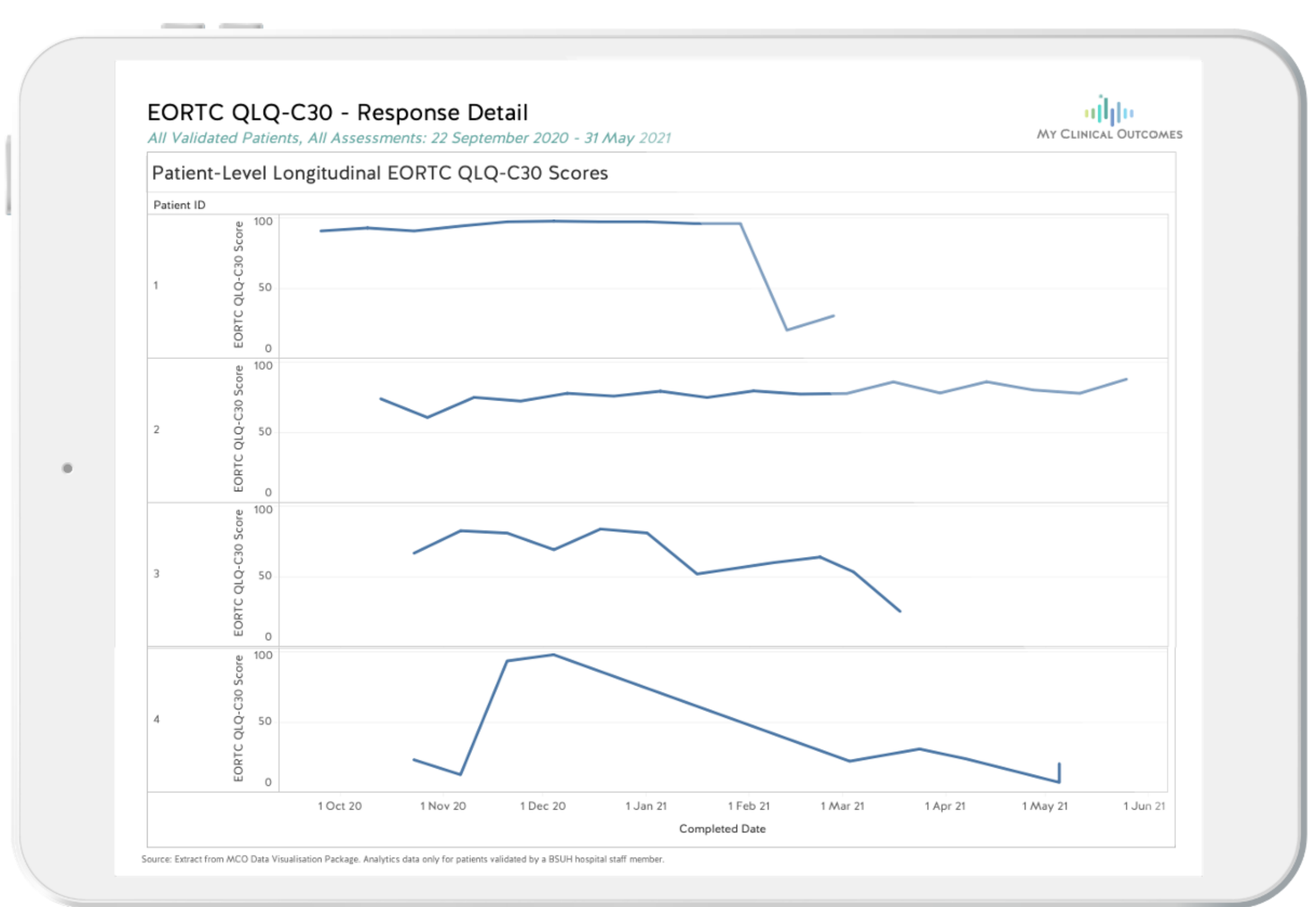
22nd Sept 2020 – 11th August 2021





304 Patients

Overall quality of life changes



Symptom burden

EORTC QLQ-C30 - Response Detail

All Validated Patients, All Assessments: 22 September 2020 - 31 May 2021

MY CLINICAL OUTCOMES

Key (Qs 1 - 28): 1. Not at All, 2. A little, 3. Quite a Bit, 4. Very Much

Key (Qs 29 & 30): 1 Very Poor, 2, 3, 4, 5, 6, 7 Excellent

1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase?
2. Do you have any trouble taking a long walk?
3. Do you have any trouble taking a short walk outside of the house?
4. Do you need to stay in bed or a chair during the day?
5. Do you need help with eating, dressing, washing yourself or using the toilet?
6. Were you limited in doing either your work or other daily activities?
7. Were you limited in pursuing your hobbies or other leisure time activities?
8. Were you short of breath?
9. Have you had pain?
10. Did you need to rest?
11. Have you had trouble sleeping?
12. Have you felt weak?
13. Have you lacked appetite?
14. Have you felt nauseated?
15. Have you vomited?
16. Have you been constipated?
17. Have you had diarrhoea?
18. Were you tired?
19. Did pain interfere with your daily activities?
20. Have you had difficulty in concentrating on things, like reading a newspaper or watching television?
21. Did you feel tense?
22. Did you worry?
23. Did you feel irritable?
24. Did you feel depressed?
25. Have you had difficulty remembering things?
26. Has your physical condition or medical treatment interfered with your family life?
27. Has your physical condition or medical treatment interfered with your social activities?
28. Has your physical condition or medical treatment caused you financial difficulties?
29. How would you rate your overall health during the past week?
30. How would you rate your overall quality of life during the past week?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

% of Total Answers

Total Assessments By Cancer Type

Breast (Primary)	Bladder	Bowel	Breast (Secondary)	Kidney	Liver	Lung	Oesophageal	Other	Ovarian	Pancreatic	Prostate	Stomach	Total
19	26	27	763	44	40	37	41	728	62	46	539	40	2,412

Source: Extract from MCO Data Visualisation Package. Means calculated across all completed assessments. Analytics data only for patients validated by a BSUH hospital staff member.

The Project

- 2 year fixed term project
  - Funded by NHS England

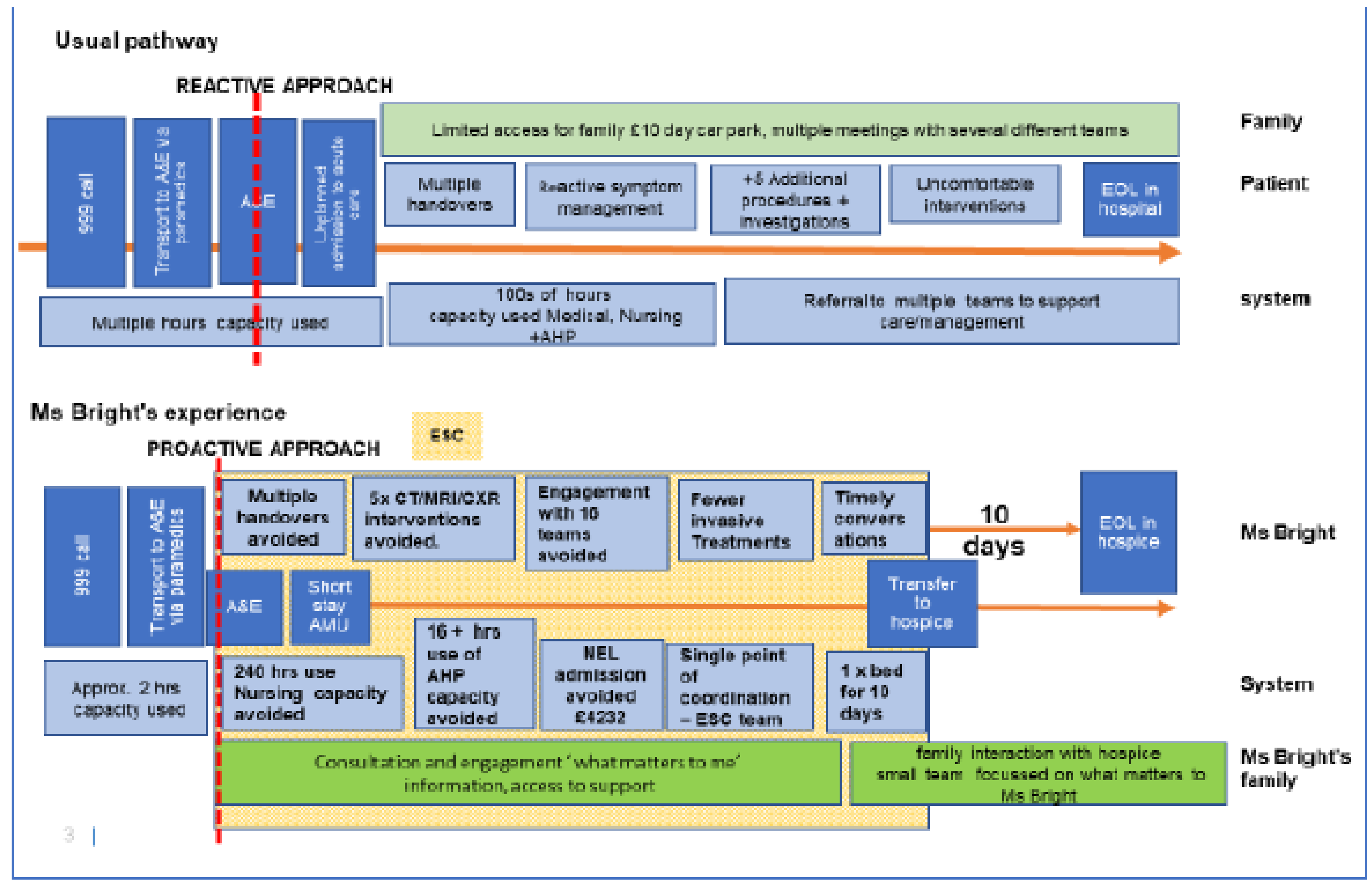
- Initially staffed by:
  - 3x Clinical Nurse Specialists
  - 1x Clinical Fellow
  - Data support from the Academic Health Sciences Network

- Project Aims
  - To reduce number of unnecessary admissions, clinical investigations and length of stay
  - To provide quicker symptom management and holistic care needs
  - To provide earlier access to specialist services and AHP reviews
  - Initially provided to those with a cancer diagnosis on a *treatable but curative pathway*

What We Learned

- Soon realised that zoning in on such a specific patient population was too limiting
- Now we see patients across the Acute Floor who:
  - Have a cancer diagnosis, irrespective of their treatment options
  - Have unmet palliative or supportive care needs
  - Are at risk of clinical deterioration

Mrs Bright



Mrs Bright

Modelling of potential system benefits from ESC using Ms Bright's experience

	Service	Ms Bright	1 x Ms Bright per month	1 x Ms Bright per week
Costs Avoided £	Acute care tests and procedures	5,500	66,000	286,000
	Non elective admission	4,232	50,784	220,064
Total (minimum)		**£9,732**	**£116,784**	**£506,064**
Capacity regained	Acute care - hrs	270	3240	14,040
	Bed days freed	10	120	520
	A&E - hrs	8	96	416
	Paramedic services - hrs	2	24	104
Total (minimum hrs)		**290**	**3480**	**15,080**

Benefits of involving the ESC team in A&E meant that Ms Bright's wishes were respected; she was moved to a hospice and supported by her family for the remaining days of her life. This was achieved with less than five hours of ESC team clinical time (£125) and support from the hospice (£1100 for 2 weeks). The savings generated from ESC engagement exceed £10k. – the costs here reflect the minimum of 'bed and board' cost. Together with at least 270 hours of capacity, that could be used for caring for other patients – including 240 hours of nursing time, over 16 hours of AHP capacity and ten days of bed use.

What patients and staff say

"I hate coming into hospital, so if teams can see I'm not doing so well through this site and stop that, then I'm all for it"

"Strong consideration should be given to the use of validated PROMS for patients to record symptoms of disease and side-effects of treatment experienced *as a regular part of clinical care.*
Systematic monitoring would facilitate communication between patients and their treatment teams by better characterising the toxicities of all anticancer therapies.
This would permit *early intervention* of supportive care services, thus *enhancing quality of life.*

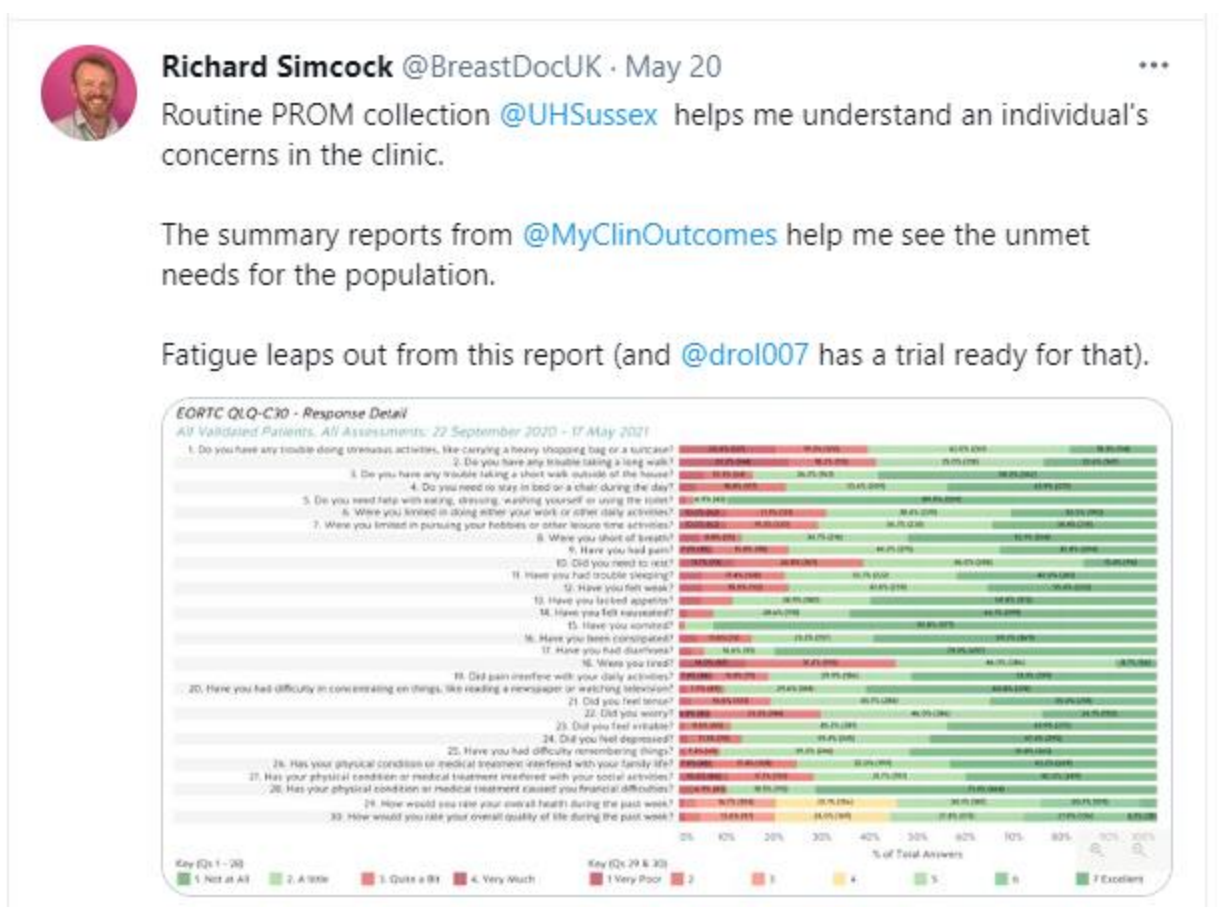
"I'm willing to try anything that may help or improve the care that I receive from the hospital"

"Its like a NEWS score for cancer"

"With a MCO assessment available a phone call can take 5 mins; if not, it takes longer and you risk missing something."

"By using MCO I can call the right people who need help, and just monitor others remotely. It'll save me so much time!!"

An Oncologists Perspective



Conclusions

- Changes in Quality life scores sensitive indicator – toxicity / progression etc
- Attending as an emergency – regardless of reason - clear indicator of deterioration vs elective care – should mandate supportive / palliative care discussions
- Collaboration key for an in reach service – acute medicine want guidance for all oncological problems and don’t discriminate