The Acute Oncology Nurse

Philippa Jones
UKONS Acute Oncology Forum Lead
Formerly Macmillan Network Lead Chemotherapy Nurse, Greater Midlands.
Hello.

• Where are we now?

• Acute oncology nurse roles.

• How can we promote a culture of Acute Oncology and support each other
UK Picture

Trusts throughout the UK are developing specialist acute oncology advice and assessment services in response to concerns raised in 2008 by the NCEPOD report.

- Scotland......... a number of acute oncology projects and the development of a national helpline service.
- Ireland ....aspects such as the adoption of UKONS triage tool.
- Wales .......... Acute oncology projects led by the Cancer networks and UKONS triage tool.
- England .......Peer Review measures in response to NCAG report.
Internationally

UK leading the way!

• Hong Kong
• Australia
• Canada
• New Zealand
• Acute Oncology is developing to meet a need, as we manage more patients, with complex treatments and the pressure on services increases, in particular emergency departments and acute medicine, it is essential to bring together clinicians from acute medicine, emergency care, oncology and haematology to ensure that patients receive rapid assessment and appropriate management.
The Acute Oncology Team

A multi-disciplinary group of health care professionals working at a new frontier; developing a care pathway that will work across specialties, that is refined enough to highlight oncology concerns and direct the health care professional in the provision of safe quality care.
One common key factor in their development is the
- Acute Oncology Nurse –
Acute oncology nurses

• Specialist Acute Oncology Nurses are appearing all over the UK, not just in England where they are a recommendation of Peer review, with teams in Scotland and Wales.

• The role of the Specialist AON is multi-faceted and demands that these nurses demonstrate many skills including leadership, innovation, negotiation, teaching and importantly expert clinical skills.
• Services are designed to be responsive to local need so the role can differ between cancer centres and units. It is also influenced by the presence of an Emergency Department (ED) or Acute Medical Admissions Unit.

• It is clear that however local services are configured there are core elements to the Specialist AON role:
The reality is that cancer patients present for emergency assessment via many routes, and it is the role of the Specialist AON to work in partnership with colleagues outside of the Oncology or Haematology speciality and with managers to strategically streamline admission pathways so that the patient receives the expert assessment they need at the point of entry.

Specialist AON are collating service specific data to provide evidence and information that will help to shape their services. Reporting this detail to manager’s helps to understand the patient pathways, predict busy periods and inform staffing requirements.
“We receive alerts for patients on treatment once they hit ED, this means we can assess the patient and ensure they are on the correct pathway”.

Niamh Hughes, Acute oncology CNS, University Hospital Coventry and Warwickshire NHS Trust.
• The UK Oncology Nursing Society (UKONS) triage tool is now established throughout the UK and has set the standard for triage of patients who call the advice line. The formalisation of telephone triage has provided Acute Oncology Services with a framework for training nurses within their trusts, thus improving patient safety and empowering the nurse who takes the call to make the correct patient management decision.
• Information obtained from the triage records provides evidence that patients needing further assessment and support are recognised and unnecessary admission is often avoided. Reporting this level of detail to site-specific teams can alert clinicians to any complications associated with specific chemotherapy regimens.
• “The Acute Oncology Team collected data relating to the volume of calls from breast cancer patients suffering with nausea and vomiting as a consequence of treatment, this was used for further research, and led to trust agreement that all women undergoing treatment for breast cancer should receive an NK1 receptor antagonist, resulting in a significant reduction of this unpleasant side effect”.

Hannah Pritchard, Macmillan AOS Team Leader, University Hospital Southampton NHS Foundation Trust” [1]
• Macmillan cancer support report that there are currently two million people living with or after cancer across the UK, as we treat more patients and as cancer becomes more of a long-term condition the need to understand what is or is not a complication of cancer is apparent. Patients often present with a complex set of problems that require an MDT approach, the specialist AON is a crucial member of an Acute Oncology Team (AOT) and provides initial assessment of the acutely ill patient and advises on oncology problems. Facilitating speedy referral to appropriate teams not only ensures that the patient receives the right care at the right time but aids patient flow within the hospital.
• Specialist Acute Oncology Nurses are developing their knowledge and experience of oncological emergencies and the role is developing further with the emergence of advanced nurse practitioners and consultant nurses who can take responsibility for the entire patient pathway.

• A nurse consultant-led model provides a comprehensive range of clinical and non-clinical activities that meet the needs of an acute oncology service and is good value for money.
• The establishment of dedicated acute oncology assessment areas in a number of Trusts has further streamlined the patient pathway. The University Hospital of North Staffordshire opened an emergency assessment bay in 2009. The impact on patient care has: avoided admissions; provided patients with appropriate medication, advice and on-going support; reduced length of stay and associated risks of hospital acquired infections and improved the overall satisfaction and experience of the emergency care pathway for patients attending EAB at the Cancer Centre.
• The Peer review measure for neutropenic sepsis requires collection of audit data to evidence the administration of intravenous antibiotics within one hour of a patient presenting with a suspected neutropenic sepsis. The audit information is proving to be useful for evaluating the target of ‘one hour door to needle’. Identification of the reasons that this target is not met can be used as a lever to obtain resources. It is also vital to use this information to educate and raise awareness of the condition and change clinical practices in order to improve the patient pathway.
Many acute oncology services have been established with limited funding and resources, with some having a caveat to produce evidence of their success to achieve further funding or obtain better resources. Teams are now able to use the improved data collection to strategically review and tailor their services to meet the local specific needs, for example to provide extra staffing and dedicated acute oncology assessment areas as demonstrated at Cambridge University Hospitals NHS Foundation Trust and Oxford University Hospitals NHS Trust.
Excellent communication between the oncology team and acute medical and emergency care teams is vital to improve patient care and safety and reap the organisational benefits of an efficient acute oncology service. One of the serious concerns raised in the NCEPOD (2008) report related to the poor communication between care teams, Specialist acute oncology nurses are the link between teams ensuring that all those involved in the patients care are aware of the patient’s circumstances.
• The Specialist AON provides patients and carers with information, advice and support with the aim of:
• Encouraging self-management and monitoring patients remotely when appropriate.
• Advising patients on the relevance of their cancer to their current problem.
• Assuming the key worker role when appropriate.
• “The majority of patients felt safe and secure that the AON would monitor and review them even if they were not able to be admitted to the Oncology ward. Patients always liked to see a familiar face, particularly as that familiar face was able to co-ordinate any aspects of their Oncology care that were relevant to their emergency admission”.

Angela Cooper, Oncology Ward Manager, Shrewsbury Cancer Centre “
• Oncology nurses have often heard the phrase “this is an oncology patient, where is the Oncology team” echoing around the busy emergency areas. Acute Oncology patients belong to all of us and the Specialist AON is working hard to ensure that patients are managed well 24/7.

• The Specialist AON either provides early intervention or equips other healthcare professionals to do so. The role is therefore one of educator and facilitator. This is a continuous process with the need to encourage all to develop the habit of thinking “Acute Oncology”.
• The specialist AON provides teaching and education to develop acute oncology skills in all entry portals so that the appropriate assessment and management of this group of patients can be provided at all times and is not reliant on the presence acute oncology team.

• This is an extremely important aspect of the role and has specific significance in trusts that have a single handed acute oncology nurse and/or visiting oncologists. They are charged with ensuring that patients receive the same level of assessment and management in their absence.
The future

• This is an emerging speciality, combining skills from acute and emergency nursing with specific knowledge and expertise from oncology and haematology. Acute oncology nursing has the potential to become a speciality in its own right.

• Although these are challenging times within healthcare, acute oncology nurses have a window of opportunity to review and streamline patient pathways and to work with managers and commissioners to identify service and funding requirements to ensure efficient use of health care resources.

• Data collection and patient feedback will shape the services we provide. The Specialist AON is central to this process and the strategic nature of this role should not be overlooked.
• Locally the Specialist AON is the oil in the machine working to make sure that all parts function smoothly, safely and efficiently to ensure a robust consistent service, whilst nationally the acute oncology nurses forums are working together to share good practice and support the Specialist Acute Oncology Nurses to develop a standardised approach to acute oncology care.
It is exciting, we do make a difference and I wouldn't have any other job but it can feel so lonely out there! Especially in a cancer unit without on-site oncologists and no oncology beds. I know we are achieving an excellent service within the resources we have because our feedback is from the words and interactions with patients.
Acute Oncology Nurse Consultant

- It is an exciting role, no two days the same, with the satisfaction from patients being the daily driver to steer through the challenges'

It's the oncologists that see the benefit to their patients during this very acute episode, the early response from the acute oncology nurse makes that difference; treatment escalated quickly, an essential link to their cancer team.

- Managing communication issues and expectations from staff and patients makes the role truly valuable.
A couple of quotes from patients;

1. A patient found to have a malignancy during an emergency admission

"Dr X the Oncologist and Sister Y, Acute Oncology Nurse were absolutely wonderful in the way they told me that my condition is terminal. They were also marvellous in the way they gave my wife the same news. They have given me the strength to look forward to death without fear."

2. Patient admitted to orthopaedic ward with chronic back problems unrelated to her cancer but 1 day post chemo

"You came to see me twice when I was a patient on the ward last week, admitted for pain control in my leg due to spinal stenosis. I'm writing to thank you very much for how you listened to me and for what you said to me. I don't envy you your job but have to say that you do it exceptionally well! I had got myself into a bit of a self-pitying circle and you gently led me out of it - thank you for all your kindness and insight and just listening without making me feel stupid. I am so grateful - Thank you"
The aims are:

• To offer a group voice and collective opinion on matters relating to Acute Oncology Nursing.
• To provide support and guidance by connecting acute oncology nurses across the UK.
• To promote and facilitate the sharing of good practice.
• To work together as a forum to develop guidelines, practical tools and pathways to aid in the implementation of first class acute oncology services.
• To provide a resource for the health community by gathering a pool of expertise all can access.
• To support education and showcase excellent practice through workshops, study days etc.

• To support multi agency project working with professional organisations such as the Macmillan Cancer Support and the Royal Colleges.
Acute Oncology Tools
## 24 Hour Helpline Assessment

### TRIAGE LOG SHEET 1

<table>
<thead>
<tr>
<th>Patient Details</th>
<th>Enquiry Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
<td><strong>Date:</strong></td>
</tr>
<tr>
<td><strong>Hospital no:</strong></td>
<td><strong>Time:</strong></td>
</tr>
<tr>
<td><strong>DOB:</strong></td>
<td><strong>Who is calling?</strong></td>
</tr>
<tr>
<td><strong>Tel no:</strong></td>
<td><strong>Contact no.:</strong></td>
</tr>
</tbody>
</table>

**Reason for call**

- **Is the patient on active treatment?** Chemotherapy ☐ Radiotherapy ☐ Supportive ☐ No ☐
- **Are they part of a clinical trial?** Yes ☐ No ☐
- **When did the patient last receive treatment?** 1-7 days ☐ 8-14 days ☐ 15-28 days ☐ Over 4 weeks ☐
- **What is the patient's temperature?** ☐ °C (Please note that this is a significant indicator of sepsis)
- **Does the patient have a central line?** Yes ☐ No ☐

### Medically Significant Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever and rigors (chills)</td>
<td>☐</td>
</tr>
<tr>
<td>Chills</td>
<td>☐</td>
</tr>
<tr>
<td>Performance Status</td>
<td>☐</td>
</tr>
<tr>
<td>Nausea</td>
<td>☐</td>
</tr>
<tr>
<td>Vomiting</td>
<td>☐</td>
</tr>
<tr>
<td>Dehydration</td>
<td>☐</td>
</tr>
<tr>
<td>Cyanosis</td>
<td>☐</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>☐</td>
</tr>
<tr>
<td>Diarrhoea or constipation</td>
<td>☐</td>
</tr>
<tr>
<td>Infection</td>
<td>☐</td>
</tr>
<tr>
<td>Paroxysmal tachycardia</td>
<td>☐</td>
</tr>
<tr>
<td>Collapse</td>
<td>☐</td>
</tr>
<tr>
<td>Peritonitis</td>
<td>☐</td>
</tr>
<tr>
<td>Breathing difficulty</td>
<td>☐</td>
</tr>
<tr>
<td>Respiratory distress</td>
<td>☐</td>
</tr>
<tr>
<td>Other (please state)</td>
<td>☐</td>
</tr>
</tbody>
</table>

### Triage Practitioner

**Signature:** [signature]  **Print:** [print name]  **Designation:** [designation]  **Date:** / /

**Follow Up Action Taken:**

**Consultants team contacted:** Yes ☐ No ☐  **Date:** / /

**Signature:** [signature]  **Print:** [print name]  **Designation:** [designation]  **Date:** / /  **Time:** / /
Progress

- A tool that will determine “the patient’s level of risk” and prioritise the level of urgency indicated by the presenting symptoms and will aid in identifying potential emergency situations.

- Uptake continues at a pace in both the NHS and Private sector in the UK and internationally 160 trusts known (please look at the map).

- The Pilot of the Paediatric version developed in partnership with the RCN is almost complete, evaluation is underway.

Primary Care Triage Services

• Shropshire care coordination and GP out of hours service. Macmillan funded pilot.

• DH funded pilot in Scotland with NHS24.

Very positive results to date.
A Primary Care version has been developed in collaboration with Macmillan GP’s and Nursing forum.

It is now available as a PDF or hard copy.

Really well received by the Primary Care Teams.
**ONCOLOGY/HAEMATOLOGY RISK ASSESSMENT TOOL FOR PRIMARY CARE HEALTH PROFESSIONALS**

If your patient scores RED or AMBER for any toxicity you should contact the 24 Hour Helpline immediately for a full image assessment.

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>RED</th>
<th>AMBER</th>
<th>ORANGE</th>
<th>GREEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever and/or generally unwell and receiving cytotoxic chemotherapy</td>
<td>Contact telephone helpline for URGENT Assessment - Risk of neutropenic sepsis</td>
<td>Mild fever and hematico</td>
<td>Moderate fever and hematico</td>
<td>Mild fever and hematico</td>
</tr>
<tr>
<td>Pain</td>
<td>Mild pain</td>
<td>Moderate pain</td>
<td>Severe pain</td>
<td>Life threatening sepsis</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>None</td>
<td>2-5 episodes in 24 hours</td>
<td>&gt;10 episodes in 24 hours</td>
<td>Life threatening sepsis</td>
</tr>
<tr>
<td>Nausea &amp; vomiting</td>
<td>None</td>
<td>1 episode in 24 hours</td>
<td>2-5 episodes in 24 hours</td>
<td>Life threatening sepsis</td>
</tr>
<tr>
<td>Muscular pain or muscle cramps</td>
<td>None</td>
<td>1 episode in 24 hours</td>
<td>2-5 episodes in 24 hours</td>
<td>Life threatening sepsis</td>
</tr>
<tr>
<td>Rash</td>
<td>None</td>
<td>1 episode in 24 hours</td>
<td>2-5 episodes in 24 hours</td>
<td>Life threatening sepsis</td>
</tr>
<tr>
<td>Skin ulceration or infection</td>
<td>None</td>
<td>1 episode in 24 hours</td>
<td>2-5 episodes in 24 hours</td>
<td>Life threatening sepsis</td>
</tr>
<tr>
<td>Serous effusion</td>
<td>None</td>
<td>1 episode in 24 hours</td>
<td>2-5 episodes in 24 hours</td>
<td>Life threatening sepsis</td>
</tr>
<tr>
<td>Wound infection or cellulitis</td>
<td>None</td>
<td>1 episode in 24 hours</td>
<td>2-5 episodes in 24 hours</td>
<td>Life threatening sepsis</td>
</tr>
</tbody>
</table>

**Instructions for Use**

The UKONS 24 Hour Triage Tool is a widely validated tool that is used to perform a risk assessment for patients who have:
- Received systemic anti-cancer therapy
- Received systemic anti-cancer therapy in the last 6-8 weeks

It is important that the effects of treatment are not underestimated and that significant toxicities are highlighted.

**Risk assessment process**

There are a number of questions to ask and information that will need to be collected to make sure that the correct advice is given.

1. **What was their weight before?** What is their weight now? Any recent weight loss? Any problems with dehydration, diarrhoea, constipation?
2. **How long do they have a problem?** Is it new? Any previous symptoms? Onset?
3. **What does the patient have abdominal pain/vomiting?** Does the patient have any abdominal pain/vomiting? AskSpecific questions?
4. **What is the patient doing?** Are they able to perform basic activities?
5. **What is the patient's weight?** What weight do they normally weigh? Is there any significant weight loss?
6. **Is it a new problem?** Where is it? How long have you noticed it? Any previous symptoms? Onset?
7. **Are they able to perform basic activities?**
8. **Is the patient's weight normal?** What is their weight now? Any recent weight loss? Any problems with dehydration, diarrhoea, constipation?

**Risk assessment tool**

This tool provides a simple method to grade the toxicities according to the patient's symptoms and advise action accordingly.

**Performance status**

No - Have there been no change in performance status?

- Asymptomatic
- Symptomatic but completely ambulant
- Symptomatic, <50% in bed during the day
- Symptomatic, 50-60% in bed
- Symptomatic, bed bound

**Grade**

- 0 - Unchanged
- 1 - Slightly increased
- 2 - Increased
- 3 - Marked increase
- 4 - Severe toxicity

**UKONS Primary Care Guidelines**

generic guidelines supported by Macmillan.

Will be available as a pocket tool for order on the Macmillan web-site with the facility to add trust contact details.

For further detail contact: philippajones@nhs.net
Patient versions

• North of England Cancer Network – Patient held Chemotherapy record (Lilly diary)

• Cancer Emergency Response Tool, an app for patients

Dr. Richard Osborne, Dorset Cancer Centre
CERT APP is now live in iTunes, you can download it below.


<table>
<thead>
<tr>
<th>Select a Symptom</th>
<th>Nausea/ Feeling sick</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Temperature</td>
<td>Nausea</td>
</tr>
<tr>
<td>Vomiting</td>
<td>Sore mouth</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Breathlessness</td>
</tr>
<tr>
<td>Bruising / bleeding</td>
<td>Leg Weakness</td>
</tr>
</tbody>
</table>

- Select Severity
  - Green: I can eat and drink fairly normally
  - Orange: I can eat and drink a bit but not as much as normal
  - Red: I cannot eat or drink anything
Initial assessment and management.
<table>
<thead>
<tr>
<th>Midlands Acute Oncology Nurses Forum</th>
</tr>
</thead>
</table>

**UNPLANNED ADMISSION LOG SHEET**

- ✔ Standardised Assessment Process
- ✔ Evidence Based Assessment Tool
- ✔ Check List/aid memoir
- ✔ Audit Tool
- ✔ Record Keeping
- ✔ Evidence of practice
- ✔ Training and education
- ✔ Communication tool

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
# ACUTE ONCOLOGY 10 KEY MESSAGES

1. Oncology patients require speedy initial triage and assessment. Cancer Treatment toxicity can be **Life-Threatening**.

2. Has the patient had chemotherapy or radiotherapy in the last 6 weeks? If yes - inform the Acute oncology Team within 24 hours of admission.

3. Chemotherapy in the last 6 weeks? Temperature over 37.9°C or unwell? This patient is at risk of neutropenic sepsis?

4. Treat suspected Neutropenic sepsis immediately with I.V. Antibiotics! **‘1 hour door to needle’ DO NOT WAIT FOR BLOOD RESULTS.**

5. **RED FLAGS** for **MALIGNANT SPINAL CORD COMPRESSION (MSCC)**? Increasing back pain; band-like or different in character; altered sensation in limbs, gait disturbances, problems with urinary or bowel function?

6. Refer suspected MSCC urgently to the **MSCC CO-ORDINATOR**. Immediate management — Nurse patient flat/log-roll/ Steroids & Urgent MRI

7. Access Acute Oncology management guidelines and pathways on the trust intranet and folder on oncology/haematology wards

8. Carcinoma of Unknown primary (CUP)? Refer to Acute Oncology Team/ CUP MDT within 24 hours of suspicion.

9. STOP oral and/or infusional chemotherapy until discussed with the Acute Oncology Team by the end of the next day

10. **Escalate care**. Consider early intervention by specialist teams

---

**Midlands Acute Oncology Nurses Forum**

---

**Acute Oncology Team**

Midlands Acute Oncology Nurses Forum  V1.0 . 20.09.2013
Macmillan are kindly supporting a Special Interest Group for the Midlands Acute Oncology Nurses Forum on Learn Zone.

This provides a forum discussion facility and a document library allowing us to share good practice and seek opinion and/or advice. This is not restricted to nurses working within the Midlands you are all welcome to join and make use of this facility.

Accessing the Acute Oncology Special Interest Group on Learn Zone - Go to: [http://learnzone.org.uk/](http://learnzone.org.uk/)

- In the green bar click on ‘special interest groups’
- It will ask you to enrol-click ‘continue’
- You will need to either log in or create an account.
- It will then list the special interest groups, select: Midlands Acute Oncology Nurses Forum

For first time access the password is ---MidA0N (the 0 is a zero)
A web based Generic Acute Oncology Induction Training Programme.
Developed by Acute Oncology Nurses and Macmillan using the East Midlands Cancer Network template.

Forum members are working alongside Macmillan to complete an online Acute Oncology Induction Training Programme.

Due to be launched end of 2013.
Midlands Acute Oncology Nurses Forum.

Nursing Competency Frameworks for the Acute Oncology Service (AOS)

Clinical Nurse Specialist Role (Band 7)
Associate Clinical Nurse Specialist (Bands 6 or 5)

Author; UKONS/ Midlands Acute Oncology Nurses Forum

Final Version 01 - 27.11.2013

Midlands Acute Oncology Nurses Forum.

Acute Oncology Quality Indicators

Acute oncology services are being established across the United Kingdom with the aim of improving the care provided to cancer patients suffering from an acute problem related to their disease be that known or unknown or the treatment of their disease. The quality and outcomes measures below have been developed in order to assess the effect of these new services and provide evidence support continuation and/or further development.

Lives of people affected by cancer will be improved through using the AOS Service by:

- Reduction in length of stay
- Reduction in emergency admissions
- Timely and appropriate management of patients with potential neutropenic sepsis
- Timely review and assessment by members of the Acute Oncology service
- Reduction in unnecessary clinical investigations
- Reduction in waiting times
- Increase in patient satisfaction
- Reduction in complaints
- Reduction in avoidable deaths within 30 days of systemic anti-cancer therapy (NICE 2009)
In the pipeline

• MSCC patient information

• MSCC Care and management plan
The message is getting through!

Acute care toolkit 7:
Acute oncology on the acute medical unit
October 2013

Advances in cancer management continue to improve patient outcomes, but this has been accompanied by a steady increase in emergency admissions with disease- or treatment-related complications. The acute medical unit (AMU) currently shoulders much of this burden. Providing efficient and excellent care to this complex patient group in a busy AMU presents a key challenge. A good working partnership between the AMU and acute oncology service (AOS) can result in a significant improvement in patient care together with opportunities for admission avoidance and early discharge.

Background
Cancer patients are attending UK emergency units in increasing numbers with a diverse and challenging set of problems (Box 1). An ever-widening range of treatments for broadening cancer diagnoses makes it difficult for a non-specialist to remain up to date in best management and leaves patients and staff exposed. The National Confidential Enquiry into Patient Outcomes and Death (NCEPOD), For better, or worse? (November 2008) identified a number of worrying themes in patients dying within 30 days of receiving systemic anti-cancer therapy (SACT), with 27% of cases being judged as having death hastened or even caused by treatment. The pitfalls exposed in the case of these patients presenting with febrile neutropenia (FN) within 30 days of their death will resonate with many staff working in the AMU:
- delay in patient admission
- delay in antibiotic administration
- failure of junior doctor diagnosis
- lack of policies or awareness of them
- lack of senior assessment.

In this report, 49% of cases were judged as having room for improvement in their care. These worrying findings led to the National Chemotherapy Advisory Group (NCAG) report Chemotherapy services in England: ensuring quality and safety (Aug, 2009), which made a number of recommendations centred on careful provision of care and effective communication between cancer services.

Box 1 Acute oncology themes
- Type I: new cancer diagnosis (-20%)
- Type II: treatment-related complication (-30%)
- Type III: cancer complication (1-50%)

‘The National Confidential Enquiry into Patient Outcomes and Death (NCEPOD) report, For better, or worse? (November 2008) identified a number of worrying themes in patients dying within 30 days of receiving systemic anti-cancer therapy (SACT), with 27% of cases being judged as having death hastened or even caused by treatment.’
Is it worth it?

- Admission avoidance
- Decreased Length of stay
- Reduced investigations/intervention

My favourites:
- **Improvement in quality and safety**
- **Increased patient satisfaction**
- **Increased professional satisfaction**
Thank you