UKONS
Oncology Nursing Society

EVALUATION

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1.0 INTRODUCTION

At the inaugural meeting of UKONS chemotherapy nurses forum in 2007 the chemotherapy nurses locality groups were asked to identify and review an area of chemotherapy care that could be improved either by sharing good practice or developing guidelines that could be shared nationally. Following discussion it was decided that the Central West Chemotherapy Nurses Group would review and develop 24 Hour Triage Services.

Literature indicates that there is a specific need for oncology patients receiving treatment to have access to a telephone enquiry service manned by trained staff (Anastasia 2002). Such a service ensures that appropriate/consistent advice is offered, and also allows for the early recognition of potential emergencies and side effects of treatment. The assessment and advice given to a potentially ill patient is crucial in providing the best possible outcome. Patient safety is an essential part of quality care; each and every situation should be managed appropriately.

The function of telephone triage in this context is to determine the severity of the callers' symptoms/complaint and to direct the caller to the appropriate emergency assessment area if required or initiate appropriate medical follow up (Courson, 2005).

Telephone triage is an important and growing component of current oncology practice, we must ensure that patients receive timely and appropriate responses to their calls (Towle,2009). Advice given over the telephone and close collaboration with community services using the developed protocols, guidelines and policies should ensure consistent advice is given and the number of patients requiring emergency admission may be reduced. Telephone triage enables the oncology nurse to have a positive impact on the standards of care. Co-ordinating care can reduce the number of unnecessary clinic visits, recognize early or potential emergencies, and provide ongoing emotional support to the family' (Johnson and Yarbo 2000). Many situations arise in oncology/haematology care that require patient assessment over the telephone. At present there are no consistent national guidelines in place to support practitioners in helpline patient management

The groups aim was to gather expertise and evidence and develop triage guidelines that would;-

- Improve patient safety and care by ensuring that they receive a robust, reliable assessment every time they contact a helpline for advice.
- Those assessments are of a consistent quality and use an evidence based assessment tool.
- That management and advice is appropriate to the patients' level of risk. To ensure that those patients who require urgent assessment in an acute area are identified and that action is taken, but also to identify and reassure those patients who are at lower risk and may safely be managed by the primary care team or a planned clinical review and avoid unnecessary attendance.
- To develop guidelines that would form the basis of triage training and competency assessment for practitioners.

The steering and development group of Central West and Wales UKONS members have over a three year period developed, designed and piloted the

"24 Hour Helpline, Rapid Assessment and Access Tool Kit".

The tool if used correctly provides safe and understandable guidelines and advice for both staff and patients. The process is easy and reliable with clear instructions and an established pathway. The tool is user friendly and is utilised well, with 72.5 % of log sheets completed correctly.

User feedback has stated that it has standardised care and supported decision making. It provides a framework for training and competency assessment and will also support governance processes. Feedback from practitioners assures us that with regular use the whole assessment process is improved in quality, structure and time taken.

2.0 Development process

The group began work in December 2007.Oncology and Haematology Nurses from within the central West Region were invited to attend a series of meetings to discuss current practice, determine the project aims and objectives and develop a project plan. The meetings were very well supported. It was clear that the group were enthusiastic and keen to work together.
The triage process was discussed coupled with a comprehensive in depth review of current pathways and guidelines, led the group to the conclusion that there were a number of steps involved in triage and assessment and that the requirements should be considered on an individual basis for each individually.
The first step was identified as Helpline Provision/triage. The decision to concentrate on the development of guidelines for helpline services was reinforced by the publication of the following reports and guidelines:-

- **The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) report of November 2008 "For better, for worse?" highlighted inappropriate provision of care and support for chemotherapy patients suffering from treatment related complications and recommended improved emergency support services should be developed.**

- **Patients who develop significant complications following chemotherapy need expert assessment and hospitalisation. Early assessment and intervention is likely to reduce the need for and the duration of hospitalisation.(NCAG 2009)**

- **National Cancer Peer Review Programme. Manual for Cancer Services 2008;Acute oncology – Including Metastatic Spinal Cord Compression Measures state that telephone advice should be available, 24 hours a day, seven days a week to patients and carers having, or having had, or awaiting, treatment for cancer.**

- **Patients have the right to be treated with a professional standard of care, by appropriately qualified and experienced staff, in a properly approved or registered organisation that meets required levels of safety and quality .(Section 2a of The NHS Constitution,2009)**

- **The DOH Manual for Cancer Services (2004) states that the cancer networks/trusts must have agreed minimum service specifications for 24hr telephone advice.'**

2.1 A steering and development group of Central West and Wales UKONS members have over a three year period developed, designed and piloted the

"24 Hour Helpline, Rapid Assessment and Access Tool Kit".

The group met regularly during this period to review and refine the tool kit. At each stage the members were asked to take the document/kit back to their clinical teams for discussion. The comments were then considered at the following meeting and the tool kit amended accordingly. The UKONS Chemotherapy Leads and Board Members and the Cancer team at the National Patient Safety Agency were also invited to review the document/kit at regular intervals and their comments were also considered.

Following steering group approval of the content and format of the tool kit, the chair and vice chair of the group met with the cancer lead of the National Patient Safety Agency. This agency had been tasked with a review of reports relating to support for patients who have complications relating to their treatment (NPSA oral therapies alert 2008).The toolkit was

identified as a positive step towards supporting patients by providing consistent reliable advice and support for both patients and staff.

The National Patient Safety Agency offered to provide funding and advice to support the design, printing and pilot of the tool kit.

3.0 Aims and Objectives

The Tool Kit has been developed for use by all members of staff who may be required to man 24 hour **HELPLINES** for adult patients who have:-

- received chemotherapy /systemic anti cancer therapy
- received any other type of anticancer treatment including Radiotherapy
- disease/treatment related immunosuppression (i.e. acute leukaemia,corticosteroids)
- N.B. this **does** include adolescent patients treated within adult units.

For the purpose of the Tool Kit, both Oncology and Haemato-oncology services were considered as one service and referred to as ONCOLOGY.
. This tool kit aims to provide:-

- Guidance and support to the practitioner at all stages
- A simple but reliable assessment process
- Safe and understandable advice
- Communication and record keeping
- Competency based training
- An audit tool.

This tool does not address patient management post – admission, nor does it contain admission pathways. It does, however, give the right of admission for assessment to the practitioner manning the helpline. The level of oncology/chemotherapy knowledge and training required to manage a 24 hour helpline is variable nationally and many practitioners feel unsure and ill equipped to make advanced care decisions. This tool kit is also an educational tool and includes a competency assessment framework that all disciplines of staff would need to complete prior to manning a helpline facility.

4.0 Content of The Tool Kit

This triage process can be broken down into three steps;-

- Contact
- Assessment/definition of problem
- Appropriate intervention/action

The Tool Kit supports and guides the practitioner through each of the three steps enabling them to provide appropriate consistent advice and lead to the early recognition of potential emergencies and side effects of treatment.
The tool kit consists of;

- Tool kit manual with competency assessment
- Alert Card
- Triage pathway which is to be used to guide the user through the triage process
- Triage log sheet
- Triage tool based on the WHO/NCRI-CTCAE common toxicity criteria with individual guidelines
    - Poster
    - Concertina pocket card

4.1 The Tool Kit Manual (appendix 1)

A simple document detailing;-

- how the tool was developed and who was involved
- the aims and objectives of the tool kit
- how it should be used and who should use it
- the training required and workforce competency assessment framework

This workforce competency framework covers the assessment of patients who have:-

- received chemotherapy or any other type of systemic anticancer treatment
- received radiotherapy as a concurrent treatment with chemotherapy or as a single agent.
- disease/medication related immunosuppresion (i.e.acute leukaemia,corticosteroids)

It also contains examples of the documentation and assessment tools
It is clinically focused and covers:-

- Referring a patient for further assessment.
- Giving interim clinical advice and information to patients or others who might be with them regarding further action, treatment and care.

It is applicable to communication via the telephone with an individual in a variety of locations or talking face to face in a healthcare environment.

4.2 The Alert Card (appendix 2)

NCAG (2008) states that "each patient must be provided with a card containing key information about the treatment and contact details"
The manual contains an example of a Treatment Alert Card
This contains information regarding:-

- Patient identification details
- Regimen details
- Symptom recognition/warning signs
- Emergency contact numbers
- Treatment delivery area

4.3 Triage Pathway (appendix 3)

This is a process map that details each step of the pathway.
Helpline providers should have clear agreed assessment and admission pathways. There should be a clearly identified Helpline practitioner for each span of duty

4.4 Triage Log Sheet (appendix 4)

It is vitally important that the data collection process is methodical and thorough in order for it to be useful and provide an accurate record of the triage assessment.
A log sheet should be completed for **all** calls and unscheduled patient visits. This provides an accurate record of triage and decision making and will support audit of the helpline service.

The data collected should be:-

C complete, **A** accurate, **L** legible, **C** concise, **U** useful, **T** traceable, **A** auditable

4.5 The Triage Assessment Tool (appendix 5 and 6).

The Triage practitioner's assessment of the presenting symptoms is key to the process. The practitioner needs to be aware of the caller's ability to communicate the current situation accurately and use appropriate questioning and prompts until all necessary information has been gathered. The triage practitioner should consider the data collected along with the patient's level of concern in order to perform a clinical assessment.

The toxicity assessment triage tool is used as a guideline highlighting the questions to ask and guiding the practitioner through the decision making process. This leads to appropriate action by giving structure, consistency and reassurance to the practitioner. If, in the triage practitioners clinical judgment the guideline is not appropriate to that individual situation, the rationale for that decision should be documented.

The triage tool is based on the World Health Organisation Toxicity Assessment Criteria and the NCI Common Terminology Criteria for Adverse Events. It is a risk assessment tool used to grade the patients' symptoms and establish the level of risk the patient is currently under, and will enable practitioners to provide a consistent standard of advice.

Action selection is based upon the triage practitioners grading of the presenting symptoms/toxicity following interview, data collection and triage.

- **Red - Any toxicity graded here takes priority and action should follow immediately. Patient should be advised to attend for urgent assessment as soon as possible.**

- **Amber - If a patient has two or more toxicities graded amber they should be escalated to red action and advised to attend for urgent assessment.**

- **Amber – one toxicity in the amber area should be followed up within 24 hours and the caller should be instructed to call back if they continue to have concerns or their condition deteriorates**

- **Green - callers should be instructed to call back if they continue to have concerns or their condition deteriorates**

The triage tool is available as a wall chart or a pocket sized concertina card.

5.0 The Pilot.

The National Patient Safety Agency provided funding to support design and production of the "Tool Kit" for a multi centre pilot. The steering/development group all enrolled their clinical areas and began to let people know that we were looking for interest from clinical areas who had not been involved with the development of the tool kit. We were inundated with expressions of interest and quickly realized that this was going to be an extensive pilot.

29 hospital trusts from England, Wales and Northern Ireland asked to take part; they were invited to send Pilot Leads to one of two "Pilot introduction and training days". Those who attended were asked to report back to their governance teams and obtain signed consent to participate and agree to the pilot process (Appendix 7).

27 Sites agreed to participate in the pilot at this point, included within these 27 were all the steering group members. The whole of the Greater Midlands Cancer Network enrolled. A second round of the pilot recruited a further 9 sites, 8 of which are ongoing and 1 who has completed the pilot and is included in the final evaluation.
19 cancer centres and 17 cancer units have been involved.
A list of the pilot sites can be found at appendix 8.

5.1 Pilot Process

5.1.1 Training

All staff using the Tool Kit had to receive training and assessment of competency.
The pilot leads were assessed at the training day and acted as mentors and assessors to their trust teams.

A competency framework was supplied for completion prior to using the tool kit.
To assist with training a Slide kit and scenario sheet were provided.

5.1.2 Evaluation

There was a two step evaluation process;-

- Questionnaire

A questionnaire was completed anonymously by helpline practitioners (appendix 9)
This gathered information regarding the use of the tool, design, ease of use and reliability.

- Log Sheets

A review of completed log sheets, this gathered data on reasons for calls, action taken and quality of assessment.

All patient and trust identifiers were removed from the log Sheets prior to photocopying and posting to the pilot offices.

Each pilot site was given a pilot number

5.1.3 Pilot Period

The pilot ran for a two month period or completion of 100 log sheets. The pilot period commenced following training of staff within the pilot sites after a suggested a two week training period. Sites were asked to inform the project lead when they had commenced the pilot.

Sites were informed that they were welcome to continue using the Tool Kit after completion of the pilot if they wished to do so.

If for any reason they were not able complete the pilot and had to be withdrawn, they were asked to inform the project lead as soon as possible and let her know the reason for withdrawal. None of the sites withdrew from the pilot. Sites were requested not to photocopy or share this “Tool Kit” with any other chemotherapy units during the pilot period.

5.1.4 Data collection and selection

- Questionnaires

A total of 134 completed questionnaires were returned. All the information received was entered into a data base for evaluation.

- Log sheets
  - 25 sites returned forms in time for evaluation.
  - A total of 1,899 forms received
  - 1,378 were correctly completed (72.5%)
  - 245 illegible (13%)
  - 276 incomplete (14.5%)

500 correctly completed forms randomly selected for review (7 random pilot sites)

Forms were considered to be correctly completed if they had followed the toxicity assessment process and marked the log sheet as such.
Forms that were illegible were either due to poor photocopying or poor handwriting
2 sites returned their information to late to be included in the evaluation. 1 site has not returned any information but is continuing to use the tool kit.
8 sites are still piloting the tool but will now report on an individual basis.

6.0 Evaluation

The aim of the evaluation was to consider and report on the data collected to assess whether or not the tool kit achieved its primary objectives;-

The tool kit aims to provide:-

1. Guidance and support to the practitioner at all three stages
2. A simple but reliable assessment process
3. Safe and understandable advice
4. Communication and record keeping
5. Competency based training
6. An audit tool.

6.1 Questionnaire evaluation

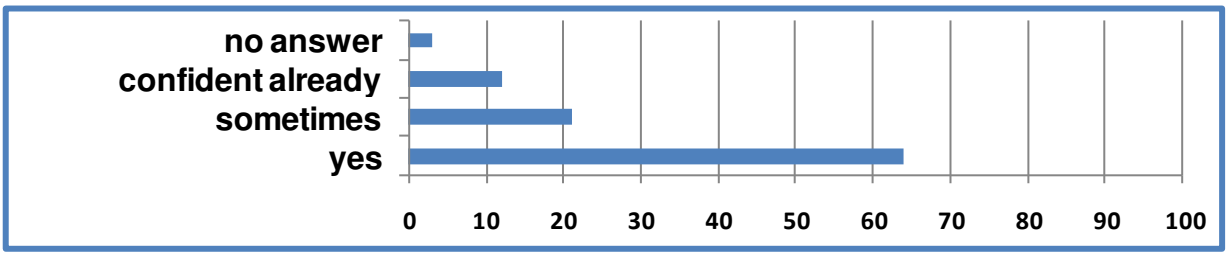
Practitioners involved in the pilot process were asked to complete a questionnaire designed to assess the users' experience. The questions reflected the aims and objectives of the tool kit. The results are illustrated in the graphs below.

The questionnaires were completed anonymously, **134** were returned.

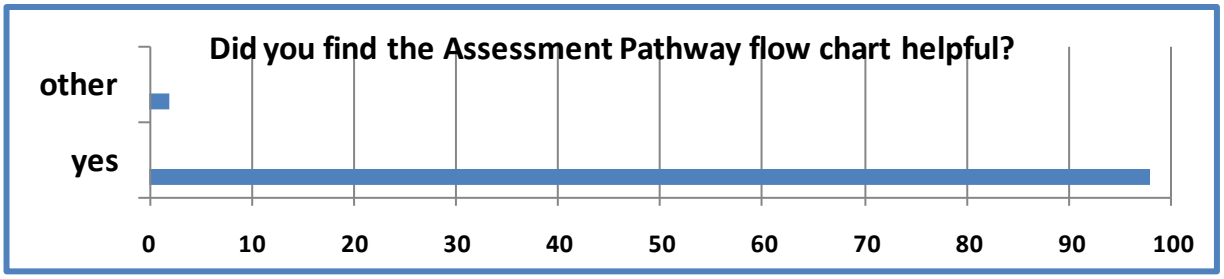
Guidance and support

- During the pilot did you feel more confident about managing the helpline?

85% of practitioners felt the tool improved confidence

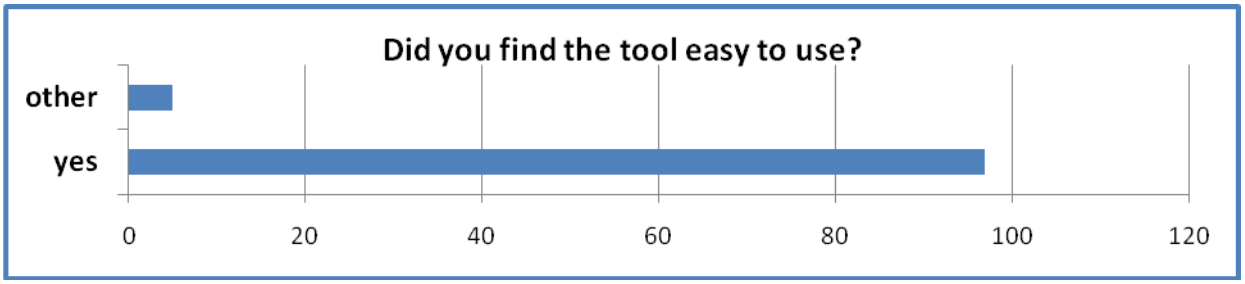


- Did you find the Assessment Pathway flow chart helpful? **98% yes**

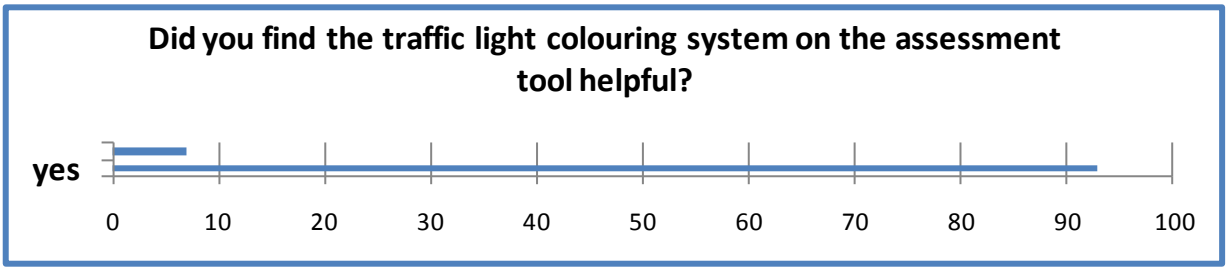


A simple but reliable assessment process

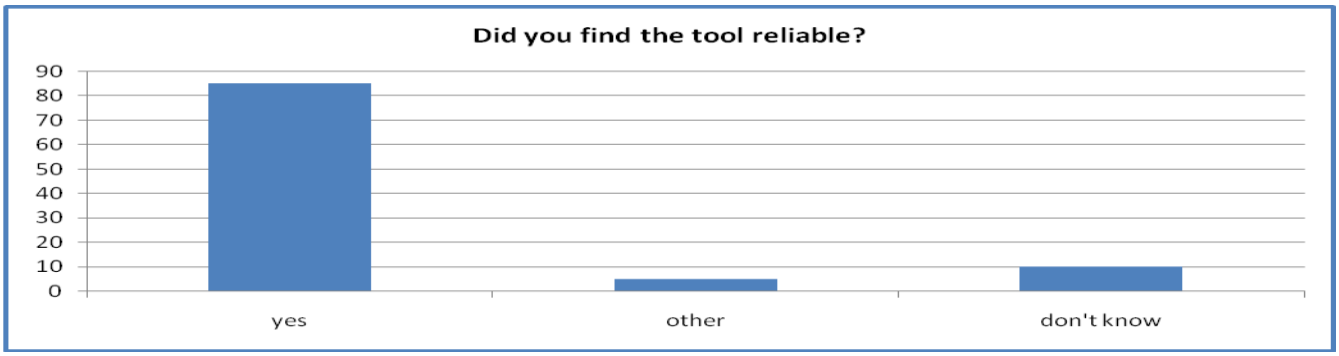
- Did you find the tool easy to use? **97% yes**



- Did you find the use of the traffic light colouring system (red, amber, green) on the Assessment Tool helpful? **93% yes**

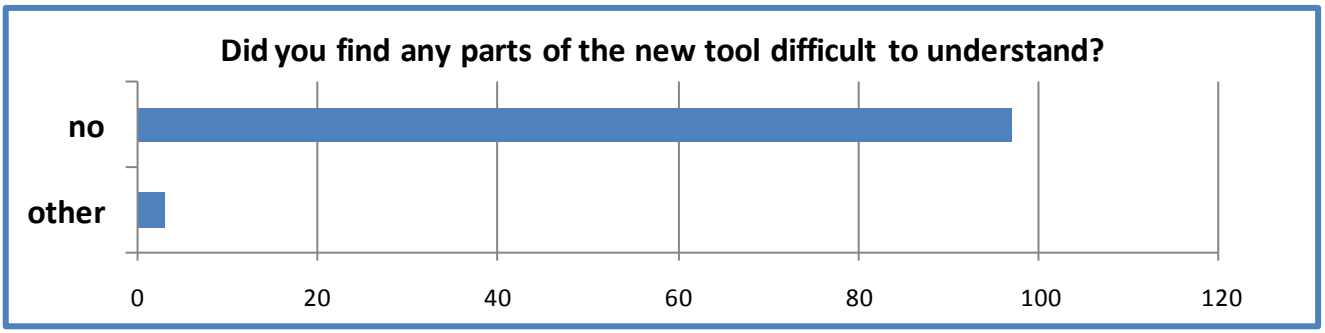


- Did you find the tool reliable? **85% yes**

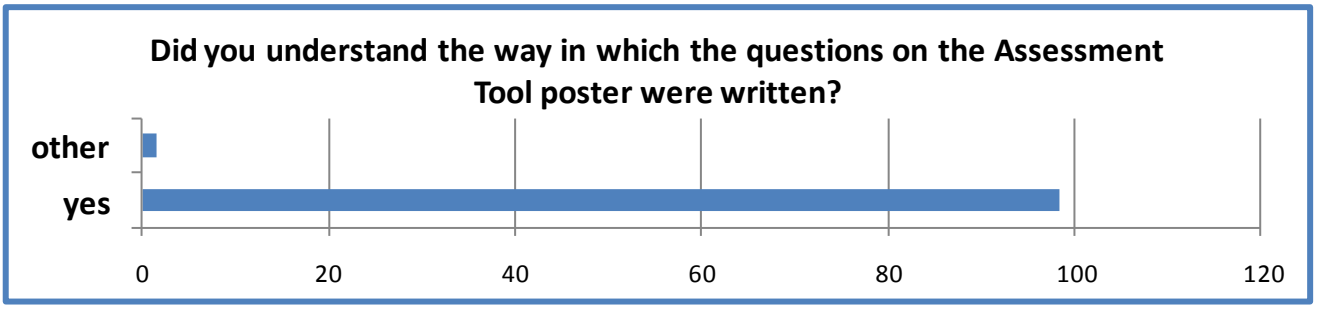


Safe and understandable advice

- Did you find any parts of the new tool difficult to understand? **97% said that the tool was not difficult to understand**



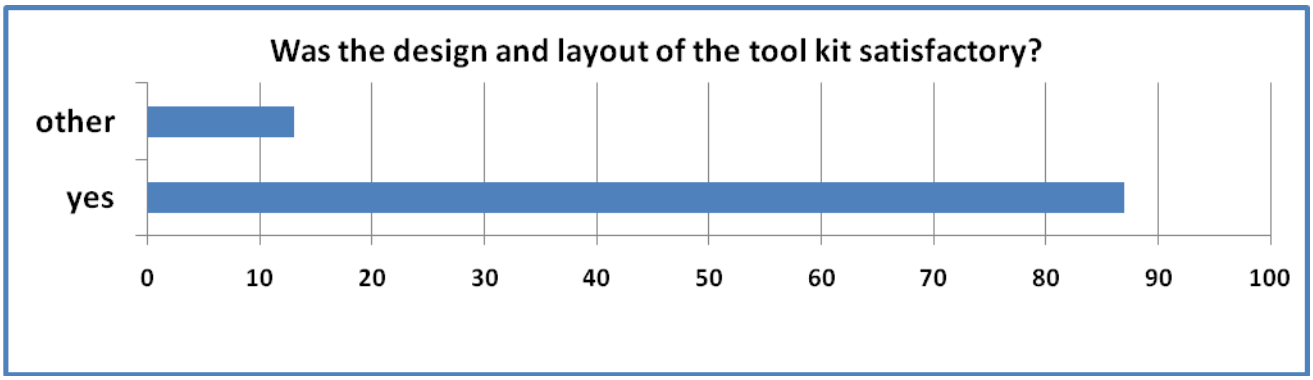
- Did you understand the way in which the questions on the Assessment Tool were written? **98.5% yes**



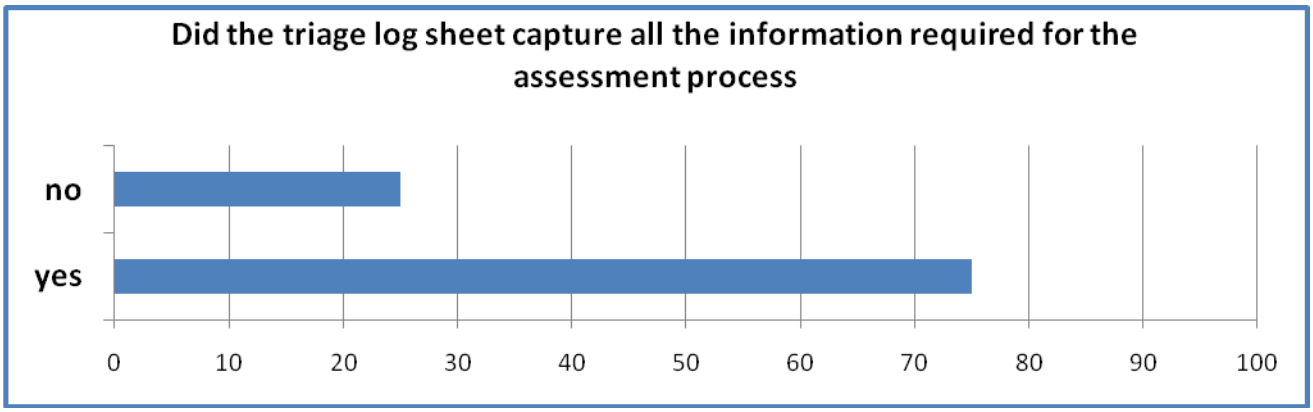
Communication and record keeping

- Was the design and layout of the tool kit satisfactory? **87% yes**

  Those who said no would like more space to write in the 'reason for call' and 'action taken' sections



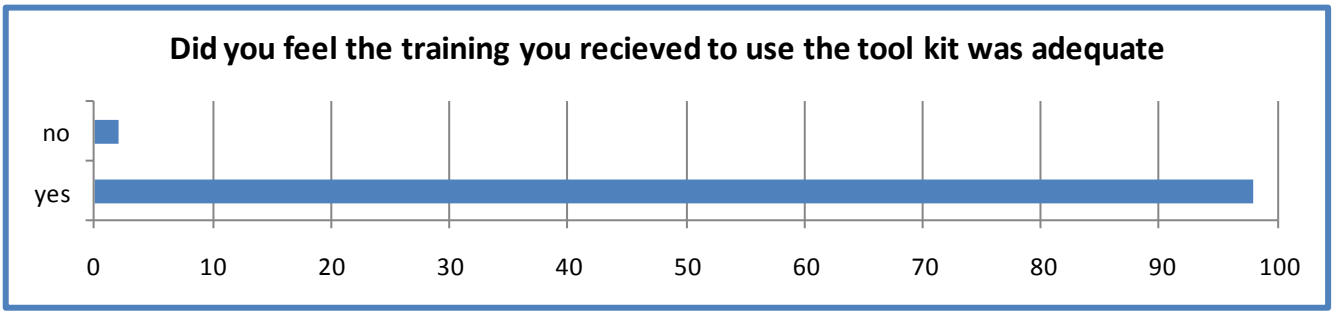
- Did the Triage Log Sheet capture all the information required for the assessment process? **78% yes**



Those who said no would like more space to write in the reason for call and action taken sections.
There were comments regarding a lack of space to record 'pain' and 'allergies' and 'DVT'
Almost all pilot areas are continuing to use the tool and have asked for more log sheets.

Competency based training

- Did you feel the training you received to use the tool kit was adequate? **98% yes**



Pilot leads have remarked that they really appreciate the competency framework and will continue using it.

6.2 Questionnaire feedback and comments

The comments and feedback included in the questionnaires were overwhelmingly positive. There were also a small number of negative responses though these were on the whole constructive.

Positive;-

- Tool has standardised practice
- Toxicity assessment very popular
- Concertina card extremely popular
- Visible reassurance of assessment
- Aids inter departmental communication
- Trainers like the competency framework
- Constantly being recommended to other areas

Negative;-

- no good for PBSCT patients
- does not cover oncological emergencies
- does not cover neutropenic sepsis

All of the above were individual comments and will need to be addressed at a local level. They possibly demonstrate a lack of training/knowledge as the tool kit has been developed to manage these very situations.

- 2 ambers are not always red
  This is an individual comment, it is clearly stated that if the triage practitioner does not feel that the assessment action advised does not apply in a particular situation then they should act as they feel is appropriate and document their reasons.

- does not photocopy well
  The photocopying problem has been addressed with the design company and is no longer a problem. The triage log sheet will also be available for downloading electronically.

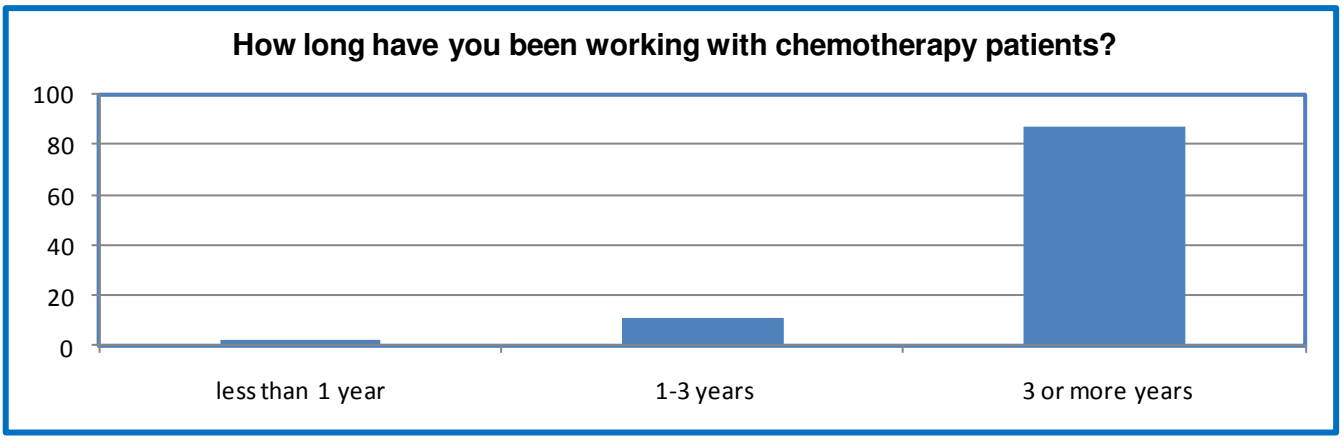
- time consuming
  A number of people felt that the process could be quite time consuming, however further feedback has been provided that lets us know that the time taken to complete the process lessens with experience.

Format

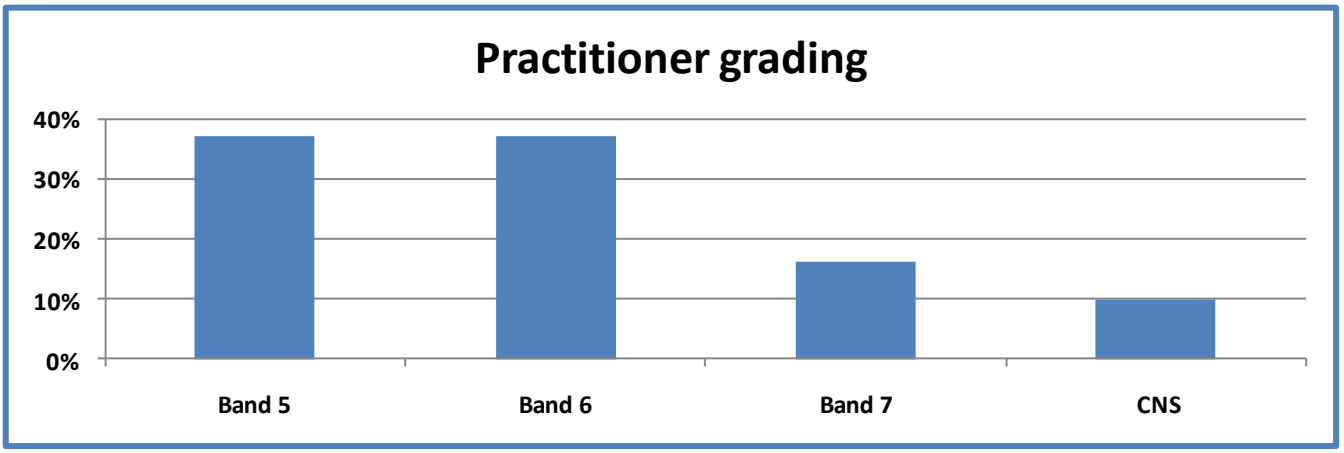
There were a number of comments relating to the format of the tool kit, all of which were considered at the steering group evaluation meeting. All have been addressed in the improved design of the final Tool Kit.

- Move red assessments such as pyrexia/fever and pain to the top of the chart.
- More space for initial call and action taken
- Add pain to the assessment chart
- DVT should be covered/highlighted
- Hypothermia should be better defined

Practitioners were asked how long they had been working with chemotherapy patients and what grade they were.
Results;



115 questionnaires recorded the grade of the person completing it



The majority of staff answering calls were nurses of band 6 or below and had more than 3 years experience working with chemotherapy patients.

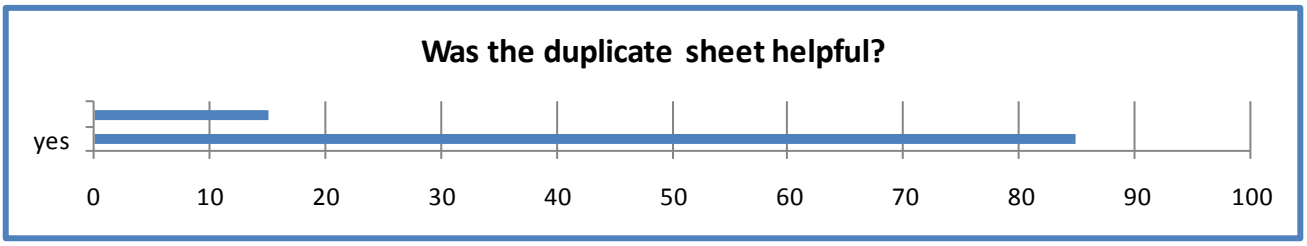
6.3 Log Sheet Evaluation

The evaluation of the sample log sheets for this report has proved the value of capturing this information.

One of our pilot sites has completed an independent audit of their activity during the pilot period they intend to use the tool kit to continue their review of activity and outcomes. They have kindly let us use the audit as a comparison for our evaluation (Appendix 12).

An audit tool.

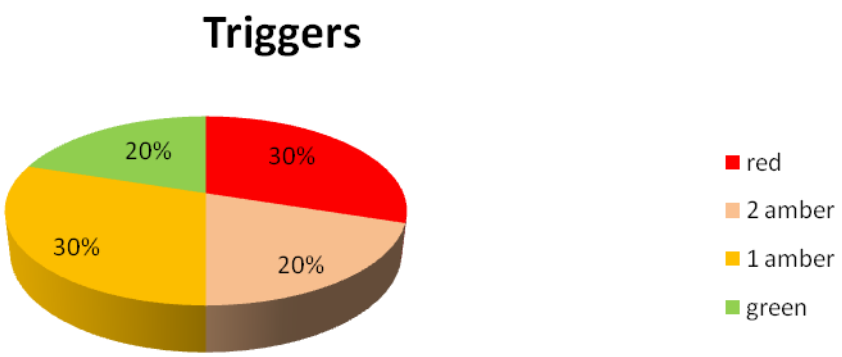
- Was the duplicate sheet helpful? **85% yes**



Most negative comments were regarding photocopying and quality of copying

The results of 500 correctly completed log sheets are as follows.

6.3.1 The patients problems/triggers were assessed as;-



150 patients were	**Red**	**30%**
101 patients were	**2 Amber**	**20%**
149 patients were	**1 Amber**	**30%**
100 patients were	**Green**	**20%**

6.3.2. Red Triggers

Red - Any toxicity graded here takes priority and action should follow immediately. Patient should be advised to attend for urgent assessment as soon as possible.

30% of the sample log sheets identified the patients as having one or more red triggers, the results of this group of patients are as follows;-
The majority (91%) of this group were asked to attend hospital for assessment, 3% were seen by their general practitioner 3% were managed with telephone advice and 3% had other forms of intervention including primary care palliative care referral.

82% of patients who had a red trigger at triage were admitted to hospital 9% of red trigger patients were seen assessed and discharged.

Conclusion.

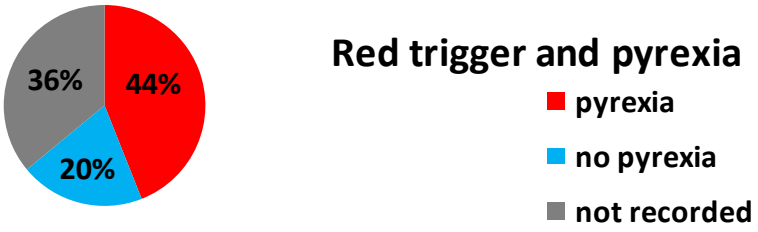
The majority of patients who had a red trigger were asked to attend hospital for assessment(91%),this action was appropriate as 82% required admission to hospital only 9% were able to go home following assessment.

Red trigger and pyrexia

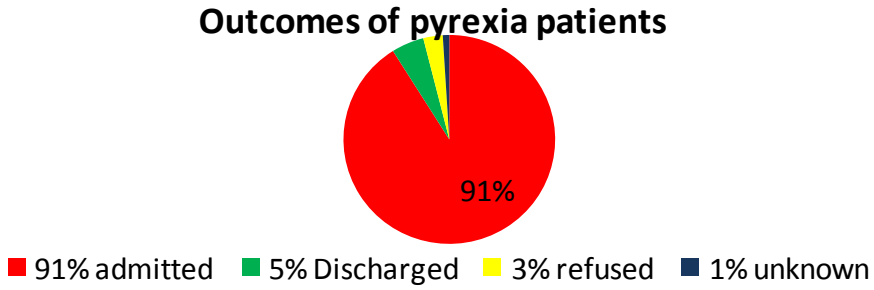
Though it is recognised that the presence of a pyrexia in a patient who may be immunocompromised is a significant indicator of risk, it is clear from the information collected on the log sheets that it is not the only indicator of risk.

Only 44% of patients with a red trigger had pyrexia of 37.5^{0}c or above recorded, 20% of patients had no pyrexia and 36% had no recording of temperature.

Conclusion...56% of red trigger patients were not related to pyrexia, these patients still required assessment and most required hospital admission.



Outcomes of patients with pyrexia
All patients who presented with pyrexia were asked to attend for assessment and 91% were subsequently admitted to hospital, 5% were discharged following assessment, 3% refused assessment and/or admission and in 1% the outcome is unknown



Conclusion……pyrexia is a significant indicator of risk and should always be investigated fully, the majority of patients who present with pyrexia are currently admitted.

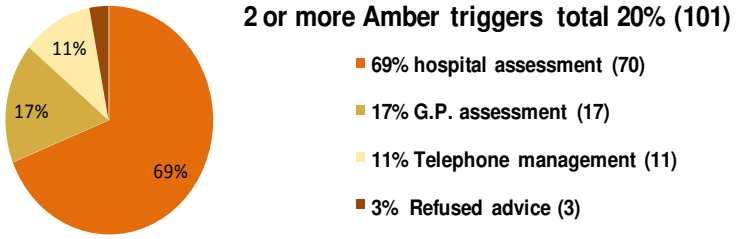
6.3.3. 2 or more Amber Triggers

Amber - If a patient has two or more toxicities graded amber they should be escalated to red action and advised to attend for urgent assessment.

20% of the sample log sheets identified the patients as having 2 or more amber triggers, the results of this group of patients are as follows;-

Of this group of patients 69% were asked to attend hospital for assessment, 39% of this group were admitted following assessment 24% were discharged following assessment and intervention,6% attended for assessment but the outcome was not recorded.
17% of this group were asked to attend their G.P. for assessment.
11% were managed by the triage practitioner over the telephone. The actions taken in these cases included modification of anti-emetics and implementation of specific regimen protocols e.g. capecitabine management.3% of patients refused to follow the advice given.

Conclusion.... A significant number of patients (20%) who contact triage helplines may not report a single overwhelming problem but will have a number of lower grade problems. The cumulative significance of these problems is demonstrated in the results above. 69% of the patients in this group were asked to attend hospital for assessment, all of these patients required intervention and over half of them required admission. This demonstrates the need for a methodical, rigorous assessment of all patients who contact helplines to ensure that significant signs and symptoms are not overlooked.



6.3.4. Amber Triggers

Amber – one toxicity in the amber area should be followed up within 24 hours and the caller should be instructed to call back if they continue to have concerns or their condition deteriorates

If the patients have an "other" problem that is not captured specifically on the log sheet they may be asked to attend for assessment. A follow up clinic appointment within 24 hours may be an acceptable alternative to a follow up telephone call.

30% of sample log sheets identified the patients as having 1 amber trigger, the results of this group of patients are as follows;-

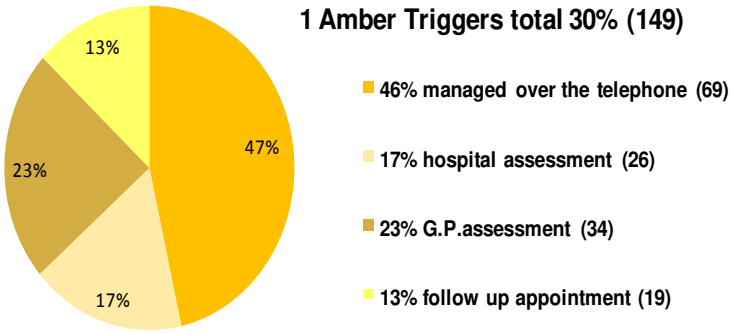
47% of this group were managed by the triage practitioner with advice/support given or arranged over the telephone.
23% were referred to their G.P.
13% received a follow up appointment for the following day
17% were asked to attend for assessment

Assessment outcomes
Outcomes of the patients who were asked to attend for assessment;
74% discharged (19)
11% admitted (3)
15% seen and outcome unknown (4)
Reasons for urgent assessment or admission were PICC or CVC problems, extravasation and "lumps" reoccurring.

Conclusion
The majority of patients (70%) with one amber trigger were managed in their homes with telephone advice or referral to the primary care team, 13% of patients were considered safe to have a review arranged for the following day.

A small proportion of patients in this group were asked to attend for urgent assessment, these patients usually had a concurrent (other) problem with the one amber score only 3 patients were subsequently admitted to hospital.

The tool kit assessment process correctly identified the majority of these patients as being safe to stay at home or have a booked review within normal working hours so avoiding unnecessary emergency assessment and possible admission.



6.3.5. All green triggers

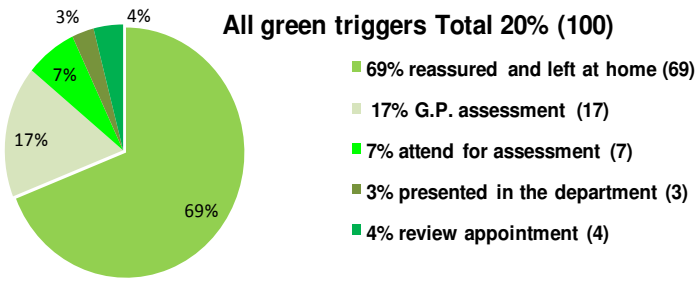
Green - callers should be instructed to call back if they continue to have concerns or their condition deteriorates

20% of the sample log sheets identified the patients as having all green triggers, the results of this group of patients are as follows;-

69% of this group were reassured and left at home with instructions to call back if they had further concerns.
17 % were referred to their G.P. for assessment.
7% were asked to attend for assessment; these patients all had other problems identified e.g. central line problems, dizziness,3 of these patients were admitted.
3% of this group presented at the treatment unit they were reviewed and discharged.
4% had a review appointment for the following day.

Conclusion

The majority of patients identified as all green triggers were safely left at home or were directed to primary care teams for further support (86%). The small number of patients who were asked to attend for urgent assessment (7%) all had a concurrent problem that would not be considered a toxicity related problem but would require urgent assessment e.g central line problems 3 of these patients required admission.



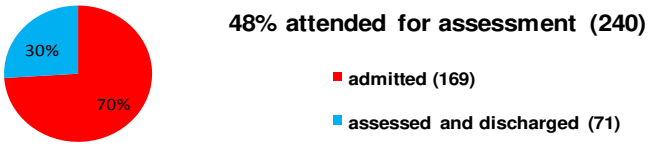
6.3.6. Assessment and Admissions

Assessment

48% of the patients who contacted the helpline were asked to attend hospital for **assessment**.

Of this group;-

- 70% were admitted
- 30% were assessed and discharged following intervention.



Admission

33.6% of the sample log sheets were **admitted** to hospital.

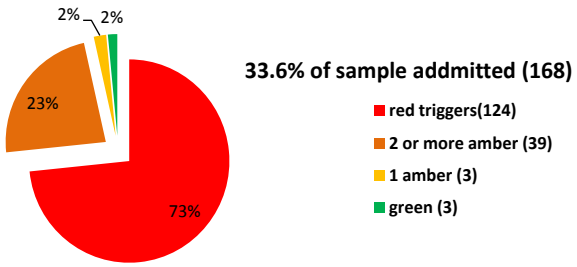
Of this group;-

73% presented with red triggers

23% presented with 2 or more amber triggers

2% presented with 1 amber or/and a concurrent problem not listed on the assessment sheet "other"

2% presented with all green triggers, but with a concurrent problem not listed on the assessment sheet "other"



Conclusion

The majority of patients who were asked to attend for assessment were subsequently admitted to hospital and of this group 96% had either scored red triggers or been escalated to red with multiple amber triggers. The tool is identifying patients who require assessment consistently and appropriately.

6.3.7. Follow up calls

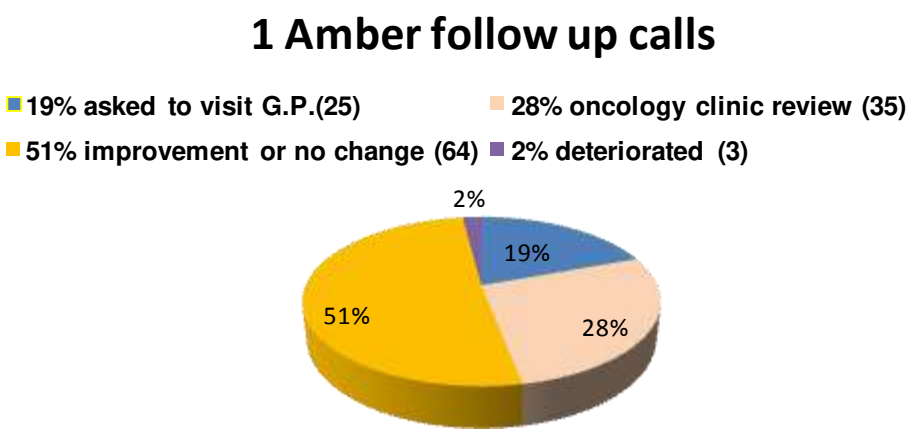
Patients presenting with **one amber** trigger should be followed up within 24 hours. They should be re-assessed and action modified if required. The follow up process will identify patients who are not improving or getting worse and increase safety in this group.

85% (127) of the one amber trigger group had a documented follow up on the triage log sheet.

The outcomes were;-

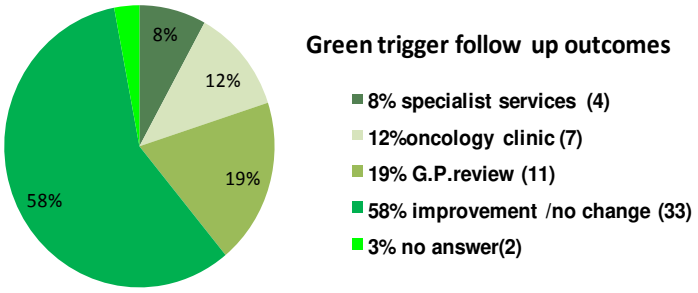
- 19% (25) were asked to visit their G.P.
- 27% (35) had an oncology clinic appointment arranged

- 50% (64) there was improvement or no change
- 2% (3) of this group had deteriorated and were asked to attend for urgent assessment



57% Patients identified with only Green triggers had a documented follow up. The Tool Kit does not instruct practitioners to follow up this group of patients but the information provided in these cases is valuable in our evaluation.
The outcomes of this group were;-

- 8% referred to specialist services for review
- 12% had an oncology clinic review appointment for the following week
- 19% had either self referred or were referred to the G.P.
- 58% reported improvement or no change
- 3% no answer when telephoned



Conclusion

85% of the amber patients received a follow up call this allowed for 46% of these patients to have an arranged review prior to their next chemotherapy 51% had either improved or reported no change (In the case of no change a further follow up call on the next day is recommended),only 2% of this group had deteriorated the follow up call identified these patients and facilitated assessment .

None of the patients who had green triggers **only** required urgent admission or assessment on follow up.

The majority had improved; none of this group had contacted the helpline with further concerns.

The tool kit triage process is correctly identifying patients who do not require urgent admission and the follow up process is allowing a planned approach to problem management directing patients for appropriate review if required.

There were no reports of adverse events or concerns relating to advice given or actions taken as a result of using the Tool Kit from any of the pilot sites during the pilot.

7.0 Evaluation comparison

One of the pilot sites has provided us with a copy of their independent audit report and evaluation. The report was compiled by the trust Department of Clinical Audit and Effectiveness.

The tool kit is now considered to be a very important component in the management of acute oncological emergencies within their service.

For the purpose of the comparison the individual pilot site will be referred to as Hospital A and the Tool Kit sample as SAMPLE. Hospital A data has been converted to % as it is easier to see how the two sites compare when this is done.

Only data that is similar and useful to the pilot evaluation has been compared. This has not included cancer types, consultant and who made the call.

The comparison is as follows;-

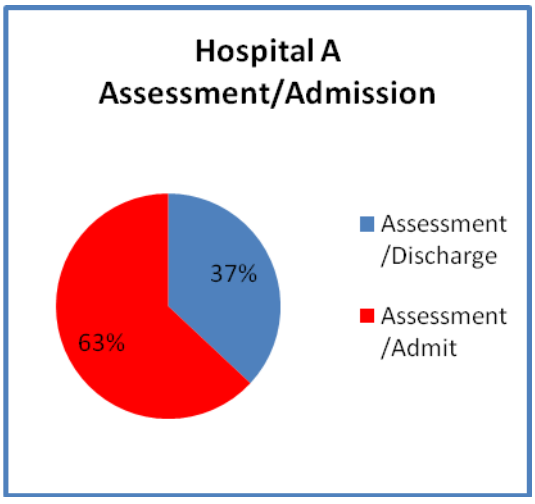
7.1 Assessment and Admission rates

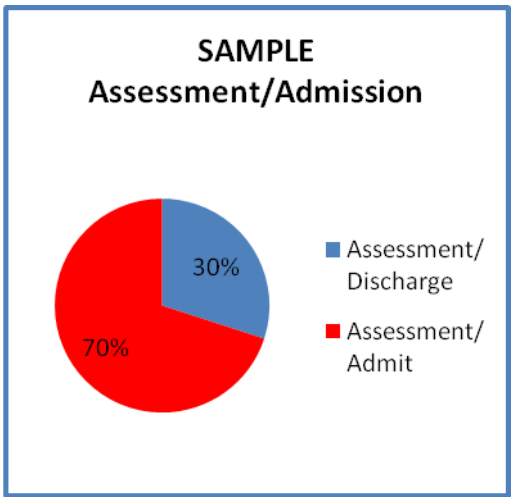
- Hospital A 32% (32) of patients who contacted the helpline were asked to attend hospital for urgent assessment 63% (20) of this group of patients were subsequently admitted to hospital.

- SAMPLE 48% (240) of patients who contacted the helpline were asked to attend for urgent assessment 69% (169) of this group of patients were subsequently admitted to hospital.

The number of Patients who were asked to attend for urgent assessment was 16% higher in the SAMPLE group, but there is no significant difference in the percentage of patients who were admitted to hospital following assessment.

We can demonstrate that between 60% and 70% of patients who attend for assessment are subsequently admitted to hospital.





7.2 Classification of calls

We have compared the classification of calls looking at the priority and action indicated for each patient following triage assessment.

Hospital A reported

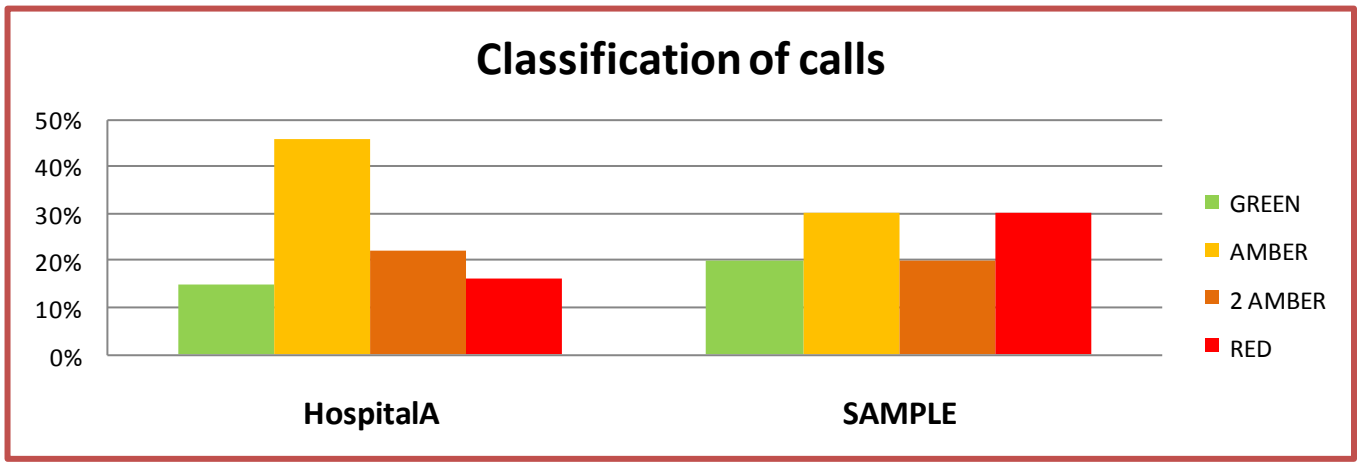
16% Red triggers
22% 2 or more amber triggers
46% Single amber trigger
15% Green Triggers

SAMPLE reported

20% Red triggers
30% 2 or more amber triggers
30% Single amber triggers
20% Green triggers

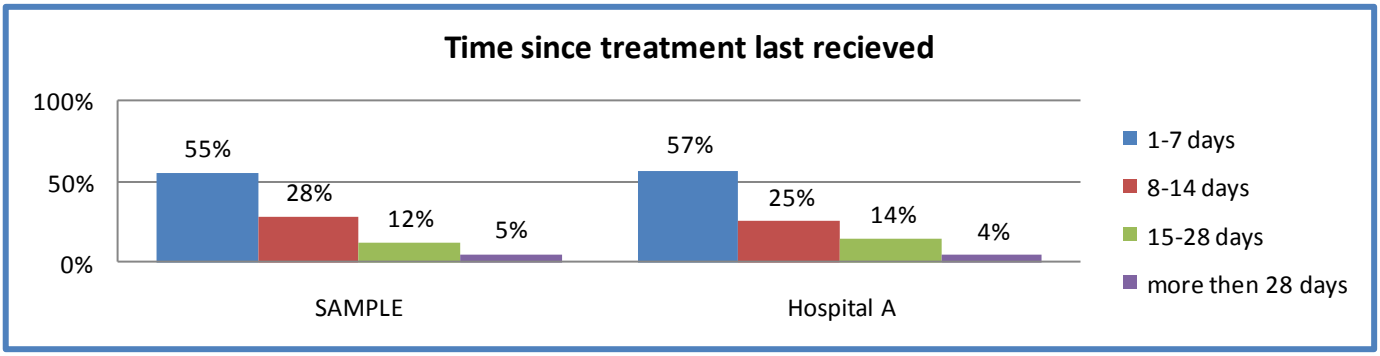
61% of patients in hospital A were considered as safe to leave at home or required follow up within 24 hours this compared to 50% of the SAMPLE group.

38% of patients in hospital A were asked to attend for urgent assessment this compared to 50% of the SAMPLE group who were asked to attend for urgent assessment.



7.3 Time since treatment last received

A comparison of calls related to length of time since treatment administration has revealed almost identical results.
Over 50% were within 7 days of treatment,33% of calls are within 8- 14 days of receiving treatment. This information would support the implementation of pro-active monitoring of patients within this high risk period. The tool kit has been used successfully in one of the pilot sites to pro-actively assess patients at regular intervals and identify those at risk and in need of early intervention.



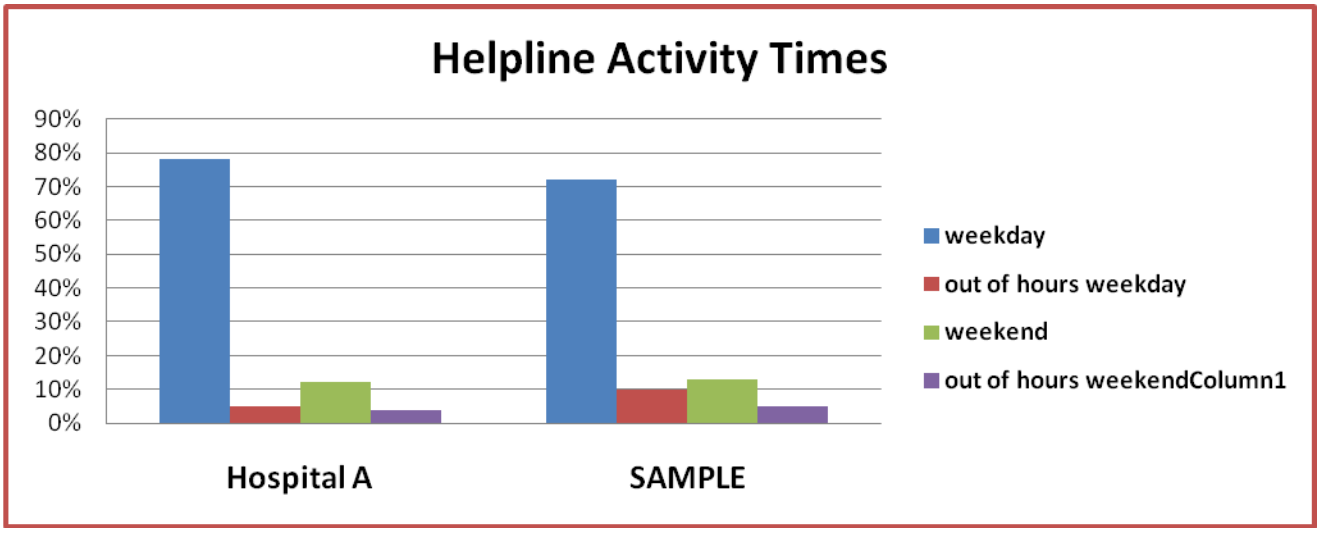
7.4 Time of call

The provision of a helpline service obviously has workforce implications. It has always been difficult to assess the amount of time required to manage calls and the level of activity. The triage log sheets were used to monitor the time of the call and could be used to monitor the episode length.

We have compared the times of the calls to Hospital A and a similar site drawn from the SAMPLE.

The time frames used are;-

SAMPLE 8am – 8pm as normal working hours and 8pm – 8am as out-of-hours.
Hospital A 9am - 5pm as normal working hours and 5pm-9am as out-of-hours



The comparison reveals almost identical activity trends and may be of considerable use when considering resources required for managing a helpline. The level of activity out of hours (nights and weekends) may lend itself to a more centralised approach with trusts working together to provide out of hours support and advice.

The level of activity within working hours is considerable and a review of who provides this support and how much time is allocated to the role is indicated. The tool kit recommends that the triage practitioner is clearly identified for every span of duty and this role should be recognised in the practitioners/department work plan.

Conclusion

The comparison has allowed us to support the sample evaluation and confirm that the tool kit when used correctly can be used safely to triage and manage patients. It has also confirmed the audit and monitoring potential of the tool kit if used correctly.

It has revealed interesting information around the time interval following treatment and the occurrence of problems, 50% of those on active treatment called within 7 days.

It has also provided us with information relating to the timing of calls that should allow us to develop workforce practice to manage this demand.

8.0 Project completion

Following the completion of the pilot the development and consultation group met to evaluate the data received.

The following conclusions and actions were agreed;-
The tool when used correctly provided safe and understandable guidelines and advice for both staff and patients. The process was easy and reliable with clear instructions and an established pathway.

The tool is user friendly and was utilised well, with 72.5 % of log sheets completed correctly.
User feedback stated that it has standardised care and supported decision making.
It provided a framework for training and competency assessment and supported governance processes. Feedback from practitioners assured us that with regular use the whole assessment process is improved in quality, structure and time taken.
The evaluation group considered the physical evidence of completed log sheets and the comments relating to the format and the process that we received from practitioners, this has helped us to refine the tool kit as follows:-

- We have increased the area for free text as requested by practitioners.
- We have moved red assessments such as pyrexia/fever and pain to the top of the chart.
- We have added a general pain grading to the triage tool
- We have clarified some of the terminology e.g. Who is calling on the Triage log Sheet
- We have defined Hypothermia
- We now ask for a temperature recording
- We have removed some of the unnecessary information requests

We have also improved the format following advice from the NPSA; appropriate symbols have been added along with improved definitions of important terms.
The group were heartened to realise that in fact very little needed to be amended from the original pilot.

The Tool Kit will be made available on a number of websites and will also be available from nominated printing companies who will hold a printing draft on the groups' behalf

9.0 Summary

9.1 The Development Process

The UKONS Central West Chemotherapy Nurses Group has demonstrated their determination and commitment to this project. They have over a period of three years developed a process that will benefit patients and support staff.

The development process has been methodical, professional and democratic and is an excellent example of team work. The aims and objectives of the project were clearly agreed and with the completion of the pilot and evaluation have been achieved.

9.2 The Pilot

The National Patient Safety Agency provided funding to support design and production of the "Tool Kit" for a multi centre pilot. 29 hospital trusts from England, Wales and Northern Ireland asked to take part; nominated Pilot Leads attended "Introduction and training days". Those who attended were asked to report back to their governance teams and obtain signed consent to participate and agree to the pilot process (Appendix 7).

27 Sites agreed to participate in the pilot at this point, included within these 27 were all the steering group members. The whole of the Greater Midlands Cancer Network enrolled. A second round of the pilot recruited a further 9 sites 8 of which are ongoing and 1 who has completed the pilot and is included in the final evaluation.
19 cancer centers and 17 cancer units have been involved. A list of the pilot sites can be found at appendix 8.

All staff using the Tool Kit had to receive training and assessment of competency. The pilot leads acted as mentors and assessors to their trust teams.

There was a two step evaluation process, an evaluation questionnaire to be completed anonymously by helpline practitioners (appendix 9) and a review of completed triage log sheets.

The pilot ran for a two month period or completion of 100 log sheets. If for any reason they were not able complete the pilot and had to be withdraw they were asked to inform the project lead as soon as possible and let her know the reason for withdrawal. None of the sites withdrew from the pilot.

9.3 Data collection and selection

A total of 134 questionnaires were received, all the information was entered into a data base.

Log sheets

- 25 sites returned forms in time for evaluation.
- A total of 1,899 forms received
- 1,378 were correctly completed (72.5%)
- 245 illegible (13%)
- 276 incomplete (14.5%)
- 500 correctly completed forms randomly selected for review (7 random pilot sites)

Forms were considered to be correctly completed if they had followed the toxicity assessment process and marked the log sheet as such. Forms that were illegible were either due to poor photocopying or poor handwriting

2 sites returned their information to late to be included in the evaluation.

1 site has not returned any information but is continuing to use the tool kit.

8 sites are still piloting the tool but will now report on an individual basis.

9.4 Results

9.4.1 **Classification of calls**

Of the sample triage log sheets reviewed;-

30% were 1 or more Red triggers
20% were 2 or more Amber triggers
30% were 1 amber trigger
20% were Green triggers

9.4.2 **Red Triggers**

Any toxicity graded here takes priority and action should follow immediately. Patient should be advised to attend for urgent assessment as soon as possible.

30% of the sample log sheets identified the patients as having one or more red triggers, the results of this group of patients are as follows;-

The majority (91%) of this group were asked to attend hospital for assessment, 3% were seen by their general practitioner 3% were managed with telephone advice and 3% had other forms of intervention including primary care palliative care referral.

82% of patients who had a red trigger at triage were admitted to hospital 9% of red trigger patients were seen assessed and discharged.

9.4.3 **Red trigger and pyrexia**

Though it is recognised that the presence of a pyrexia in a patient who is at risk from immunosuppression is a significant indicator of risk, it is clear from the information collected on the log sheets that it is not the only indicator of risk. Only 44% of patients with a red trigger had pyrexia of 37.5^0c or above recorded, 20% of patients had no pyrexia and 36% had no recording of temperature. From this information we conclude that.56% of red trigger

patients were not related to pyrexia, these patients still required assessment and most required hospital admission.

Outcomes of patients with pyrexia

All patients who presented with pyrexia were asked to attend for assessment and 91% were subsequently admitted to hospital, 5% were discharged following assessment, 3% refused assessment and/or admission and in 1% the outcome is unknown. We can conclude pyrexia is a significant indicator of risk and should always be investigated fully, the majority of patients who present with pyrexia are currently admitted.

9.4.4 **2 or more Amber Triggers**

If a patient has two or more toxicities graded amber they should be escalated to red action and advised to attend for urgent assessment.

20% of the sample log sheets identified the patients as having 2 or more amber triggers, the results of this group of patients are as follows;-

Of this group of patients 69% were asked to attend hospital for assessment, 39% of this group were admitted following assessment 24% were discharged following assessment and intervention,6% attended for assessment but the outcome was not recorded.

17% of this group were asked to attend their G.P. for assessment.

11% were managed by the triage practitioner over the telephone. The actions taken in these cases included modification of anti-emetics and implementation of specific regimen protocols e.g. capecitabine management.

3% of patients refused to follow the advice given.

Conclusion.... A significant number of patients (20%) who contact triage helplines may not report a single overwhelming problem but will have a number of lower grade problems. The cumulative significance of these problems is demonstrated in the results above. 69% of the patients in this group were asked to attend hospital for assessment, all of these patients required intervention and over half of them required admission. This demonstrates the need for a methodical, rigorous assessment of all patients who contact helplines to ensure that significant signs and symptoms are not overlooked.

9.4.5 **1 Amber Trigger**

A single toxicity in the amber area should be followed up within 24 hours and the caller should be instructed to call back if they continue to have concerns or their condition deteriorates.

If the patients have an “other” problem that is not captured specifically on the log sheet they may be asked to attend for assessment. A follow up clinic appointment within 24 hours may be an acceptable alternative to a follow up telephone call.

30% of sample log sheets identified the patients as having 1 amber trigger, the results of this group of patients are as follows;-

47% of this group were managed by the triage practitioner with advice/support given or arranged over the telephone.

23% were referred to their G.P.

13% received a follow up appointment for the following day

17% were asked to attend for assessment

Assessment outcomes

Outcomes of the patients who were asked to attend for assessment;

74% discharged (19)

11% admitted (3)

15% seen and outcome unknown (4)

Reasons for urgent assessment or admission were PICC or CVC problems, extravasation and “lumps” reoccurring.

Conclusion
The majority of patients (69%) with one amber trigger were managed in their homes with telephone advice or referral to the primary care team, 13% of patients were considered safe to have a review arranged for the following day.

A small proportion of patients in this group were asked to attend for urgent assessment, these patients usually had a concurrent (other) problem with the one amber score only 3 patients were subsequently admitted to hospital.

The tool kit assessment process correctly identified the majority of these patients as being safe to stay at home or have a booked review within normal working hours so avoiding unnecessary emergency assessment and possible admission.

9.4.6 **Green Triggers**
Callers should be instructed to call back if they continue to have concerns or their condition deteriorates.

20% of the sample log sheets identified the patients as having all green triggers, the results of this group of patients are as follows;-

69% of this group were reassured and left at home with instructions to call back if they had further concerns.
17 % were referred to their G.P. for assessment.
7% were asked to attend for assessment; these patients all had other problems identified e.g. central line problems, dizziness,3 of these patients were admitted.
3% of this group presented at the treatment unit they were reviewed and discharged.
4% had a review appointment for the following day.

Conclusion
The majority of patients identified as all green triggers were safely left at home or were directed to primary care teams for further support (86%). The small number of patients who were asked to attend for urgent assessment (7%) all had a concurrent problem that would not be considered a toxicity related problem but would require urgent assessment e.g central line problems 3 of these patients required admission.

9.4.7 **Follow up**
85% of the amber patients received a follow up call this allowed for 46% of these patients to have an arranged review prior to their next chemotherapy 51% had either improved or reported no change. In the case of no change a further follow up call on the next day is recommended only 2% of this group had deteriorated the follow up call identified these patients and facilitated assessment .

None of the patients who had green triggers **only** required urgent admission or assessment on follow up.

The majority had improved; none of this group had contacted the helpline with further concerns.

The tool kit triage process is correctly identifying patients who do not require urgent admission and the follow up process is allowing a planned approach to problem management directing patients for appropriate review if required.

There were no reports of adverse events or concerns relating to advice given or actions taken as a result of using the Tool Kit from any of the pilot sites during the pilot.

9.5 Evaluation comparison

One of the pilot sites has provided us with a copy of their independent audit report and evaluation. The report was compiled by the trust Department of Clinical Audit and Effectiveness. The tool kit is now considered to be a very important component in the management of acute oncological emergencies within their service.

For the purpose of the comparison the individual pilot site will be referred to as Hospital A and the Tool Kit sample as SAMPLE.

9.5.1 Assessment and Admission rates

The number of Patients who were asked to attend for urgent assessment was 16% higher in the SAMPLE group, but there is no significant difference in the percentage of patients who were admitted to hospital following assessment.

We can demonstrate that between 60% and 70% of patients who attend for assessment are subsequently admitted to hospital.

We have compared the classification of calls looking at the priority and action indicated for each patient following triage assessment.

- 61% of patients in hospital A were considered as safe to leave at home or required follow up within 24 hours this compared to 50% of the SAMPLE group.
- 38% of patients in hospital A were asked to attend for urgent assessment this compared to 50% of the SAMPLE group who were asked to attend for urgent assessment.

9.5.2 Time since treatment last administered

A comparison of calls related to length of time since treatment administration has revealed almost identical results.

83% of calls are within 14 days of receiving treatment; over 50% were within 7 days of treatment. This information would support the implementation of pro-active monitoring of patients within this high risk period. The tool kit has been used successfully in at least one of the pilot sites to pro-actively assess patients at regular intervals and identify those at risk and in need of early intervention.

The comparison with data/results obtained independently has proved to be a very valuable. It demonstrates the strength of the data collection process and the reliability of the tool. The outcomes are similar and support the process.

9.5.3 Time of call

The provision of a helpline service obviously has workforce implications. It has always been difficult to assess the amount of time required to manage calls and the level of activity. The triage log sheets were used to monitor the time of the call and could be used to monitor the episode length.
We have compared the times of the calls to Hospital A and a similar site drawn from the SAMPLE log sheets.

The time frames used are;-

SAMPLE 8am – 8pm as normal working hours and 8pm – 8am as out-of-hours.
Hospital A 9am - 5pm as normal working hours and 5pm-9am as out-of-hours

The comparison reveals almost identical activity trends and may be of considerable use when considering resources required for managing a helpline. The level of activity out of hours (nights and weekends) may lend itself to a more centralised approach with trusts working together to provide out of hours support and advice.

The level of activity within working hours is considerable and a review of who provides this support and how much time is allocated to the role is indicated. The tool kit recommends that the triage practitioner is clearly identified for every span of duty and this role should be recognised in the practitioners/department work plan.

9.6 Questionnaire feedback and comments

The comments and feedback included in the questionnaires were overwhelmingly positive. There were also a small number of negative responses though these were on the whole constructive. Practitioners felt that it has standardised practice and aids inter departmental communication. The triage tool and log sheet provide visible reassurance of assessment. Pilot leads appreciated the competency framework and assessment process.

A number of people felt that the process could be quite time consuming, however further feedback has been provided that lets us know that the time taken to complete the process lessens with experience.

There were a number of comments relating to the format of the tool kit, all of which were considered at the steering group evaluation meeting, all have been addressed in the improved design of the final Tool Kit.

10.0 Conclusion

The UKONS Central West Chemotherapy Nurses group has succeeded in developing, testing and producing a tool that if used correctly will standardise and support excellent practice.

The Tool Kit has been successfully used to assess adult patients who contacted 24 hour HELPLINES in 25 hospital trusts within the United Kingdom. There were no reports of adverse events or clinical incidents linked to the tool during the pilot period or since.

The pilot has shown that there is an overwhelming need (83%) for patients to contact Health Care Professionals within the first two weeks following chemotherapy. Through effective management of calls the pilot has proved that with training and education, those patients were adequately assessed and treated accordingly.

The level of oncology/chemotherapy knowledge and training required to manage a 24 hour helpline is variable nationally and many practitioners feel unsure and ill equipped to make advanced care decisions. The pilot has proven the need to train triage nurses consistently in the use of triage tools, to effectively manage and treat this group of patients. The practitioner evaluation has shown that guidelines and a standardised approach are valued. The tool has increased confidence and provides support for decision making and reassurance for both the practitioner and the patient. There is strong evidence indicating that chemotherapy patients value 24 hour access to health care professionals (Oakley et al 2010) and this tool facilitates the consistent safe delivery of advice by, using a risk assessment tool based on internationally recognized assessment criteria and a defined process to provide safe outcomes of care.

The pilot has provided us with significant data about the timing of calls and level of risk that patients exhibit.

The majority of patients who were asked to attend for assessment were subsequently admitted to hospital and of this group 96% had either scored red triggers or been escalated to red with multiple amber triggers. The tool is identifying patients who require assessment consistently and appropriately. Over half (56%) of red trigger patients were not related to pyrexia, these patients still required assessment and most required hospital admission. The majority of patients who presented with pyrexia were admitted for further management we

can conclude then that Pyrexia is a significant indicator of risk and should always be investigated fully, significantly the threshold for urgent assessment was 37.5^0C in this pilot study.

A significant number of patients (20%) who contact triage helplines may not report a single overwhelming problem but will have a number of lower grade problems. The cumulative significance of these problems is demonstrated in the pilot results for those patients who presented with two or more amber triggers. 69% of the patients in this group were asked to attend hospital for assessment, all of these patients required intervention and over half of them required admission. This demonstrates the need for a methodical, rigorous assessment of all patients who contact helplines to ensure that significant signs and symptoms are not overlooked.

Anecdotal evidence from practitioners relate feelings of anxiety and concern about unsupported decision making, and there is also evidence that decisions can be overturned by senior but less knowledgeable staff resulting in dire consequences (NPSA adverse events reports).The tool will support decisions to ask the patients to attend for urgent assessment and will also support the decision to manage the patient in their own home with either a follow up call/ review appointment or reassurance and simple advice
The decision to leave a patient at home should not be taken lightly and should follow a complete risk assessment and supportive action or advice. The majority of patients (69%) with one amber trigger were managed in their homes with telephone advice or referral to the primary care team, 13% of patients were considered safe to have a review arranged for the following day.

A small proportion of patients in this group were asked to attend for urgent assessment, these patients usually had a concurrent (other) problem with the one amber score only 3 patients were subsequently admitted to hospital.

The tool kit assessment process correctly identified the majority of these patients as being safe to stay at home or have a booked review within normal working hours so avoiding unnecessary emergency assessment and possible admission.

The majority of patients identified as all green triggers were safely left at home or were directed to primary care teams for further support (86%). The small number of patients who were asked to attend for urgent assessment (7%) all had a concurrent problem that would not be considered a toxicity related problem but would require urgent assessment e.g central line problems 3 of these patients required admission.

The follow up process that was used during the pilot has provided us with evidence to support the effectiveness and safety of the tool when used correctly. Log sheets revealed that 85% of the one amber patients received a follow up call this allowed for 46% of these patients to have an arranged review prior to their next chemotherapy 51% had either improved or reported no change. In the case of no change a further follow up call on the next day is recommended. Reassuringly 2% of this group had deteriorated but with the safeguard of a follow up call they were identified and attended for assessment.

None of the patients who had green triggers **only** required urgent admission or assessment on follow up.

The majority had improved; none of this group had contacted the helpline with further concerns.

The tool kit triage process is correctly identifying patients who do not require urgent admission and the follow up process is allowing a planned approach to problem management directing patients for appropriate review if required.

As previously stated 83% of calls are within 14 days of receiving treatment; over 50% were within 7 days of treatment. This information would support the implementation of pro-active monitoring of patients within this high risk period. The tool kit has been used successfully in one of the pilot sites to pro-actively assess patients at regular intervals and identify those at risk and in need of early intervention. This also supports an uninterrupted treatment schedule and avoids unplanned admission whenever possible.

The comparison exercise within the evaluation reveals almost identical activity trends and may be of considerable use when considering resources required for managing a helpline. The level of activity out of hours (nights and weekends) may lend itself to a more centralised approach with trusts working together to provide out of hours support and advice.

The level of activity within working hours is considerable and a review of who provides this support and how much time is allocated to the role is indicated. The tool kit recommends that the triage practitioner is clearly identified for every span of duty and this role should be recognised in the practitioners/department work plan.

The comparison has allowed us to support the sample evaluation and confirm that the tool kit can be used safely to triage and manage patients correctly. It has also confirmed the audit and monitoring potential of the tool kit if used correctly.

The Tool kit is a framework that can be used to;-

- Improve patient safety and care by ensuring that they receive a robust, reliable assessment every time they contact a helpline for advice.
- Ensure those assessments are of a consistently high quality by the use an evidence based assessment tool.
- Identify action and advice that is appropriate to the patients' level of risk.
- To ensure that those patients who require urgent assessment in an acute area are identified and that action is taken, but also to identify and reassure those patients who are at lower risk and may safely be managed by the primary care team or a planned clinical review and avoid unnecessary attendance.
- Form the basis of triage training and competency assessment for practitioners.

The future!
The group are planning to continue with the development of the tool and aim to;-

- Modify the tool for use by primary care teams
- Investigate the potential for an electronic format
- Modify the pocket tool for patient use, helping them to self assess symptoms and seek help appropriately.

Recommendation;

The level of oncology/chemotherapy knowledge and training required to manage a 24 hour helpline is variable nationally and many practitioners feel unsure and ill equipped to make advanced care decisions. It is recommended that this Tool Kit

"24 Hour Helpline, Rapid Assessment and Access Tool Kit".

be adopted nationally as it will provide a robust framework for triage assessment, action and audit, and will as a result lead to improved quality and safety in patient care.

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Key skills identified from http://www.skillsforhealth.org.uk/

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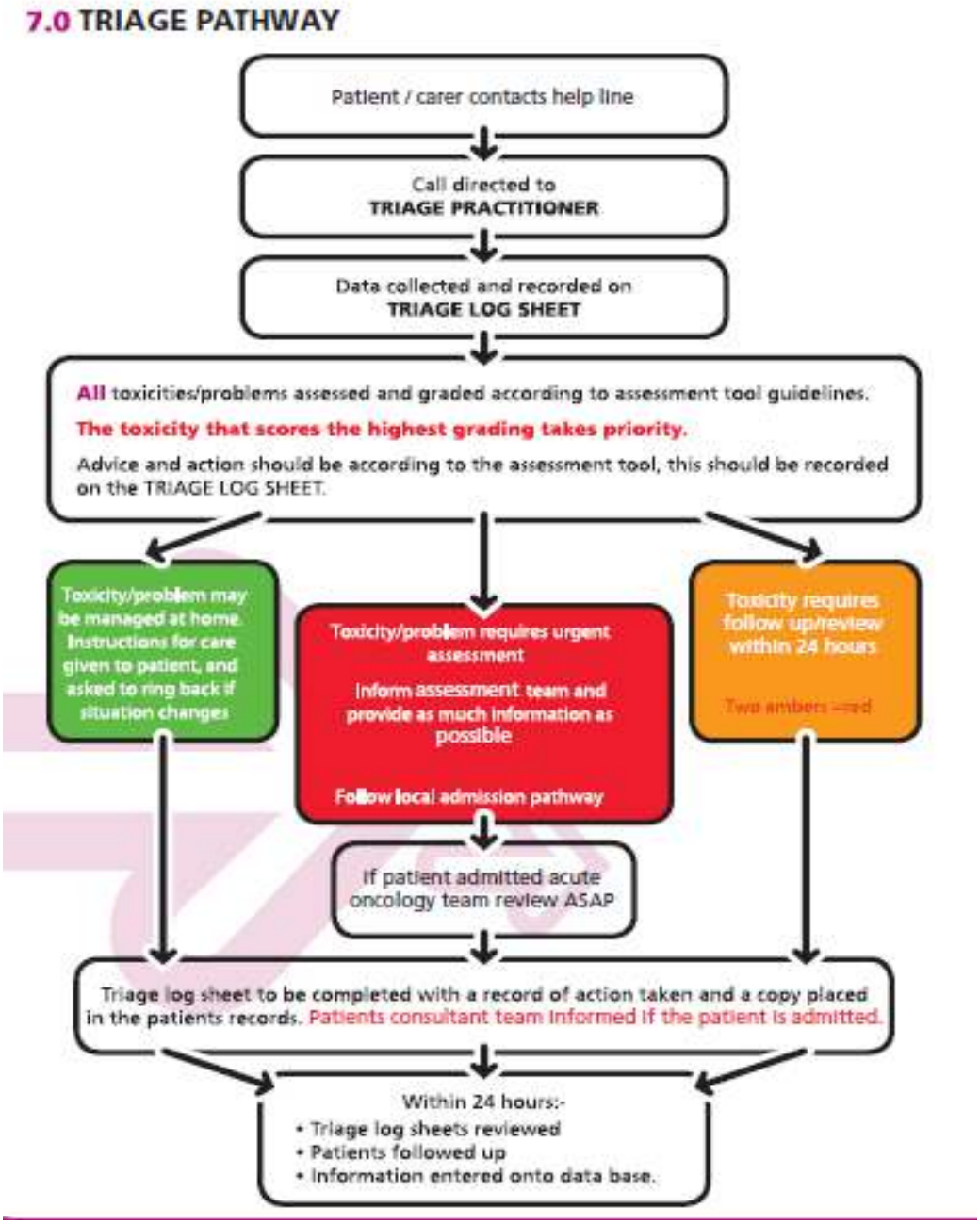
Appendix1. Tool Kit Manual

Appendix 2. Alert card

Appendix 3 . Triage Pathway



Appendix 4. Triage Log Sheet

TRIAGE LOG SHEET 1

Hospital Name / Dept:		Log Sheet No.
Patient Details	**Patient History**	**Enquiry Details**
Name: Hospital no..... DOB..... Tel no.....	Diagnosis: Male ☐ Female ☐ Consultant.....	Date..... Time..... Who is calling? ..... Contact no..... Drop in Yes ☐ No ☐

Reason for call
(in patients own words)

Is the patient on active treatment? Chemotherapy ☐ Radiotherapy ☐ Other ☐ Supportive ☐ No ☐

State regimen..... 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 hypothermia is a significant indicator of sepsis)

DOES THE PATIENT HAVE A CENTRAL LINE? Yes ☐ No ☐

Advise	Follow up Review	Assess
Remember: two ambers equal red!		
Fever (and receiving chemo)		
Chest Pain		
Performance Status		
Nausea		
Vomiting		
Oral/stomatitis		
Diarrhoea		
Constipation		
Fever (not receiving chemo)		
Infection		
Palmer - planter syndrome		
Fatigue		
Anorexia		
Dyspnoea/shortness of breath		
Rash		
Neurosensory/motor		
Bleeding		
Pain		
Bruising		
Extravasation		
Other (please state)		

Please document significant medical history/medication

Action Taken

Triage practitioner

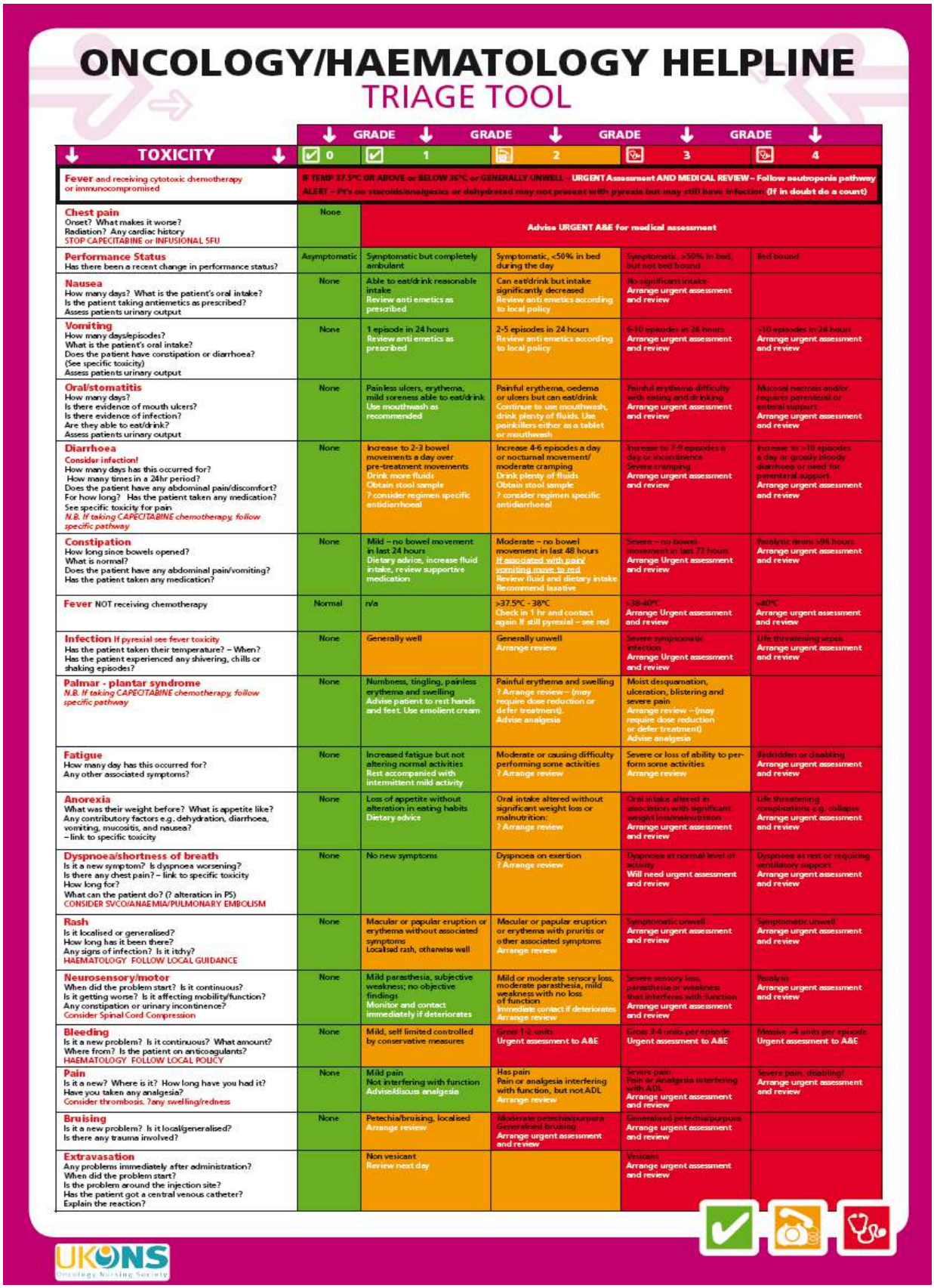
Signature..... Print..... Designation..... Date / /

Follow Up Action Taken:

Consultants team contacted Yes ☐ No ☐ Date / /

Signature..... Print..... Designation..... Date / / Time:

Appendix 5. Triage Assessment Tool

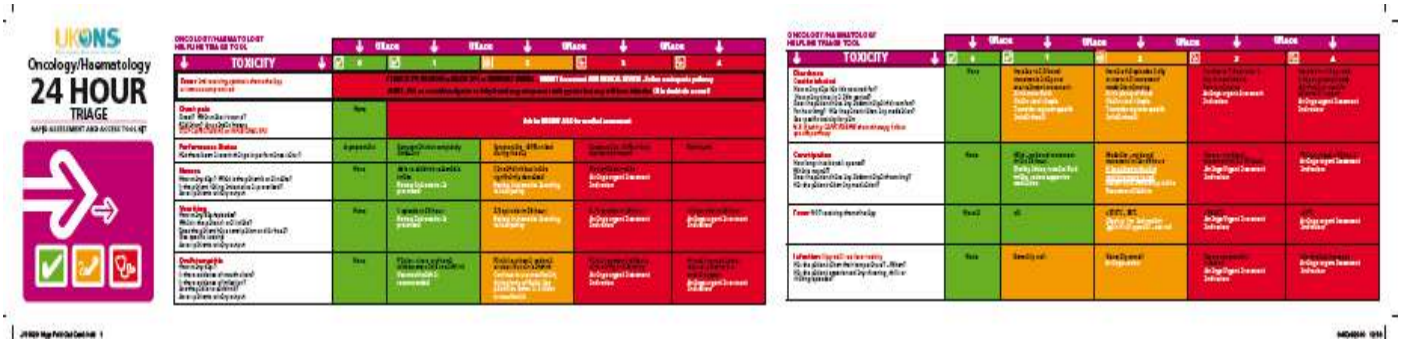


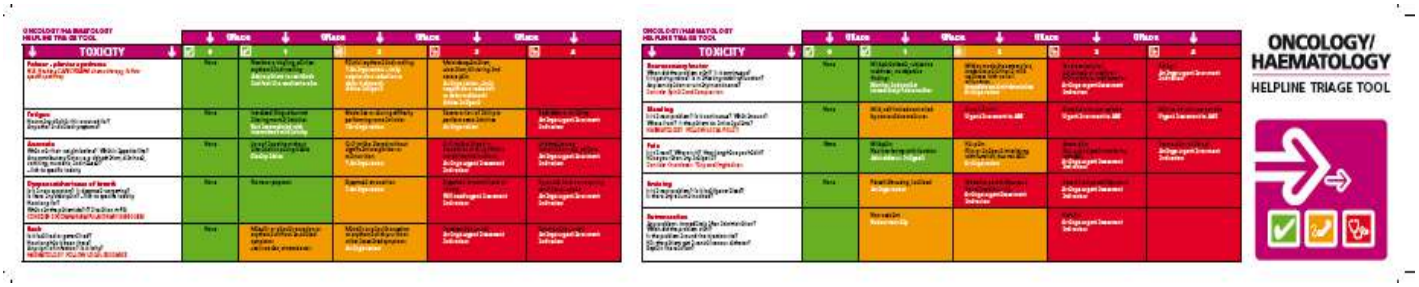
ONCOLOGY/HAEMATOLOGY HELPLINE
TRIAGE TOOL

TOXICITY	GRADE 0	GRADE 1	GRADE 2	GRADE 3	GRADE 4
Fever and receiving cytotoxic chemotherapy or immunocompromised	IF TEMP 37.5°C OR ABOVE or BELOW 36°C or GENERALLY UNWELL – URGENT Assessment AND MEDICAL REVIEW – Follow neutropenia pathway ALERT – Pt's on steroids/analgesics or dehydrated may not present with pyrexia but may still have infection (If in doubt do a count)				
Chest pain Onset? What makes it worse? Radiation? Any cardiac history STOP CAPECITABINE or INFUSIONAL 5FU	None	Advise URGENT A&E for medical assessment			
Performance Status Has there been a recent change in performance status?	Asymptomatic	Symptomatic but completely ambulant	Symptomatic, <50% in bed during the day	Symptomatic, >50% in bed, but not bed bound	Bed bound
Nausea How many days? What is the patient's oral intake? Is the patient taking antiemetics as prescribed? Assess patients urinary output	None	Able to eat/drink reasonable intake Review anti emetics as prescribed	Can eat/drink but intake significantly decreased Review anti emetics according to local policy	No significant intake Arrange urgent assessment and review	
Vomiting How many days/episodes? What is the patient's oral intake? Does the patient have constipation or diarrhoea? (See specific toxicity) Assess patients urinary output	None	1 episode in 24 hours Review anti emetics as prescribed	2-5 episodes in 24 hours Review anti emetics according to local policy	6-10 episodes in 24 hours Arrange urgent assessment and review	>10 episodes in 24 hours Arrange urgent assessment and review
Oral/stomatitis How many days? Is there evidence of mouth ulcers? Is there evidence of infection? Are they able to eat/drink? Assess patients urinary output	None	Painless ulcers, erythema, mild soreness able to eat/drink Use mouthwash as recommended	Painful erythema, oedema or ulcers but can eat/drink Continue to use mouthwash, drink plenty of fluids. Use painkillers either as a tablet or mouthwash	Painful erythema difficulty with eating and drinking Arrange urgent assessment and review	Mucosal necrosis and/or requires parenteral or enteral support Arrange urgent assessment and review
Diarrhoea Consider infection! How many days has this occurred for? How many times in a 24hr period? Does the patient have any abdominal pain/discomfort? For how long? Has the patient taken any medication? See specific toxicity for pain *N.B. If taking CAPECITABINE chemotherapy, follow specific pathway*	None	Increase to 2-3 bowel movements a day over pre-treatment movements Drink more fluids Obtain stool sample ? consider regimen specific antidiarrhoeal	Increase 4-6 episodes a day or nocturnal movement/ moderate cramping Drink plenty of fluids Obtain stool sample ? consider regimen specific antidiarrhoeal	Increase to 7-9 episodes a day or incontinence Severe cramping Arrange urgent assessment and review	Increase to >10 episodes a day or grossly bloody diarrhoea or need for parenteral support Arrange urgent assessment and review
Constipation How long since bowels opened? What is normal? Does the patient have any abdominal pain/vomiting? Has the patient taken any medication?	None	Mild – no bowel movement in last 24 hours Dietary advice, increase fluid intake, review supportive medication	Moderate – no bowel movement in last 48 hours If associated with pain/ vomiting move to red Review fluid and dietary intake Recommend laxative	Severe – no bowel movement in last 72 hours Arrange Urgent assessment and review	Paralytic ileum >96 hours Arrange urgent assessment and review
Fever NOT receiving chemotherapy	Normal	n/a	>37.5°C - 38°C Check in 1 hr and contact again if still pyrexial – see red	>38-40°C Arrange Urgent assessment and review	>40°C Arrange urgent assessment and review
Infection If pyrexial see fever toxicity Has the patient taken their temperature? – When? Has the patient experienced any shivering, chills or shaking episodes?	None	Generally well	Generally unwell Arrange review	Severe symptomatic infection Arrange Urgent assessment and review	Life threatening sepsis Arrange urgent assessment and review
Palmar - plantar syndrome *N.B. If taking CAPECITABINE chemotherapy, follow specific pathway*	None	Numbness, tingling, painless erythema and swelling Advise patient to rest hands and feet. Use emolient cream	Painful erythema and swelling ? Arrange review – (may require dose reduction or defer treatment). Advise analgesia	Moist desquamation, ulceration, blistering and severe pain Arrange review – (may require dose reduction or defer treatment) Advise analgesia	
Fatigue How many day has this occurred for? Any other associated symptoms?	None	Increased fatigue but not altering normal activities Rest accompanied with intermittent mild activity	Moderate or causing difficulty performing some activities ? Arrange review	Severe or loss of ability to perform some activities Arrange review	Bedridden or disabling Arrange urgent assessment and review
Anorexia What was their weight before? What is appetite like? Any contributory factors e.g. dehydration, diarrhoea, vomiting, mucositis, and nausea? – link to specific toxicity	None	Loss of appetite without alteration in eating habits Dietary advice	Oral intake altered without significant weight loss or malnutrition. ? Arrange review	Oral intake altered in association with significant weight loss/malnutrition Arrange urgent assessment and review	Life threatening complications e.g. collapse Arrange urgent assessment and review
Dyspnoea/shortness of breath Is it a new symptom? Is dyspnoea worsening? Is there any chest pain? – link to specific toxicity How long for? What can the patient do? (? alteration in PS) CONSIDER SVCO/ANAEMIA/PULMONARY EMBOLISM	None	No new symptoms	Dyspnoea on exertion ? Arrange review	Dyspnoea at normal level of activity Will need urgent assessment and review	Dyspnoea at rest or requiring ventilatory support Arrange urgent assessment and review
Rash Is it localised or generalised? How long has it been there? Any signs of infection? Is it itchy? HAEMATOLOGY FOLLOW LOCAL GUIDANCE	None	Macular or papular eruption or erythema without associated symptoms Localised rash, otherwise well	Macular or papular eruption or erythema with pruritis or other associated symptoms Arrange review	Symptomatic unwell Arrange urgent assessment and review	Symptomatic unwell Arrange urgent assessment and review
Neurosensory/motor When did the problem start? Is it continuous? Is it getting worse? Is it affecting mobility/function? Any constipation or urinary incontinence? Consider Spinal Cord Compression	None	Mild parasthesia, subjective weakness; no objective findings Monitor and contact immediately if deteriorates	Mild or moderate sensory loss, moderate parasthesia, mild weakness with no loss of function Immediate contact if deteriorates Arrange review	Severe sensory loss, parasthesia or weakness that interferes with function Arrange urgent assessment and review	Paralysis Arrange urgent assessment and review
Bleeding Is it a new problem? Is it continuous? What amount? Where from? Is the patient on anticoagulants? HAEMATOLOGY FOLLOW LOCAL POLICY	None	Mild, self limited controlled by conservative measures	Gross 1-2 units Urgent assessment to A&E	Gross 3-4 units per episode Urgent assessment to A&E	Massive >4 units per episode Urgent assessment to A&E
Pain Is it a new? Where is it? How long have you had it? Have you taken any analgesia? Consider thrombosis. ?any swelling/redness	None	Mild pain Not interfering with function Advise/discuss analgesia	Has pain Pain or analgesia interfering with function, but not ADL Arrange review	Severe pain Pain or Analgesia interfering with ADL Arrange urgent assessment and review	Severe pain, disabling! Arrange urgent assessment and review
Bruising Is it a new problem? Is it local/generalised? Is there any trauma involved?	None	Petechia/bruising, localised Arrange review	Moderate petechia/purpura Generalised bruising Arrange urgent assessment and review	Generalised petechia/purpura Arrange urgent assessment and review	
Extravasation Any problems immediately after administration? When did the problem start? Is the problem around the injection site? Has the patient got a central venous catheter? Explain the reaction?		Non vesicant Review next day		Vesicant Arrange urgent assessment and review	

UKONS Oncology Nursing Society

Appendix 6 Concertina Pocket Triage Assessment Tool





Appendix 7. Pilot agreement

Pilot Process

1. **Training**

All staff using the Tool Kit must receive training and assessment of competency. The project leads will be assessed at the training day and will be able to act as mentors and assessors to their trust teams.
A competency framework is supplied please complete prior to using the tool kit.
To assist with training a Slide kit and scenario sheet is provided.

2. **Evaluation**

Evaluation will be a two step process, an evaluation questionnaire to be completed by helpline practitioners and a review of a random sample of anonamised log sheets.

- Questionnaire

We would like all staff that use the tool kit, to complete this evaluation; we are happy for this to be completed on line or printed and sent to us by mail.
A paper copy of the evaluation questionnaire is contained within your pack.

- Log Sheets

Log Sheets should be anonamised and photocopied prior to posting to the pilot offices.
Please make sure that the;

- pilot site number
- the professional discipline and grade of the staff member who completed the form

are on every form.
There is an example in your pack.

When you have completed your trial period please post the copied forms to the address below. Please inform philippajones@nhs.net advising that you have forwarded the documents and completed your pilot.

Mail Address;- 24 Hour Helpline Pilot
Greater Midlands Cancer Network
James House
Albrighton
Shropshire, WV7 3HA

The development team will review the evaluation sheets and a random selection of the log sheets to produce a report that will be available to the pilot sites.

1. **Pilot Period**

The pilot will run for a two month period or completion of 100 log sheets.
The pilot period commences following training of staff within the pilot sites, we suggest a two week training period.
PLEASE INFORM philippajones@nhs.net when you commence the pilot.
You are welcome to continue using the Tool Kit after completion of the pilot if you wish to do so.
If for any reason you are not able to complete the pilot and have to be withdrawn please would you inform philippajones@nhs.net it would be very useful if you could also let us know why this has happened.
We request that you do not photocopy or share this "Tool Kit" with any other chemotherapy units during the pilot period. We are hoping to distribute widely following review and evaluation.

Could you please sign and date both copies of this document, retain one in your pilot pack and give one to Philippa Jones.

I agree to comply with the pilot process as described above,

Name…… date……..
Signature……

Appendix 8. Pilot sites.

1st round pilot sites		
1.	St Helens and Knowsley NHS Trust	Haematology and Oncology Chemotherapy Unit
2.	Barking Havering and Redbridge University Hospitals Trust	Haematology and Oncology Cancer Centre
3.	Clatterbridge Centre for Oncology.	Oncology Cancer Centre
4.	University Hospitals of Coventry and Warwickshire NHs trust	Haematology and Oncology Cancer Centre
5.	North Cumbria University Hospital NHS Trust	Haematology and Oncology Cancer Centre
6	Belfast Health and Social Care Trust.	Haematology and Oncology Cancer Centre
7	Maidstone and Tunbridge Wells NHS Trust/The Kent Oncology Centre	Haematology and Oncology Cancer Centre
8	City Hospitals Sunderland	Haematology and Oncology Chemotherapy Unit
9	Sandwell and West Birmingham Hospitals NHS Trust	Haematology and Oncology Chemotherapy Unit
10	North Wales NHS Trust. Glanclwyd Hospital.	Haematology and Oncology Cancer Centre
11	Oxford Radcliffe Hospitals Trust. The Oxford Cancer and Haematology Centre	Haematology and Oncology Cancer Centre
12	Dudley Hospitals NHS Foundation Trust	Haematology and Oncology Chemotherapy Unit
13	Royal United Hospital NHS Trust Bath	Haematology and Oncology Chemotherapy Unit
14	University Hospital Birmingham	Haematology and Oncology Cancer Centre
15	Royal Devon and Exeter Foundation NHS Trust	Cancer centre
16	Heart of England Foundation Trust	Haematology and Oncology Chemotherapy Unit
17	Southampton University Hospitals NHS Trust	Haematology and Oncology Cancer Centre
18	University Hospital of North Staffordshire	Haematology and Oncology Cancer Centre
19	Royal Preston Hospital, Lancashire Teaching Hospitals NHS Trust	Haematology and Oncology Cancer Centre
20	Royal Free Hampstead NHS Trust	Haematology and Oncology Cancer Centre

21	Royal Wolverhampton NHS Trust	Haematology and Oncology Cancer Centre
22	Shrewsbury and Telford NHS Trust	Haematology and Oncology Cancer Centre
23	Mid Staffordshire Hospital Foundation Trust	Haematology and Oncology Chemotherapy Unit
24	BMI Priory Hospital,	Private Hospital, Combined unit
25	BMI Mount Alvernia	Private Hospital, Combined unit
26	Queen Alexandra Hospital Portsmouth.	Haematology and Oncology Cancer Centre
27	The Great Western Hospital Foundation Trust,	Haematology and Oncology Chemotherapy Unit
2nd round pilot sites		
1.	The Christie Hospital	Haematology and Oncology Cancer Centre
2.	Western Sussex Hospital trust	Haematology and Oncology Chemotherapy Unit
3.	Lothian University Hospital Trusts	1x Cancer Centre 5xChemotherapy Units
4.	Brighton and Sussex University Hospitals	

Appendix 9. User questionnaire

UKONS Central West Chemotherapy Nurses Group.

As part of a project with UKONS we are evaluating the new

"24 Hour Helpline, Rapid Assessment and Access Tool Kit".

You will have been involved in the pilot process of the tool and therefore we ask that you complete the following questionnaire.

We are trying to discover the advantages and disadvantages of using the tool therefore feel free to answer as honestly as possible.

Thank you for your time and co-operation. We will share the results of the evaluation accordingly.

General.

1. **How long have you been caring for oncology/haematology patients?**

   A. less than 12 month's
   B. between 1year and 3 years
   C. more than 3years

2. **Please could you indicate your area of work and speciality**

   Cancer Centre ⍞ Cancer Unit ⍞

   Haematology ⍞ Oncology ⍞ Combined ⍞

3. **Prior to being involved in the pilot did your Trust have a 24 hour helpline**

   A. Yes ⍞
   B. No ⍞

4. **Prior to being involved in the pilot did you use any other tool for assessing patients contacting the helpline**

   A. Always ⍞
   B. Sometimes ⍞
   C. Never ⍞

The Tool Kit Contents and Training.

5. **Was the design and layout of the tool kit satisfactory?**

   A. Yes ⍞
   B. No ⍞

   If no please state which parts were unsatisfactory and how ----------

6. **Did you find any parts of the new tool difficult to understand?**

A. Yes ☐
B. No ☐

If yes please state which parts were problematic and what the difficulties were,

_____

_____

7. **Did you feel the training you received to use the tool kit was adequate?**

A. Yes ☐
B. No ☐

8. **Did you find the tool easy to use?**

A. Yes ☐
B. No ☐

If no please state why----------

_____

_____

9. **Did you find the Assessment Pathway flow chart helpful?**

A. Yes ☐
B. No ☐

10. **Did you find the use of the traffic light colouring system (red, amber, green) on the Assessment Tool poster helpful?**

A. Yes ☐
B. No ☐
C. Not sure ☐

11. **Did you understand the way in which the questions on the Assessment Tool poster were written?**

A. Yes ☐

B. No ☐

If no please elaborate----------

_____

_____

12. Did the Assessment Log Sheet capture all the information required for the assessment process?

A. Yes☐
B. No☐

If no please elaborate----------

---

13. Was the duplicate sheet helpful?

A. Yes☐
B. No☐

14. What effect did the new tool have on the admission process?

A. More patients attending for further assessment ☐
B. Fewer patients attending for further assessment ☐
C. More patients admitted ☐
D. Fewer patients admitted ☐

Further Comments ----------

---

15. Did you find the tool reliable?

A. Yes ☐
B. No ☐
C. Don't know ☐

16. During the pilot did you feel more confident about managing the helpline?

A. Yes☐
B. No☐
C. Sometimes☐

<u>Helpline follow up.</u>

17. Did you have staff time allocated to follow up helpline patients?

A. Yes☐
B. No☐
C. Sometimes☐

18. What percentage of Amber patients were you able to contact?

A 80% - 100% ⍞
B 80% -60% ⍞
C below 60% ⍞

19. Was this a useful conversation?

A. Always ⍞
B. Sometimes ⍞
C. Never ⍞

20. What percentage of Red patients were you able to track?

A. 80%- 100% ⍞
B. 80% -60% ⍞
C below 60% ⍞

21. Was this a useful process?

A. Always ⍞
B. Sometimes ⍞
C. Never ⍞

22. Do you think an electronic version of the tool would have been better than paper?

1. Yes⍞
2. No⍞
3. Didn't mind⍞

Pilot site number…….

Grade of staff completing the evaluation form……. [e.g. chemotherapy nurse]

May we take this opportunity to thank you for your time. If you have any further comments please feel free to add at the end.