

QUALITY OF LIFE IN CANCER CLINICAL TRIALS

A Practical Guide For Research Staff



Cancer Research UK and
UCL Cancer Trials Centre

Contents

What is Quality of Life?1

QOL in Cancer Trials 2

How is QOL Measured?3

EORTC Questionnaires4

FACIT Questionnaires5

EQ – 5D 6

Your role in collecting QOL data7

Barriers to participation 10

Avoiding Missing Information & bias 11

Summary12

Further Information 13

What is Quality of life?

Quality of life (QOL) is an overall assessment of total wellbeing and includes physical, psychological and social wellbeing.

It is affected by all aspects of life including work, home, relationships, finances and health.

It is sometime referred to as a patient reported outcome (PRO).



It is an important consideration in oncology as both the disease and treatments can impact on several aspects of life.

Thus in addition to prolonging life, treatments should aim to maximise the total wellbeing of patients, by minimising the adverse effects of treatment in survivors, particularly when cure is no longer possible.



QOL in Cancer Trials

QOL is an important outcome measure as it is increasingly accepted that, in addition to the classical outcomes such as tumour control and survival, cancer trials must accurately evaluate the effect a treatment has on quality of life.



QOL allows a unique insight into the views of patients. Unlike survival it cannot be collected retrospectively.

“...treatment can be recommended in metastatic cancer even without an improvement in survival, if it improves quality of life”

*ASCO guidelines,
J Clin Oncol;14: 671-9, 1996*

Site staff therefore play a vital role in obtaining this data and in many ways the validity of the data is dependent on your skills.

If you are responsible for administration of QOL forms, you should find this booklet useful.



How is QoL Measured?

There is a range of standardised QOL assessment questionnaires that have been rigorously tested and well-validated. Some are generic, others are disease-specific.

These questionnaires have clearly defined methods and procedures, ensuring a consistent measurement and allowing comparison of data from different studies.



“...the question is no longer whether quality of life should be measured but what is the most reliable and practical way of obtaining these data”

Slevin

B J Cancer;7:109-12, 1998

As each questionnaire is designed to look at different aspects of QOL, some trials use more than one set of questionnaires. Each questionnaire asks up to 30 questions, and patients choose one of up to 5 responses. Some forms also have an overall score of QOL.

This booklet gives details of three of the most commonly used forms in cancer clinical trials.

EORTC Questionnaires

These are cancer specific, the core questionnaire (**EORTC QLQ-30**), has 30 questions covering 5 functional states

- Physical
- Role
- Emotional
- Social
- Cognitive functioning

There are two final questions covering “overall health” and “overall quality of life” and 3 symptom scales.

Answers are graded on a 4-point Likert scale.

- Not at all
- A little
- Quite a bit
- Very much



1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase?
2. Do you have any trouble taking a long walk?
3. Do you have any trouble taking a short walk outside of the house?
4. Do you need to stay in bed or a chair during the day?
5. Do you need help with eating, dressing, washing yourself or using the toilet?

During the past week:

6. Were you limited in doing either your work or other daily activities?
7. Were you limited in pursuing your hobbies or other leisure time activities?
8. Were you short of breath?
9. Have you had pain?
10. Did you need to rest?
11. Have you had trouble sleeping?
12. Have you felt weak?
13. Have you lacked appetite?
14. Have you felt nauseated?
15. Have you vomited?

Please go on to the next page

Disease-specific modules exist for most cancers. eg CX-24, which has 24 questions aimed at cervix cancer patients. They are not usually used independently of the QLQ-30.

FACIT Questionnaires



<u>PHYSICAL WELL-BEING</u>		Not at all	A little bit	Somewhat	Quite a bit	Very much
141	I have a lack of energy.....	0	1	2	3	4
142	I have nausea.....	0	1	2	3	4
143	Because of my physical condition, I have trouble meeting the needs of my family.....	0	1	2	3	4
144	I have pain.....	0	1	2	3	4
145	I am bothered by side effects of treatment.....	0	1	2	3	4
146	I feel ill.....	0	1	2	3	4
147	I am forced to spend time in bed.....	0	1	2	3	4
<u>SOCIAL/FAMILY WELL-BEING</u>		Not at all	A little bit	Somewhat	Quite a bit	Very much
148	I feel close to my friends.....	0	1	2	3	4
149	I get emotional support from my family.....	0	1	2	3	4
150	I get support from my friends.....	0	1	2	3	4
151	My family has accepted my illness.....	0	1	2	3	4
152	I am satisfied with family communication about my illness.....	0	1	2	3	4
153	I feel close to my partner (or the person who is my main support).....	0	1	2	3	4
154	Regardless of your current level of sexual activity, please answer the following question. If you prefer not to answer it, please mark this box <input type="checkbox"/> and go to the next section.					
155	I am satisfied with my sex life.....	0	1	2	3	4

Functional Assessment of Chronic Illness Therapy or Cancer Therapy (FACT)

The general cancer specific questionnaires (FACT-G) consists of four domains:

- Physical,
- Social/Family,
- Emotional
- Functional Well-Being.

There are also disease and treatment specific questionnaires

- FACT-O, ovarian cancer
- FACT-L, lung cancer
- FACT-D, diarrhoea
- FACT- NTX, neurotoxicity

Patients need to **circle** the most appropriate answer

- Not at all
- A little bit
- Somewhat
- Quite a bit
- Very much

Questions refer to issues within the last 7 days.

EQ-5D Questionnaire

This generic, **non cancer specific**, form is often used by health economists to generate a single index value measure called quality-adjusted life years (QALYs) to calculate the health economics of different interventions.

EuroQol has 5 questions:

- Mobility,
- Self-care,
- Usual activities
- Pain/discomfort
- Anxiety/depression

There are 3 versions

- 3L (1990) – 3 answers
- Y (2008) - 3 answers
- 5L (2009) – 5 answers

Patients tick the statement (of 3 or 5) they agree with.

There is a question on overall health: “Your health state today” answered on a scale of 0-100 – all versions.

It only takes a few minutes to complete.



Mobility

I have no problems in walking about

I have some problems in walking about

I am confined to bed

Self-Care

I have no problems with self-care

I have some problems washing or dressing myself

I am unable to wash or dress myself

Usual Activities (e.g. work, study, housework, family or leisure activities)

I have no problems with performing my usual activities

I have some problems with performing my usual activities

I am unable to perform my usual activities

Pain/Discomfort

I have no pain or discomfort

I have moderate pain or discomfort

I have extreme pain or discomfort

Anxiety/Depression

I am not anxious or depressed

I am moderately anxious or depressed

I am extremely anxious or depressed

Your Role in Collecting QoL Data - 1

The role is key to study success and requires awareness and sensitivity.

Step 1 – before seeing the patient

Check the trial protocol to

- find out if QOL aspect is optional or mandatory
- check the number and timing of the forms
- where the forms should be completed
- how the forms should be completed – most of our trials use paper forms but others ask for completion online or via a handheld device

You could also check the patients notes to find out if they are likely to have any difficulty completing questionnaires.

Step 2 – explain the process to the patient

This occurs at the initial visit to discuss the trial and before consent is obtained.

Stress the importance of the QOL study objectives; ie as a means of finding out how patients are feeling over the course of the treatment/s.

Explain to the patient

- the number of forms
- how often and when they need to be filled in
- how long they take to fill in
- that the forms should (preferably) be filled in by the patient themselves

Your Role in Collecting QoL Data - 2

Step 3 – Administer the Questionnaires

Usually this is done whilst waiting to be seen in clinic, but forms may be completed as a day case/ inpatient or at home. If in clinic, try and select a quiet location.

You should explain

- the instructions on the top of each form
- that there is no wrong or right answer
- they should choose the answer that best suits them
- to try and answer all questions even if they seem irrelevant
- you are available to answer any questions

Re-iterate these points at each QOL time point outlined in the protocol.

Patients who need help

If a patient needs you to read out the questions make sure you do so

- in a neutral tone
- do not be tempted to suggest possible answers or influence the patient in any way
- If relatives assist make sure they are able to be neutral.

Stress that any concerns should be raised with the clinical team as their responses may be kept confidential. Only a few studies alert the clinical team of specific issues.

Your role in collecting QoL data - 3

Step 4 – Check responses

All completed forms should be checked and collected before the patient leaves. Check that all questions have been answered.

If necessary, go back to the patient and ask them to answer any overlooked questions. If this was deliberate they should write their initials by the question or, you could annotate the form yourself.



Step 5 - Documentation

METRO BIBF											
Low dose cyclophosphamide +/- BIBF -1120											
QoL Cover Sheet											
Group 1											
Patient Initials	<table border="1"><tr><td>H</td><td>S</td><td>M</td></tr></table>	H	S	M							
H	S	M									
Trial Number	<table border="1"><tr><td>B</td><td>I</td><td>B</td><td>1</td><td>2</td><td>3</td><td>4</td></tr></table>	B	I	B	1	2	3	4			
B	I	B	1	2	3	4					
Questionnaires enclosed:											
<input type="checkbox"/> EORTC QLQ-C30	<input type="checkbox"/> EORTC OV28										
<input type="checkbox"/> FACT-O	<input type="checkbox"/> MOST										
Date Coversheet Completed: <table border="1"><tr><td>d</td><td>d</td><td>/</td><td>m</td><td>m</td><td>/</td><td>y</td><td>y</td><td>m</td><td>m</td></tr></table>		d	d	/	m	m	/	y	y	m	m
d	d	/	m	m	/	y	y	m	m		
Time point:											
<input type="checkbox"/> Baseline	<input type="checkbox"/> Week 6										
<input type="checkbox"/> Week 12	<input type="checkbox"/> Week 18										
<input type="checkbox"/> Week 24	<input type="checkbox"/> Week 30										
<input type="checkbox"/> Week 36	<input type="checkbox"/> Week 42										

Complete the cover sheet (if there is one) to give the reason why a form may not have been filled in **or** if, and how, help was given.

If no cover sheet exists, to avoid queries, make sure the Trial Centre has these details.

If forms were not given out at clinic, they could be completed by phone or posted to the patient.

Barriers to participation

Literacy

As many as 10% of people have problems reading.



Patients may claim to have forgotten their glasses and if so offering to read the questions will enable them to take part.

Language

All our trial documents, including patient information leaflets, are only provided in English. Although questionnaires are available in different languages, patients who cannot speak/understand English cannot be included as we will not be sure of their true consent. Other trials may differ.

Illness - Many studies collect data over a long time and inevitably some patients become ill. Data on their quality of life at this point is of real value but you may feel it is no longer appropriate to ask patients to fill in the forms. In an advanced lung cancer study 55% of patients still completed forms despite having had a relapse. Wherever possible, do at least ask patients if they want to complete forms rather than assume they do not want to.



Avoiding Missing Information & Bias

One of the major problems with the interpretation of QOL data relate to missing information. Missing forms can introduce bias and one missing question may invalidate a section or the whole questionnaire. Differences in QOL may be missed if a lot of information is missing.

Unanswered questions

If a patient has chosen not to answer a question, eg those of a sexual or personal nature, there is no need to ask them to do so, but they should write their initials next to such questions.

Treatment delays

If treatment has been delayed it may mean that the timing of completing questionnaires is disrupted. If there are no instructions in the protocol, contact the Trial Centre for guidance.

Biased responses

Patients are frequently accompanied by friends or relatives when they visit hospital. It is crucial that answers should belong entirely to the patient and are not influenced by the opinions of healthcare workers or family members.



Managing QOL Forms

Summary

Before seeing the patient

- Check trial protocol; is completion of QOL forms optional or not?
- Which forms are being used and when are they to be completed?
- Where (clinic, home etc) should the forms be completed ?

Explain QOL study to patient

- Study objectives eg patients views before, during & after treatment
- Number of forms and how often they need completing
- How long forms take to complete
- How forms will be given to them and where to complete them

Give out QOL forms

- Go through form instructions eg should answer be circled or ticked
- Answers should be theirs, not influenced by others
- Stress there are no right/wrong answers
- Try to answer all questions even if some seem irrelevant
- **If patient needs assistance;** read out questions in neutral tone, and do not suggest an answer

Check forms are complete

- Check if any questions have not been answered
- Ask patient to write their initials next to questions they do not want to answer or complete those they overlooked
- Thank them for completing form

Send forms to Trial Centre

- Complete cover sheet and attach to this visits completed forms
- **If there is no cover sheet;** make a note for the Trial Centre of how, and if, the patient had assistance **or** the reason why forms were not completed

Further Information

If you are interested in finding out more about Quality of Life you might find some of these resources helpful.

References

- Aaronson NK, Ahmedzai S, Bergman B, et al for the European Organization for Research and Treatment of Cancer. **QLQ-C30: A Quality-of-Life Instrument for Use in International Clinical Trials in Oncology.** JNCI **85**: 365-376, 1993.
- Cella DF, Tulsky DS, Gray G et al. **The Functional Assessment of Cancer Therapy (FACT) scale: Development and validation of the general measure.** JCO **11**(3), 570-579, 1993.
- The EuroQol Group (1990). **EuroQol-a new facility for the measurement of health-related quality of life.** Health Policy **16**(3):199-208.
- Herdman M, Gudex C, Lloyd A et al. **Development and preliminary testing of the new five-level version of EQ-5D (EQ-5D-5L).** Qual Life Res. December; **20**(10): 1727–1736, 2011 .
- Clinical Trials in Cancer: principles and practice. Girling et al. Oxford.

Websites

- EORTC: <http://groups.eortc.be/qol/>
- FACIT: <http://www.facit.org/>
- EQ-5D: <http://www.euroqol.org/>

This leaflet was produced by
Dr Roy Rabbie and Helen Meadows, Training Lead at
the Cancer Research UK & UCL Cancer Trials Centre

*We thank the following for their input and
Cancer Research UK for access to their image library*

*Trial centre: Lindsay James, Krystyna Reczko, Iftekhar Khan & Nicky Gower.
Site staff: Christine Brannan, Nikki Evans, Emma Hainsworth, Gill Sandeep &
Melanie Winterbotham*

Cancer Research UK and **UCL Cancer Trials Centre**

The centre is funded by



CANCER
RESEARCH
UK