Study Title: Use of the Skin Cancer Quality of Life Impact Tool (SCQOLIT) – a feasibility study in non-melanoma skin cancer

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No potential conflicts of interest to declare.

Confidentiality Statement

This document contains confidential information that must not be disclosed to anyone other than the Sponsor, the Investigator Team, host organisation, and members of the Research Ethics Committee, unless authorised to do so.

TABLE OF CONTENTS

1. SYNOPSIS 4
2. ABBREVIATIONS 4
3. BACKGROUND AND RATIONALE 5
4. OBJECTIVES AND OUTCOME MEASURES/ENDPOINTS 7
5. STUDY DESIGN 7
6. PARTICIPANT IDENTIFICATION 9
6.1. Study Participants 9
6.2. Inclusion Criteria for Groups 1 – 3 9
6.3. Exclusion Criteria for Groups 1 – 3 9
7. STUDY PROCEDURES 10
7.1. Recruitment 10
7.2. Informed Consent 10
7.3. Screening and Eligibility Assessment 12
7.4. Subsequent Visits 12
7.5. Discontinuation/Withdrawal of Participants from Study 13
7.6. Definition of End of Study 13
8. STUDY DATA COLLECTION 13
9. STATISTICS AND ANALYSIS 14
9.1. Description of Statistical Methods 14
9.2. The Number of Participants 15
9.3. Analysis of Outcome Measures/Endpoints 15
10. DATA MANAGEMENT 16
10.1. Access to Data 16
10.2. Data Recording and Record Keeping 16
11. QUALITY ASSURANCE PROCEDURES 17
12. ETHICAL AND REGULATORY CONSIDERATIONS 17
12.1. Declaration of Helsinki 17
12.2. ICH Guidelines for Good Clinical Practice 17
12.3. Approvals 17
12.4. Reporting 17
12.5. Participant Confidentiality 17
13. FINANCE AND INSURANCE 18
13.1. Funding 18

13.2. Insurance 18
14. PUBLICATION POLICY 18
15. REFERENCES 19
16. APPENDIX A: STUDY FLOW CHART FOR ALL PARTICIPANTS. 20
17. APPENDIX B: SCHEDULE OF STUDY PROCEDURES FOR GROUP 2 – CLINIC-BASED. 20
18. APPENDIX C: SCQOLIT TOOL Questionnaire. 21
19. Appendix D: EQ-5D Questionnaire 22
20. Appendix E: AMENDMENT HISTORY 23

1. SYNOPSIS

Study Title	**Use of the Skin Cancer Quality of Life Impact Tool (SCQOLIT) – a feasibility study in non-melanoma skin cancer**	
Internal ref. no. / short title	Feasibility and utility of the Skin Cancer Quality of Life Impact Tool	
Study Design	Feasibility study	
Study Participants	Patients with histological diagnosis of non-melanoma skin cancer	
Planned Sample Size	300 patients	
Planned Study Period	1 year	
	Objectives	**Endpoints**
Primary	To establish the acceptability of using the SCQOLIT tool as an assessment of patient reported outcome measures (PROMs) for patients with non-melanoma skin cancer (NMSC) attending dermatology clinics	Mixed methods 1) Analysis of a) Patient participation rates b) Questionnaire response rates c) Missing values 2) Analysis of patient and staff preferences, views and experiences
Secondary	To determine the psychometric properties of the SCQOLIT as a tool for patients with NMSC	Analysis of: a) Construct validity b) Responsiveness c) Clinically Important Difference d) Floor and ceiling effects e) Intra- and Inter-participant change scores

2. ABBREVIATIONS

BAD	British Association of Dermatologists
BCC	Basal cell carcinoma
CI	Chief Investigator
CRF	Case Report Form
CTRG	Clinical Trials & Research Governance, University of Oxford

DCT	Direct care team
DLQI	Dermatology Life Quality Index
GCP	Good Clinical Practice
GP	General Practitioner
ICF	Informed Consent Form
ICH	International Conference of Harmonisation
MDT	Multidisciplinary Team
NHS	National Health Service
NMSC	Non melanoma skin cancer
NRES	National Research Ethics Service
OUH	Oxford University Hospitals NHS Trust
PI	Principal Investigator
PIS	Participant Information Sheet
PROM	Patient reported outcome measure
QOL	Quality of life
R&D	NHS Trust R&D Department
REC	Research Ethics Committee
SCC	Squamous cell carcinoma
SCQOLIT	Skin Cancer Quality of Life Impact Tool
SOP	Standard Operating Procedure
URN	Unique reference number

3. BACKGROUND AND RATIONALE

Patient-reported outcome measures (PROMs) offer enormous potential to improve quality and results of Dermatology services, providing validated evidence of health from the patient perspective. They can assess levels of health needs in populations with skin disease, and over time, can provide evidence of outcomes of services for the purposes of audit, quality assurance and comparative performance evaluation. They may also improve the quality of interactions between clinicians and patients in the Dermatology clinic. Lord Darzi's Interim Report on the future of the NHS recommended that PROMs should play a more significant role in our approach to clinical quality in the NHS (1). Using PROMs is recommended as a method to improve the experience of patients with cancer, and in prostate cancer has been demonstrated to uncover specific, previously unidentified, issues which were affecting a large number of people (2). This evidence is therefore essential to planning provision of appropriate monitoring and support services, including specialist psychological support services.

In addition, PROMs data have the potential to impact on clinical decision-making and thus plausibly guide commissioning choices. As a result, PROMs have been assessed nationally since April 2009, for four elective surgical procedures (hip replacement, knee replacement, varicose vein and groin hernia surgery)

to determine whether and how commissioners and patients can best use this information to guide decisions about services and support options (3). It therefore seems reasonable that in the future, PROMs could be extended to evaluate outcomes in other specialties including Dermatology, to support the commissioning process.

Referrals of skin lesions (including suspected skin cancers) comprise 30 – 45% of specialist Dermatology outpatient work (4). This is likely to intensify, as skin cancer is the most rapidly increasing cancer among fair-skinned populations worldwide. In England, the incidence of and mortality from skin cancer are increasing each year, with current estimates in excess of 100 000 new cases of non-melanoma skin cancer (NMSC) per annum, although this is likely to be a gross underestimate due to incomplete reporting. NMSC are rarely life threatening, however, both disease and treatments can be associated with substantial morbidity and confer significant financial burden to the NHS. Consequently, the British Association of Dermatologists commissioned the Patient-reported Outcomes Measurement Group, Oxford to review the evidence for PROMs for skin cancer (5). The authors concluded that there was a limited volume of published evidence for the application of generic PROMs (e.g. Dermatology Life Quality Index (DLQI)) in skin cancer. Cancer-specific quality of life (QOL) questionnaires appeared more sensitive than generic PROMs in capturing relevant QOL issues. In the NMSC population, these issues include scarring, disfigurement, anxiety and fear of future skin cancers (6,7). Although limited attempts have been made to develop PROMs specific to NMSC, the authors suggested that further evaluations are needed (5).

One particular skin cancer-specific PROM that was evaluated in this review was the Skin Cancer Quality of Life Impact Tool (SCQOLIT) [Appendix C]. The SCQOLIT is a ten-item instrument developed specifically for patients with non-metastatic skin cancer. Item generation and reduction was undertaken using 100 patients with both melanoma and non-melanoma skin cancers (6). Responses were obtained evaluating the impact of their skin cancer on these ten items using a 4-point Likert scale. All responses were totalled scores with a maximum achievable score of 30 (similar to the DLQI). The instrument was further evaluated with 54 patients with melanoma and 59 patients with NMSC. Reproducibility using intraclass correlation coefficients for both groups was reported to be greater than 0.72. Internal consistency (Cronbach's alpha) for the NMSC group was 0.81. Convergent validity was supported by significant correlation of change of scores between SCQOLIT and the DLQI. The SCQOLIT demonstrated some sensitivity to change with statistically significant differences in scores from baseline to three months but this was not considered to be clinically significant (8). The authors of the commissioned review on PROMs for Patients with Skin Cancer (5) concluded that the SCQOLIT questionnaire demonstrated evidence in favour of reproducibility, validity, internal consistency but felt that it required further evaluation (6).

The decision to evaluate the SCQOLIT in this study, includes its similarity in overall format and brevity to that of the DLQI which is a PROM now widely used in routine medical dermatology clinical practice, thus making it a good candidate for incorporation into busy skin cancer clinics. The SCQOLIT takes less than five minutes for the patient to complete and its similar score calculation to the DLQI, a PROM familiar to Dermatologists, means that this questionnaire incurs low administrative burden. Acceptability and feasibility of this tool has never been rigorously assessed in Dermatology clinics. Studies evaluating PROMs in NMSC have been largely assessed in relation to surgical treatments yet basal cell carcinoma can be effectively treated using medical treatments e.g. topical immunomodulators and photodynamic therapy, and to date, PROMs have not been investigated in these sub-populations.

Justification summary

There are very few studies evaluating PROMs in skin cancer yet the incidence of all skin cancers is rapidly increasing and confers significant burden on NHS healthcare resources. The British Association of Dermatologists commissioned the Patient-Reported Outcome Measurement Group in Oxford to undertake a structured review of PROMs in skin cancer in 2013 (5), and the authors concluded that although limited attempts had been made to develop PROMs specific to NMSC, larger studies are needed to evaluate their use in clinical practice. This feasibility study is designed to evaluate one of the PROMs tools reviewed by the authors – the SCQOLIT questionnaire (8), and aims to establish its utility and impact in patients with non-melanoma skin cancers attending dermatology clinics. We will assess both patient and clinician acceptability of the SCQOLIT questionnaire tool for use in a busy skin cancer clinic. By determining the impact of using the SCQOLIT questionnaire on patients with NMSC, we hope to identify any unmet needs and potentially use these results to inform future clinical decisions and/or service planning.

In the long-term, a validated NMSC-specific PROM would allow robust comparison of quality of care pathways from a patient perspective, across different specialties. In addition, it could help to standardize multi-centred randomized controlled trials for emerging treatments and more appropriately direct healthcare resources to improve quality of life in patients with NMSC.

4. OBJECTIVES AND OUTCOME MEASURES/ENDPOINTS

Objectives	**Outcome Measures/Endpoints**
Primary Objective To establish the acceptability of using the SCQOLIT tool as an assessment of patient reported outcome measures (PROMs) for patients with non-melanoma skin cancer (NMSC) attending Dermatology clinics	Mixed methods 1) Analysis of a) Patient participation rates b) Questionnaire response rates c) Missing values 2) Analysis of patient and staff preferences, views and experiences
Secondary Objectives To determine psychometric properties of the SCQOLIT as a tool for patients with NMSC	Analysis of: a) Construct validity b) Responsiveness c) Clinically Important Difference d) Floor and ceiling effects e) Intra- and Inter-participant change scores

5. STUDY DESIGN

Plan of Investigation

To undertake a prospective feasibility study investigating the utility and impact of the SCQOLIT tool in patients presenting with a new diagnosis of non-melanoma skin cancer.

Participants:

All patients referred to the Dermatology Tumour outpatient clinics in the Churchill Hospital, Oxford with a clinically suspected non-melanoma skin cancer (NMSC) will be considered for participation. Entry criteria will be as broad and inclusive as possible to increase external validity. Patients will be approached by the Chief Investigator (clinician who is part of the normal direct care team [DCT]) or other clinicians directly responsible for the patient's care in the Dermatology clinic. Following obtaining consent to participate in the study, patients will be asked to complete between 2 and 3 questionnaires at 2 – 3 time-points according to the study flowchart (Appendix A).

Group 1 (Postal group) – these are patients who will be identified from the histological diagnosis of their skin cancer by members of the DCT and deemed 'low risk'; questionnaires will be administered by post.

Group 2 (Clinic-based) – these are patients who will be identified from the histological diagnosis of their skin cancer by members of the DCT, for whom all aspects of the study will be conducted in the Dermatology clinic.

Participants will be invited to complete the SCQOLIT and EQ-5D (used for comparison purposes, given its widespread use in other healthcare contexts in the UK) questionnaires [Appendices C & D) at:

a) baseline (after histological diagnosis of a NMSC is confirmed – both Groups)
b) 3 months – either by postal (Group 1) or face-to-face (Group 2) dependent on whether the patient is returning to the Dermatology clinic for routine follow-up
c) at 6-9 months in the dermatology clinic if the patient is deemed high risk (squamous cell carcinoma with high risk clinicopathological features as listed by the National British Association Dermatologists Multiprofessional Guidelines for management of SCC) (Group 2 only) (9)

We aim to minimize any inconvenience to the patient and the study aims to evaluate the SCQOLIT as part of the patients' routine clinical pathway as determined by their skin cancer subtype and in keeping with local and national guidelines for management (9).

Demographic details (age, gender, Fitzpatrick skin type) and clinicopathological information (skin cancer type, histological subtype, site, tumour diameter, previous history of skin cancer, active current medical conditions, medication history) for all study participants will be recorded so this information can be correlated with the participant questionnaire scores. Subgroup analysis of scores will also be undertaken.

Group 3 (Interviews): A Qualitative Researcher (Co-Investigator) will undertake structured interviews with approximately 20 patients from both Group 1 and 2. Potential participants will be invited to volunteer their contact details at the time of consent to the Questionnaire study. This is optional; they may refuse to do so and still take part in the main questionnaire study. The patient will then be contacted by the Qualitative Researcher (Co-Investigator) at a later date and subsequently consented for the interview. Consent can take place on the telephone (details provided in section 7.1) but this will be

confirmed face-to-face in written form when the patient attends the Dermatology department for the interview.

Group 4 (Clinician focus group): As part of clinical governance arrangements, monthly Dermatology Departmental Clinical Governance meetings are held with staff (including Dermatology doctors, Dermatology nurses, Dermatology healthcare assistants and Skin Cancer Nurse Specialists) to discuss service improvement issues. Preliminary discussion on 15th July 2014 (approx. 20 attendees) confirmed engagement and willingness of the Dermatology clinical team to support the project. We aim to discuss the project at the end of the study period in the same setting, to establish staff perspectives on the study, to establish usefulness of the SCQOLIT tool and to identify any barriers to implementation. Staff will be provided with [PIS 4: Focus group] and invited to consent to the focus group work using Consent Form – Focus Group (Clinicians).

Mixed methods will be used to evaluate the acceptability of the SCQOLIT tool as a process of PROM data collection in the Dermatology clinic (detailed in section 9).

6. PARTICIPANT IDENTIFICATION

6.1. Study Participants

There will be four categories of participants, Groups 1 – 3 are participants with a new diagnosis of non-melanoma skin cancer (primary or recurrent) on any site of the body:

Group 1 (Postal) – this will include those patients with a 'low risk' NMSC as deemed by Oxford Skin Cancer Multidisciplinary Team guidelines

Group 2 (Clinic-based) – this will include those patients with a 'moderate to high risk' NMSC as deemed by Oxford Skin Cancer Multidisciplinary Team guidelines

Group 3 (Interview) – these will be volunteers selected from Groups 1 and 2.

Group 4 (Focus Group : Clinicians) – this will include any Dermatology staff member who is involved in consenting and collecting PROMS data and has a role for direct care of patients attending Dermatology outpatient clinics.

6.2. Inclusion Criteria for Groups 1 – 3

- Male or Female, aged 18 years or above.
- Participant is willing and able to give informed consent for participation in the study.
- All patients with a histopathological diagnosis of NMSC (primary or recurrent disease) will be included.
- All treatments used for NMSC will be included in the study; excision, shave excision, curettage and cautery, Mohs micrographic surgery, photodynamic therapy and topical treatments e.g. imiquimod cream.

6.3. Exclusion Criteria for Groups 1 – 3

The participant may not enter the study if ANY of the following apply:

- Concurrent internal malignancy as this is likely to significantly influence QOL.
- Patients referred onwards to other specialties for management of their skin cancer e.g. Plastic surgeons / Clinical oncology.
- Other significant dermatological diseases e.g. severe inflammatory or blistering skin conditions as this may influence QOL.
- Inability to consent for themselves.

7. STUDY PROCEDURES

7.1. Recruitment

Groups 1 & 2

Patients referred to the Dermatology Department in the Churchill Hospital, Oxford, with a clinically suspected non-melanoma skin cancer will be identified by the Chief Investigator (who is a member of the direct care team) or other clinicians who are part of the direct care team, from the Dermatology Tumour outpatient clinics. At the time of their initial visit, eligible patients with a suspected skin cancer will be approached by a member of their direct care team (clinician or trained dermatology nurse) and provided with the relevant patient information leaflet (recruitment to Group 1 or 2).

Group 3: Interviews

Recruitment to Group 3 will be offered to all patients who consent to the Questionnaire study. They will be asked when they consent to this, if they agree to be contacted at a later date for an interview and will voluntarily provide their contact details on the [Contact Interview Form]. Their contact details will be collected by the Chief Investigator. Participants will be advised that only a selected sample of 20 individuals will be contacted at a later date to be invited to interview and therefore they are unlikely to be contacted. Once the patient has a confirmed diagnosis of NMSC and is therefore eligible for inclusion in the study, the CI will pass their contact details to the Qualitative Researcher (Co-Investigator) who will contact selected participants at a later date. Patients who decline to participate may volunteer information about why they don't want to take part, and this information (their reason for declining) will be recorded.

Group 4: Focus Group (Clinicians)

Clinicians who work in the Dermatology Department, have direct care responsibilities for patients with NMSC and who have been involved with the study will be invited to attend the Focus Group.

7.2. Informed Consent

Members of the direct care team (which includes the Chief Investigator) with appropriate training will discuss the study with the potential participant and take informed consent from participants who wish to join. This will take place in the Dermatology outpatient clinic.

All patients attending the Dermatology Tumour clinic are referred by their GP with a suspected skin cancer. All patients will therefore be approached and depending on their suspected type of skin cancer they will be offered one of two Patient Information Leaflets to keep:

PIS: Group 1 (Postal group) – these are patients who are deemed clinically to have a 'low risk' NMSC.

PIS: Group 2 (Clinic-based) – these are patients who are deemed clinically to have a 'moderate to high risk' NMSC.

The participant will be allowed as much time as they wish to consider the information, and will be provided with the opportunity to question the Chief Investigator, other Dermatology clinical staff or other independent parties, to decide whether they will participate in the study. Participants will be given either PIS Group 1 or PIS Group 2 at the initial consultation to keep. The PIS details the exact nature of the study and what it will involve for the participant. There will be an opportunity to go through the PIS in detail with their clinician at the time of consenting. It will be clearly stated in the PIS that the participant is free to withdraw from the study at any time for any reason without prejudice to future care, and with no obligation to give a reason for withdrawal.

Consent will be obtained subsequently when the patient attends for surgical intervention (part of routine clinical care). This can be between 3 hours after the initial consultation (small proportion of high risk patients offered surgery on the day if the service is available) to up to six weeks later (routine minor operation for basal cell carcinoma). All clinicians who are involved in the direct care of patients who attend with a suspected skin cancer, are both suitably qualified and experienced for this role and have had appropriate training. Written Informed Consent will then be obtained by means of participant dated signature and dated signature of the person who presented and obtained the Informed Consent. A copy of the signed Informed Consent form (Consent Form – Study) will be given to the participant.

Group 3 (Interviews): The Qualitative Researcher (Co-Investigator) will undertake structured interviews with 20 patients randomly selected from both Groups 1 and 2. Patients will be invited to voluntarily provide their contact details at the time of initial consent to the main Questionnaire study using a separate 'Contact Interview Form'. Patients will be advised at this time that they may not necessarily be contacted at a later date if they are not selected for the Interview study. The contact details of the patients will be stored by the CI and once patients are entered into the questionnaire study, their details will then be sent securely to the Qualitative Researcher. The randomly selected patients will subsequently be contacted by the Qualitative Researcher (Co-Investigator) who will invite patients to participate by posting the separate Patient Information Leaflet: Group 3 (Interviews) and consent form (Consent Form – Interviews) to them. Patients will be allowed sufficient time to review the PIS. They will be provided with the Qualitative Researcher's contact details and the CI contact details on the PIS, if they have any queries. The patient will be contacted by telephone by the Qualitative Researcher and a mutually agreed interview date will be arranged once the patient has consented verbally on the telephone. At the beginning of the face-to-face interview the Qualitative Researcher will confirm that the patient is happy to proceed and record written consent [Consent form – Interviews] to enter this part of the study. The patient will be offered the option to withdraw at this point if they decide to do so.

Group 4 (Focus Group – Clinicians): Clinicians who work in the Dermatology Department, have direct care responsibilities for patients with NMSC and who have been involved with the study will be invited to

consent to a focus group and be provided with a PIS 4: Focus Group (Clinicians). This will take place as part of a monthly Dermatology Clinical Governance Meeting.

7.3. Screening and Eligibility Assessment

Participants will be identified from the Dermatology Tumour Clinics. These occur on a daily basis in the morning (Monday to Friday) with additional clinics on Wednesday and Thursday afternoons. Participants will be approached by the clinician at the initial consultation visit when they attend with a clinically suspected skin cancer. They will be provided with the relevant PIS according to risk of NMSC (assessed clinically as part of standard care). Once the participants have been provided with sufficient time to consider the study they will be consented to enter using 'Consent Form – Questionnaire Study'. This can be between 3 hours and 6 weeks, depending on when their surgical procedure takes place. A small proportion of patients in Group 2 may have surgery on the same day of the initial consultation if this service is available. If patients are too anxious regarding the surgery taking place on the same day, they will not be invited to enter the study. The clinician who has direct care for the patient will assess the situation to make this decision, based on their clinical judgement.

Patients will be deemed eligible to enter the study by the Chief Investigator (member of the DCT), once a histological diagnosis of NMSC is confirmed for patients who have consented to participate in the study. Participants will be provided with baseline questionnaires as detailed in section 7.4 following confirmation of study eligibility.

7.4. Subsequent Visits

Following the participant's informed consent to participate in the study and confirmation of their eligibility (i.e. histological diagnosis of NMSC confirmed*), patients will be asked to complete a SCQOLIT and EQ-5D questionnaire according to the study schedule (Appendix A) at visit numbers:

1) Baseline visit
    a) by post if patient is given their diagnosis by post (Group 1 – considered low risk skin cancer group as determined from Oxford Skin Cancer MDT guidelines)
    b) or face-to-face when the diagnosis is given in clinic (Group 2 – considered moderate – high risk skin cancer group as determined from Oxford Skin Cancer MDT guidelines)
2) At 3 months follow up
    a) postal, for those patients discharged to community care, deemed 'low risk' (Group 1)
    b) or face-to-face if the patient is returning to the dermatology clinic for routine follow-up (Group 2 – high risk skin cancer)
3) At 6 – 9 months in the Dermatology clinic if the patient is deemed high risk i.e. squamous cell carcinoma with high risk clinicopathological features (denoted by the National BAD Multidisciplinary Guidelines for management of SCC) or rare NMSC (Group 2 only – See Appendix B).

* Participants will be entered into the study and should have completed the baseline questionnaire within three weeks of the date that they were informed of their diagnosis of NMSC (not date of pathological diagnosis).

There will be no additional visits to the clinic required for any aspect of the questionnaire study. The timeline for administering questionnaires in the clinic has been set according to the standard care pathway for these patients. This reflects routine clinical practice and the feasibility study is designed to run as close as possible to the standard pathway of care.

Participants will also receive a reminder telephone call from the Chief Investigator about each questionnaire once they receive them in the post to maximize response rates. This will occur 10-14 days after the questionnaires have been posted.

Structured interviews (Group 3) will be undertaken after three to six months from date of entry into the study, for individuals who volunteer to be contacted by the Qualitative Researcher. Twenty individuals who have participated in the study from both Groups 1 and 2 will be invited to attend. Patients who volunteer their contact details will be informed that only 20 patients will be chosen at random for an interview. This is also written on the consent to provide details form. Patients will be contacted at random until 10 patients from Groups 1 and 2 have completed an interview. The interview will be undertaken at a time convenient to the patient in the Dermatology Outpatient Department.

Group 4: A clinician focus group will be undertaken to establish staff preferences and views regarding the study methodology and the SCQOLIT tool. This will be led by the Qualitative Researcher and supported by the Chief Investigator and will take place as part of the regular monthly Dermatology Departmental Clinical Governance meetings, which are undertaken to discuss service evaluation issues. It will involve 10 – 15 clinicians including Dermatology doctors, Dermatology nursing staff, skin cancer nurse specialists and health care assistants who have been involved in the questionnaire study. This will take place after the questionnaire and patient participant interviews have been analysed.

7.5. Discontinuation/Withdrawal of Participants from Study

Each participant has the right to withdraw from the study at any time. In addition, the Investigator may discontinue a participant from the study at any time if the Investigator considers it necessary for any reason including:

- New diagnosis of other serious medical or mental health condition that significantly impacts on quality of life.
- Withdrawal of Consent

Withdrawal from the study will not result in exclusion of the data for that participant from analysis, as these data will provide information regarding feasibility of use of the SCQOLIT in dermatology clinics. The reason for withdrawal will be recorded on the CRF. Withdrawn participants will not be replaced. If a withdrawing patient requests data to be excluded and/or destroyed this request will be adhered to. This has also been documented in the PIS.

7.6. Definition of End of Study

The end of study is the date of the last visit / telephone follow-up / interview of the last participant.

8. STUDY DATA COLLECTION

The data collected in this study are two quality of life questionnaires – the SCQOLIT tool (Appendix C) and the EQ-5D (Appendix D), which will printed on double-sided paper. These will be administered according to the schedule detailed in Appendix A. All patients will be designated a Questionnaire - Unique reference number (Q-URN) by the CI and this will be used on all questionnaires (rather than names or initials).

For Group 1 – Study questionnaires will be sent in a separate sealed envelope with the diagnosis letter to patients who have consented to the study. These will be completed at home and returned by post in a pre-paid envelope. A covering letter will be sent to patients explaining what they need to do [see example Covering letter]. The Chief Investigator will review all responses and if they are concerned that the patient has significant impairment of their QOL, then as part of the standard duty of care to these patients, the Chief Investigator will contact the patient to assess this further and arrange follow-up in the clinic or with the Skin Cancer Nurse Specialist as deemed clinically required.

For Group 2 – Study questionnaires will be completed in the clinic. The questionnaires will be completed by the patient on their own and then reviewed by clinicians who are involved in the direct care of the patient and the scores will be calculated in the clinic. This has been agreed by Dermatology clinical staff at the Clinical Governance meeting (15th July 2014). Any specific high-scoring items identified will be discussed with the patient at the time. Any specific issues identified from the questionnaires will allow for open dialogue with the clinician. If there is sufficient concern that the patient has significant QOL impairment (score greater than 20/30 or any specific item scoring highly e.g. concerns about dying) then the patient will be referred to the Skin Cancer Nurse Specialist, as would be carried out as part of the standard care pathway for patients who are deemed to be significantly anxious or concerned about their diagnosis. This process is important as clinical staff will then be able to feedback at the focus group in the Dermatology Departmental Clinical Governance Meeting, regarding unmet needs and unidentified patient concerns. Any action taken by the clinicians will be reported to the CI and recorded on the CRF.

Group 3: Interviews – Twenty patients from Groups 1 and 2 will be interviewed by the Co-investigator (Qualitative Researcher). This will take place after three to six months from date of entry into the study, for individuals who volunteer to be contacted by the Qualitative Researcher. The interview will be undertaken at a time convenient to the patient when they attend Dermatology Outpatients for a follow-up appointment. All interviews will be recorded using Olympus DSS digital recorder and transcribed verbatim by the researcher. Data will be anonymous and identified by an Interview unique reference number (URN). The interview URN (I-URN) will be different to the Questionnaire study URN (Q-URN) so that the data cannot be linked. Participants will not be identified in any report. Only their gender and from which group they have been recruited from (i.e. Group 1 or 2 from the Questionnaire study) will be recorded. Patient consent forms, interview recordings and transcripts will be stored securely in locked cabinets/drawers at the University of Oxford. Electronic details will be encrypted and stored on password-protected University of Oxford computers. The Chief Investigator will have access to these data and there will be a filenote in the Research Study Master File stating where the data is being stored.

Group 4: Focus Group (Clinicians) – Approximately 10 – 15 Dermatology clinical staff will be invited to attend focus group work to establish staff preferences, views and experiences of collecting PROMs data in a clinical setting. Their gender and role (Doctor or other) will be recorded. All focus group work will be recorded using Olympus DSS digital recorder and transcribed verbatim by the researcher. Data will be anonymous and unidentifiable and when published will not be able to be traced back to any individual. Data will be stored on password-protected computers in the University of Oxford.

9. STATISTICS AND ANALYSIS

9.1. Description of Statistical Methods

As this is a feasibility study, both quantitative and qualitative data will be analysed. There will be no specific interim analyses of data but for Group 2, patients who complete the questionnaires in clinic will also have the chance to discuss their scores with their clinician (as described above). Clinicians will have the opportunity to feedback specific issues for individuals to the Chief Investigator and this will be recorded on the CRF. They will also have the opportunity to discuss general issues at the Staff focus group in the Dermatology Departmental Clinical Governance meeting.

Statistical analyses of PROM scores will be undertaken using Excel and SSPS software with statistical support from the Health Services Research Group, University of Oxford. Data reviewed will be in an anonymised form.

All interviews will be recorded using Olympus DSS digital recorder and transcribed verbatim by the researcher. A framework analysis, developed from the interview schedule and from themes that emerged during fieldwork, will be conducted using NVivo V.10 qualitative analysis software. All coding will be performed by the Qualitative Researcher.

9.2. The Number of Participants

Overall, a minimum of 300 participants will be required to complete the feasibility study. This is based on previous studies having used much smaller numbers to validate the SCQOLIT tool (8). This is a realistic sample size which can be recruited from the Dermatology Department; patient recruitment figures are derived from median numbers (+/- range) of patients seen in the Oxford Dermatology Department in 2013 with basal cell carcinoma (mean 160, range 140 – 172 / month) and squamous cell carcinoma (median 203, range 157 – 220 / month) obtained from a local departmental audit and the Skin Cancer Multidisciplinary Team Meeting IT data, respectively.

For the qualitative aspects of the study (Group 3) there will be a total of 20 volunteers interviewed (10 from each of Groups 1 and 2).

For Group 4 there will be 10-15 clinicians invited to the focus group.

9.3. Analysis of Outcome Measures/Endpoints

All data will be included in the analyses as this is a feasibility study.

The study is designed to explore the willingness of patients and clinicians to use the SCQOLIT questionnaire in a clinical setting, the ease of use of the SCQOLIT questionnaire and its usefulness in clinical practice. As mixed methods are being used, both quantitative and qualitative analyses will be undertaken.

Acceptability of use of the SCQOLIT as a tool for PROM assessment in the Dermatology Tumour clinic will be assessed using mixed methods:

1) Quantitative analysis of
    a) Patient participation rates
    b) Questionnaire response rates
    c) Missing values
2) Qualitative analysis of patient and staff preferences, views and experiences

Psychometric properties of the SCQOLIT as a tool for patients with NMSC will be assessed by quantitative analysis of:

a) Construct validity
b) Responsiveness
c) Clinically Important Difference
d) Floor and ceiling effects
e) Intra- and Inter-participant change scores

This will be carried out by the Chief Investigator supported by the Health Services Research Group.

The Qualitative Researcher will undertake qualitative analyses. A framework analysis, developed from the interview schedule and from the themes, which emerged during fieldwork, will be conducted using NVivo V.10 qualitative analysis software.

10. DATA MANAGEMENT

10.1. Access to Data

Direct access will be granted to authorised representatives from the Sponsor or host institution for monitoring and/or audit of the study to ensure compliance with regulations.

10.2. Data Recording and Record Keeping

All data will be stored in the Research Study Master File by the Chief Investigator in a locked cabinet in the Dermatology Department Clinical Offices (1st Floor), Churchill Hospital. Patients will be assigned a Q-URN code by the Chief Investigator and data will be anonymised. The Chief Investigator will be the only member of the research team who will be able to link the patient identifiable data with the Patient URN and this information will be stored in a password-protected Excel spreadsheet which is on a password-protected NHS Computer based in the Dermatology Department Offices. Data from questionnaires will be entered onto a different Password-protected Excel spreadsheet for quantitative analyses. All data analysed in collaboration with the Health Services Research Unit, University of Oxford will be anonymised.

Audio data will be stored using an I-URN (different to the Q-URN) and will be stored by the Qualitative Researcher on a password-protected University of Oxford computer in the Qualitative Researcher's office in the Health Services Research Unit, Nuffield Department of Population Health, University of Oxford, Old Road Campus. In addition, only patient gender and the group from which they have been recruited from (i.e. Group 1 or 2 from the Questionnaire study) will be recorded. The location of these data will be referenced using a Filenote in the Research Study Master File held by the CI. The Qualitative researcher does not require access to patient medical records or clinical information except that which is anonymised research data for analysis. Only the CI will be able to link data to individuals.

All research data (questionnaires, audio tapes, interview transcripts and consent forms) will be stored for 5 years.

11. QUALITY ASSURANCE PROCEDURES

The study may be monitored, or audited in accordance with the current approved protocol, ICH GCP, relevant regulations and standard operating procedures.

12. ETHICAL AND REGULATORY CONSIDERATIONS

12.1. Declaration of Helsinki

The Investigator will ensure that this study is conducted in accordance with the principles of the Declaration of Helsinki.

12.2. ICH Guidelines for Good Clinical Practice

The Investigator will ensure that this study is conducted in full conformity with relevant regulations and with the ICH Guidelines for Good Clinical Practice (CPMP/ICH/135/95) July 1996.

12.3. Approvals

The protocol, informed consent form, participant information sheet and any proposed advertising material will be submitted to an appropriate Research Ethics Committee (REC), and host institution(s) for written approval.

The Investigator will submit and, where necessary, obtain approval from the above parties for all substantial amendments to the original approved documents.

12.4. Reporting

The CI shall submit an Annual Progress report to the host organisation and Sponsor. In addition, an End of Study notification and final report will be submitted to the same parties and the funding body if required. Participants who request information regarding the outcome of the study will be provided with a letter using the template [Outcome Letter].

12.5. Participant Confidentiality

The study staff will ensure that the participants' anonymity is maintained. The participants will be given a URN by the CI and data will only be identified by their URN number on the CRF and on any electronic database. All documents will be stored securely and only accessible by study staff and authorised personnel. The study will comply with the Data Protection Act, which requires data to be anonymised as soon as it is practical to do so. Participants will be de-identified and all documents assigned an anonymised code. Data will be stored on password-protected computers and hard copies of consent forms in secure, locked cabinets in Oxford University Hospitals NHS Trust.

Recruitment to Group 3 will be offered to all patients who voluntarily provide their contact details for a potential interview. Their contact details will be collected by the Chief Investigator (part of the direct care team). Once the patient is entered into the Questionnaire study (i.e. has a confirmed diagnosis of NMSC), the CI will pass the patient details onto the Qualitative Researcher (Co-Investigator) who will contact selected participants at a later date. This information will be stored securely in a locked cabinet

in a locked office in the University of Oxford. This information will be destroyed as soon as the study is complete.

Recruitment to Group 4 will be anonymised. The only personal details recorded will be role i.e. Doctor / Other (this includes nurses, health care assistants an cancer nurse specialists) and gender of the individual. No data will be linked back to individuals and they will not be assigned a URN. They will not be identifiable in any publication.

13. FINANCE AND INSURANCE

13.1. Funding

Oxfordshire Health Services Research Committee grant awarded.

13.2. Insurance

NHS bodies are legally liable for the negligent acts and omissions of their employees. If a participant is harmed while taking part in a clinical research study as a result of negligence on the part of a member of the study team this liability cover would apply.

Non-negligent harm is not covered by the NHS indemnity scheme. The Oxford University NHS Trust, therefore, cannot agree in advance to pay compensation in these circumstances.

In exceptional circumstances an ex-gratia payment may be offered.

14. PUBLICATION POLICY

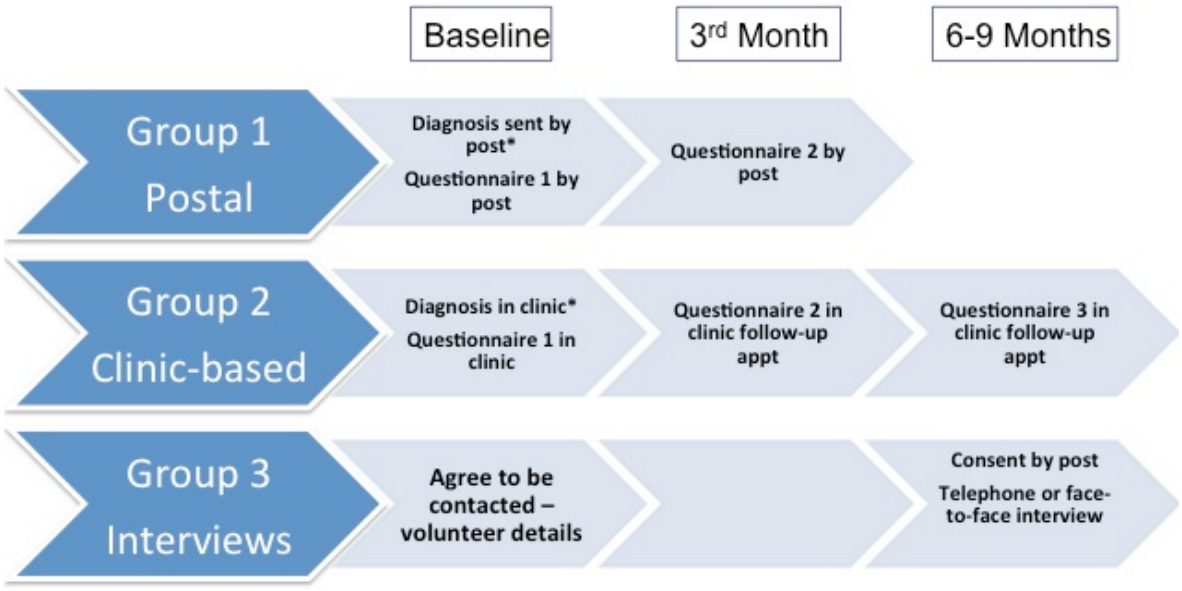
The Investigators will be involved in reviewing drafts of the manuscripts, abstracts, press releases and any other publications arising from the study. Authors will acknowledge that the study was funded by [pending]. Authorship will be determined in accordance with the ICMJE guidelines and other contributors will be acknowledged.

Study results will not be routinely disseminated to study participants unless specifically requested. In these circumstances, participants will be provided with any publications that arise from this work.

15. REFERENCES.

1. Lord Darzi. NHS Next Stage Review Interim Report. October 2007. http://www.nhshistory.net/darzi-interim.pdf
2. Improving Outcomes: A Strategy for Cancer – Third Annual Report. Dec 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/264511/IOSC_3rd_Annual_Report_-_Proof_version_-_9_December_2013_v2.pdf
3. Andrew Wineberg. Provisional Monthly Patient Reported Outcome Measures (PROMs) in England. April 2014. http://www.hscic.gov.uk/catalogue/PUB13751/prov-mon-proms-eng-apr13-nov13-dat-qual-note.pdf
4. Schofield , J , Grindlay , D & Williams , H 2009 , Skin conditions in the UK : a health care needs assessment . Centre of Evidence Based Dermatology, University of Nottingham.
5. Gibbons E, Casañas i Comabella C, Fitzpatrick R. A structured review of patient-reported outcome measures for patients with skin cancer, 2013. Br J Dermatol. 2013 Jun;168(6):1176-86.
6. Burdon-Jones D, Thomas P, Baker R. Quality of life issues in non-metastatic skin cancer. Br J Dermatol 2010; 162:147-51
7. Rhee JS, Matthews BA, Neuberg M, Burzynski M, Nattinger AB. Creation of a quality of life instrument for non-melanoma skin cancer patients. Laryngoscope 2005; 115: 1178-85.
8. Burdon-Jones D, Gibbons K. The Skin Cancer Quality of Life Impact Tool (SCQOLIT): a validated health-related quality of life questionnaire for non-metastatic skin cancers. J Eur Acad Dermatol Venereol. 2013 Sep; 27(9):1109-13.
9. Motley RJ, Preston PW, Lawrence CM. Multi-professional guidelines for the management of the patient with primary cutaneous squamous cell carcinoma. London (UK): British Association of Dermatology (BAD); 2009 Dec 11; 34.

16. APPENDIX A: STUDY FLOW CHART FOR ALL PARTICIPANTS.



*Mode of giving diagnosis is standard care – pre-determined by Dermatology Skin Cancer MDT guidelines

17. APPENDIX B: SCHEDULE OF STUDY PROCEDURES FOR GROUP 2 – CLINIC-BASED.

Procedures	**Visits**			
	Screening (Point of referral – first clinic visit)*	**Baseline (within three weeks of being given a diagnosis of NMSC – verbal or postal)**	**3 months follow up**	**6 - 9 months follow up**
Informed consent	Y (after being given PIS)	Y		
Demographics	Y			
Medical history	Y	Y		
Eligibility assessment (histological diagnosis of NMSC)	Y			
SCQOLIT questionnaire and EQ-5D questionnaire		Y	Y	Y (high risk SCC patients only)
Structured interviews				Y

* This visit is applicable to all participants in the study including Group 1 (postal group)

18. APPENDIX C: SCQOLIT TOOL Questionnaire.

Skin Cancer Quality of Life Impact Tool (SCQOLIT)

Patient ID	Date: Questionnaire number: 1 / 2 / 3	SCQOLIT score: / 30

The purpose of this questionnaire is to measure how much having skin cancer has affected your quality of life OVER THE LAST WEEK. Please tick ONE box for each question.

1) Over the last week how much have you been concerned that your skin cancer might **come back**?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

2) Over the last week, how much have you felt that you needed **more information** on how to recognise skin cancer or prevent it?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

3) Over the last week, how much have you worried about **covering up** your skin and avoiding the sun?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

4) Over the last week, how much have you felt a need for **reassurance** from your doctor or nurse, in respect to your skin cancer or its treatment?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

5) Over the last week, how much have you felt **emotional, anxious, depressed, guilty or stressed** in respect to your skin cancer or its treatment?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

6) Over the last week, how much have you been bothered about any **disfigurement** or **scarring**, in respect to your skin cancer or its treatment?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

7) Over the last week, how much have you felt **shock** or **disbelief** about having been diagnosed with skin cancer?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

8) Over the last week, how much **skin discomfort** or inconvenience have you experienced, in respect to your skin cancer or its treatment?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

9) Over the last week, how much have you had any concerns about **dying** from your skin cancer?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

10) Over the last week, to what extent have you felt the need for **emotional support** from your family or friends, in respect to your skin cancer or its treatment?

Very much so ☐ Moderately so ☐ Somewhat ☐ Not at all ☐

19. Appendix D: EQ-5D Questionnaire.

Under each heading, please tick the ONE box that best describes your health TODAY

MOBILITY

I have no problems in walking about ❑
I have slight problems in walking about ❑
I have moderate problems in walking about ❑
I have severe problems in walking about ❑
I am unable to walk about ❑

SELF-CARE

I have no problems washing or dressing myself ❑
I have slight problems washing or dressing myself ❑
I have moderate problems washing or dressing myself ❑
I have severe 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 doing my usual activities ❑
I have slight problems doing my usual activities ❑
I have moderate problems doing my usual activities ❑
I have severe problems doing my usual activities ❑
I am unable to do my usual activities ❑

PAIN / DISCOMFORT

I have no pain or discomfort ❑
I have slight pain or discomfort ❑
I have moderate pain or discomfort ❑
I have severe pain or discomfort ❑
I have extreme pain or discomfort ❑

ANXIETY / DEPRESSION

I am not anxious or depressed ❑
I am slightly anxious or depressed ❑
I am moderately anxious or depressed ❑
I am severely anxious or depressed ❑
I am extremely anxious or depressed ❑

20. Appendix E: AMENDMENT HISTORY

Amendment No.	Protocol Version No.	Date issued	Author(s) of changes	Details of Changes made