

Welcome to the

Northern Centre for Cancer Care (NCCC)

Freeman Hospital

An Outpatients Guide to Radiotherapy



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Introduction

This booklet is a guide to your radiotherapy treatment at the Northern Centre for Cancer Care (NCCC), in the Freeman Hospital.

It provides general information about radiotherapy and aims to answer some of the questions asked by patients and their carers.

We hope you find it helpful, however, if you have any further questions, please ask your oncologist, radiographer or nurse.

The NCCC is a regional cancer centre delivering high quality care to outpatients and in-patients. The services we provide include radiotherapy, chemotherapy, research facilities, palliative and supportive services.

Each year we treat over 7000 new patients and there are over 66,000 patient appointments for radiotherapy.

The department has state of the art equipment including 7 treatment machines, called linear accelerators, two Tomotherapy units, a superficial treatment unit, two CT scanners and a dedicated MRI (magnetic resonance imaging) scanner.

The centre not only provides routine radiotherapy but is a specialist centre for the treatment of some rare cancers, paediatric cancers, total body irradiation, stereotactic radiosurgery and total skin electron irradiation.

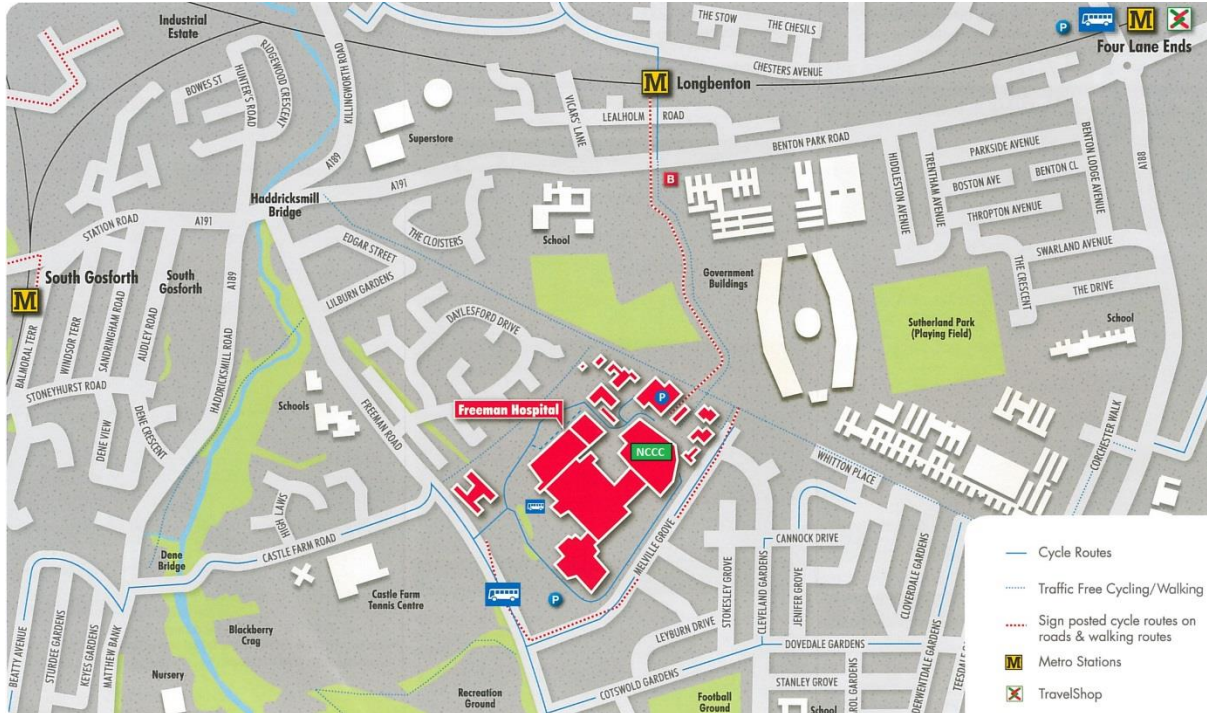
NCCC has three inpatient wards which consist of single rooms with en-suite cubicles and four-bedded bays.

There is a chemotherapy day unit where approximately 100 patients attend each day for chemotherapy. Care and treatments are also given on the supportive therapies unit.

NCCC provides specialist research services delivered in the Sir Bobby Robson Cancer Trials Research Centre. Our aim is to offer access to a wide range of research studies which enhance patient choice, increase treatment options and further scientific knowledge. Working in partnership with all specialities, research staff provides expert information and support to patients and their carers participating in research studies.

How to get to NCCC

NCCC is based at the Freeman Hospital on Freeman Road situated toward the north of the city in High Heaton. All patients will be sent information on how to get to NCCC with their treatment appointment schedule.



By car: (satnav NE7 7DN)

Approach routes to the hospital are sign posted. Parking is available for patients and carers on levels 0, 1 and 2 in the multi-story car park close to the NCCC.

There are some designated spaces for disabled parking opposite NCCC, and a drop off point outside the main entrance.

Over 400 public car parking spaces are provided in the two main car parks at the front of the hospital for both visitors and patients.

Pay-as-you-leave parking is in place and the ticket machines take cash and cards. Failure to comply with parking regulations may result in a penalty charge.

By bus:

The hospital is served by bus services: 6, 7, 8, 18, 18A, 38, 52 and 553. The buses stop outside the hospital grounds on Freeman Road.

For more details we recommend you contact Traveline North East on 0871 200 2233 or check out the local public transport websites:

www.travelinenortheast.info

www.nexus.org.uk

By rail:

The closest mainline station is Newcastle Central Station in the centre of the city and this is connected to the Tyne and Wear Metro and Bus network.

By Metro:

The closest Metro station to NCCC is Longbenton, approximately 7 minutes' walk away and there is a pathway through to the hospital from the station. Alternatively you can use the bus interchange at Four Lane Ends.

By taxi:

Taxis can drop off and pick up at all hospital entrances.

Ambulances

Non-emergency ambulance transport is provided for patients who have a medical or mobility need. If you need an ambulance for your first appointment please ask your GP to arrange this giving at least seven days' notice. After your first appointment NCCC will arrange further ambulance bookings if you need it.

If you need someone to be with you at the hospital (but don't require a carer), please arrange to meet that person at the hospital.

“Daft as a Brush” patient transport:

This is a charitable organisation that may be able to offer transport for cancer patients attending NCCC for treatment/care.

If you would like to use this service, please contact the radiotherapy scheduling department in NCCC.

Travel expenses

You may be eligible for a refund of travel costs to and from the hospital if you receive any of the following:

- Employment Support Allowance (ESA)
- Job seekers allowance (income based)
- Your gross annual income is below the current set limit and you get working tax credit and child tax credit
- Pension credit
- An exemption certificate (HC2, HC3)

A leaflet explaining the scheme can be obtained from the Macmillan Information and Support Centre on level 2 of NCCC, or call at the cashiers' office at the Freeman Hospital for details. If you are eligible you need to bring proof of benefits, travel costs and authorised confirmation of attendance issued by NCCC.

Car parking

Parking is available in the multi-storey car park opposite NCCC on levels 0, 1 and 2. This is free for radiotherapy patients for the duration of their treatment. On each day of attendance, patients should take a ticket on entry to the Freeman Multi Storey Car Park or Freeman Car Park 1 - the ticket should then be handed to the receptionist at the Radiotherapy Red Desk who will scan the ticket to ensure free exit from the car park. If the red desk is not open this can be done at the level 2 NCCC reception.

Your visit to NCCC

Once you arrive at the NCCC, you will enter on level 2. The reception staff on level 2 can direct you down the stairs or the lift to level 1 where you will need to check in to the red radiotherapy reception.

On level 1 the receptionist will book you in and then you will be directed to the appropriate waiting area.



Level 1 Red Reception

At your first appointment you will be given a new schedule. There will be a barcode on the bottom right of your appointment schedule for this is so you can use the self-service check in desk next to reception. You will be shown how to use this on your first visit.

Signing and translation services:

An Interpreter Service (including sign language and lip speakers) is available. Please let us know if you need this service.

Induction loop - we have loop systems in place for hearing aid users.

Wards and departments by level

Level 1

Radiotherapy department including: Mould room, CT (computerised tomography) planning, MRI, radiotherapy treatment, and treatment review clinics

Level 2 (Entrance Level)

Main reception and NCCC outpatient department
Sir Bobby Robson Cancer Trials Research Centre

Level 3

Inpatient wards 33, 34 and 35

Outpatient ward 36 (chemotherapy day unit and supportive therapies unit)

Facilities throughout the NCCC

Level 1

Refreshments bar

Macmillan lounge



Macmillan lounge

Level 2

Macmillan Cancer Information and Support Centre

Open Monday to Friday 10am to 4pm

Charlie Bear Charity Shop

Open Monday to Friday 9.30am to 4pm

Café and shop

Open Monday to Sunday 6.30am to 7.30pm



Where can I get more information?

Your oncologist, radiographers, nurses and others in the health care team can give you information and advice about your treatment. They will talk with you and answer any questions you may have.

Maggie's Centre

Maggie's is a charitable organisation. It provides a number of drop-in services for people who have or have had cancer and their family and friends, including practical and emotional support from the team of specialist nurses, benefits advice from the benefits advisor, and booked appointments with the psychologists. The centre also offer courses, support groups and workshops including advice on diet and exercise. Maggie's Newcastle is opposite the main entrance to NCCC just over the zebra crossing.

For more information please drop in to Maggie's, ring the Centre, or visit the website.

Macmillan Cancer Information and Support Centre

The centre on level 2 can offer:

- a private, comfortable, quiet room where you can talk to someone in confidence
- help to find practical support with work, travel or finance
- advice on headwear and accessing wig fitting services
- help to find local support groups; complimentary therapies or bereavement support
- emotional support - share your concerns with one of our team, we are here to listen to you



Macmillan Cancer Information and Support Centre

Patient Advice and Liaison Service (PALS)

PALS give confidential advice, support and information on NHS and any related health matters. PALS listens to your concerns, suggestions or queries about NHS services or treatments and helps sort out any problems or concerns on your behalf.

Contact details for PALS are provided in the “useful contacts” section at the end of this booklet.

If you are unhappy with the service you have received, please speak to a member of staff or a line manager who will try to resolve any issues you may have.

If however you wish to make a formal complaint, you should do this as soon as possible after the event by contacting the Contact the Patient Experience Team by:

Telephone: 0191 223 1382 Email: nuth.patient.relations@nhs.net

Radiotherapy

This section of the booklet has been written to help you understand more about radiotherapy. It contains general information about radiotherapy and what you can expect during treatment.

What is radiotherapy?

Radiotherapy is the use of high energy x-rays to treat cancers (and sometimes other diseases).

Why might I have radiotherapy?

When recommending a course of radiotherapy your oncologist will have taken into account the risk of having the treatment and the benefits. Whilst completing your consent form the side effects from this treatment were discussed with you but the advantages of having radiotherapy are considered to outweigh these.

You might have radiotherapy to try to cure your cancer. This is called radical treatment. Some people have it to relieve symptoms and make them feel better. This is called palliative treatment.

If you are going to have a bone marrow or stem cell transplant (e.g. for leukaemia) you may have radiotherapy in preparation for this procedure. This is called total body irradiation, or TBI.

You may have radiotherapy on its own or with another treatment such as surgery, chemotherapy or hormone therapy. This is called adjuvant radiotherapy and is given to reduce the risk of the cancer coming back.

Everyone is different. Even patients with the same cancers may have different treatments. You will have a treatment plan tailored to your exact needs and your oncologist will talk you through this.

How does radiotherapy work?

Radiotherapy damages cancer cells in the part of the body being treated. Normal cells can also be damaged by the radiotherapy, but they repair themselves more easily than cancer cells.

Radiotherapy can be given from inside or outside the body.

Radiotherapy from outside the body is called external beam radiotherapy.

The information in this booklet is about **external beam radiotherapy**.

What happens if I agree to this treatment?

Your oncologist or clinical specialist radiographer will explain to you about benefits, risks and possible side effects of your treatment and you will be asked to sign a consent form to say you agree to go ahead with the treatment.

Please ask questions if there is anything you are unsure about

How is external beam radiotherapy delivered?

External beam radiotherapy is delivered using a **machine called a linear accelerator**. This is a treatment machine (pictures below) that directs high energy x-rays at exactly the place where your doctor wants the treatment to be delivered. Radiotherapy is carefully planned so that it damages as few normal cells as possible.

In the NCCC there are two types of linear accelerator used to deliver your treatment.

A Varian unit



A Tomotherapy unit



They both deliver the radiotherapy treatment but in different ways.

Who will look after me when I go for treatment?

A whole team of people will care for you during your treatment, including:

Clinical oncologists

A consultant clinical oncologist is a doctor who specialises in treating cancer with radiotherapy, chemotherapy or hormone therapy. The oncologist will discuss what treatment you need. The oncologist and others in the health care team will review your treatment regularly.

Therapeutic radiographers

Therapeutic radiographers are health professionals trained to plan and deliver your course of radiotherapy. At each of your treatment sessions the radiographers will make sure that you are in the right position for your radiotherapy. They will also give you information, advice and support and help you with your physical and emotional needs.

Therapeutic review radiographers

The department has therapeutic radiographers who have undergone additional training so they can give advice about the side effects you may experience during your radiotherapy treatment.

Clinical specialist therapeutic radiographers

Experienced Therapeutic Radiographer with additional training to review patients and consent patients referred for radiotherapy.

Mould room technicians

You may need a special mould to help keep you in the correct position during treatment or to protect parts of your body around the treatment area. If so, the technicians in the mould room will make this for you.

Nurses

Nurses are available to help look after you, offer advice, support and any nursing care you may need.

Clinical nurse specialists

There may be a clinical nurse specialist attached to your care team who can give you expert advice about the type of cancer you have.

Specialist palliative care team (SPCT)

The Specialist Palliative Care Team consists of nurses (sometimes called Macmillan nurses), doctors and social workers, all of whom are experienced and trained in specialist symptom control. They can offer an advisory supportive service for patients and families.

Please ask your radiographer or oncologist if you would like to meet a particular member of the team.

Who else may I come into contact with during my visits?

Outpatient reception staff

The outpatient reception staff welcomes patients and carers to NCCC providing a friendly and helpful support service to all. The receptionist is responsible for booking you into the system which informs the radiographers that you have arrived for treatment.

Radiotherapy engineers

Radiotherapy Engineers are experts in radiotherapy engineering. They carry out machine maintenance, making sure it is safe to use and able to deliver treatment accurately.

Dosimetrists and physicists

Dosimetrists and Physicists work alongside the clinicians to help plan your treatment. Ensuring the best possible treatment is planned for each patient individually.

Students

This is a teaching hospital so we may have students present at your appointments. All students are supervised by members of staff, but if you prefer not to have them present, please tell the staff. This will in no way affect your treatment, as your request will be respected and understood.

Others in your health care team

There are many others making up the team providing your care. These include a dietician, speech and language therapist, clinical psychologist and physiotherapist. A social worker can help with practical matters you may need advice about.

How can I identify different members of hospital staff?

All staff are required to wear identification badges with their name and photograph so that you know who you are talking with.

How many treatments will I have?

Your oncologist decides how many treatments you need and how frequent they will be.

When do I attend for treatment?

Treatment appointments will be during the working week (Monday to Friday). Treatment is not routinely delivered on Saturdays, Sundays or Bank Holidays, however, there are occasions when you may be asked to attend at a weekend. This is usually when a treatment machine has been out of action for a day or two and weekend treatment is required to make up for the missed treatments.

How will my treatment be planned?

You will normally attend one or two treatment planning sessions before you start your radiotherapy.

You may need to visit the mould room prior to treatment planning for construction of a mould to ensure you remain in the same position for each treatment. This will be discussed with you at your consultation appointment with your oncologist if necessary.

As part of your first planning session we will ask you to have a photograph taken. This is to help us identify you throughout your course of treatment.

You will also be asked your name and date of birth each time you attend the department to confirm identity.

We will check that you have signed a consent form for radiotherapy and will confirm with you that you are happy to go ahead with your planning and treatment.

What will happen after my treatment has finished?

You will have follow up appointments with your specialist team so that they can check how you are getting on.

Your radiographer, oncologist or specialist nurse will tell you about the arrangements for your follow up appointments.

We are happy to discuss any other questions or concerns you may have.

Your appointments

The scheduling office will arrange your appointments for planning. Sometimes arrangements for your first visit may be made over the telephone during discussion with one of the scheduling staff. When you attend for your CT or MRI planning scan you will be given your first treatment appointment time.

On your first treatment appointment the radiographers will give you a schedule of appointments. These times may need to change at short notice so it's important we have your correct telephone number.

It is very important that you do not miss any of your treatments.

If you are unable to attend any of your appointments you must advise the scheduling office on 0191 213 8777.

Please inform the scheduling office if you have a heart pacemaker.

Treatment Planning Appointments

Mould room

Part of the planning process may involve a visit to the mould room. It is important to keep the part of the body being treated as still as possible, therefore you may need to wear a specially made mould, shell or shield during your radiotherapy to help keep you in the correct position or to protect parts of your body around the treatment area.

Planning Scan

The radiographers will take radiographic pictures and measurements using imaging equipment. These images are used by your doctor and the planning department to plan exactly where they want the treatment to be delivered.

The images are taken using a CT (computerised tomography) or MRI (magnetic resonance imaging) scanner or PET (positron emission tomography) scanner. A CT scanner is a type of machine that creates detailed pictures (images) of the inside of the body. For the scan you lie on a couch while it passes through a large, hollow ring.

These images show you the CT Scanner & MRI scanner used in the NCCC.

We will give you separate information about your mould room visits and planning sessions specific to your treatment.

Skin Marks

During these appointments the radiographers will draw marks on your skin to use for the accurate positioning of your treatment.

Most patients have tiny permanent marks made on the skin. On the rare occasion that a patient is unable to have permanent marks, your skin will be marked with a special ink pen. These marks must not be washed off until your radiographer tells you it is ok to do so. You may need to leave them on until your radiotherapy is completed.

CT Scanner



MRI Scanner



Your first treatment appointment

Before you have your treatment one of the radiographers will have a chat and explain what is to happen during treatment and any side effects you may expect.

How should I prepare for treatment?

Unless we tell you otherwise there is nothing special you need to do. You can eat and drink as usual beforehand.

When you come along to the department, please remember these points:

- Try to wear clothes that are easy to get on and off
- Leave your valuables at home so that there is less risk of losing them
- If you have a pacemaker please tell your oncologist or radiographer.

What is a treatment session like?

In the treatment room

The radiographers will explain exactly what is going to happen and then help position you on the treatment couch. They will have to move you to help get you in the correct position.

Once you are in the room it takes between 10 and 15 minutes to prepare and deliver your treatment. The machine is only delivering treatment for part of this time. The radiographers spend most of the time getting you in the correct position for your treatment.

They will use the marks put on during planning to correctly position you for treatment. It is important you keep as still as possible during treatment. Unless you are told otherwise you can breathe normally. If you feel uncomfortable and think you may not be able to stay in position, please tell us.

Once you are correctly positioned for treatment the radiographers leave the room, and switch on the machine. X-ray images will be taken to confirm you are in the correct position for treatment to start. The treatment is then given.

You are on your own in the room during this time, but the radiographers are just outside, watching closely on a TV screen. They can hear you and talk to you on an intercom. If you feel distressed at any time during your treatment please alert the radiographers by raising a hand and they will stop your treatment immediately. You can have music playing to help you relax during your treatment.

You feel nothing unusual during treatment delivery (it is similar to having a normal x-ray). The treatment machine makes a buzzing noise when on that can stop and start during the session. The machine will move around you during your treatment, it may come close to you but it will not touch you.

After treatment

When your treatment is over, the radiographers will come back into the room. You can then get dressed again and go home.

You will not be radioactive and you can't harm your family and friends.

Will I get any side effects?

The side effects depend on the part of your body being treated and how much radiotherapy you are having.

Most side-effects are temporary and after treatment they gradually disappear as you get back to normal. Radiotherapy can cause long-term effects. For some patients side-effects may be permanent but you will be informed if this is true in your case.

Some common side-effects

Fatigue - You may find that you become more tired than usual, particularly towards the end of your course of treatment.

You can find useful information about fatigue at:

<https://www.macmillan.org.uk/information-and-support/coping/side-effects-and-symptoms/tiredness>

Skin reaction - During radiotherapy your skin may become red and itchy, similar to sunburn.

Emotions - Diagnosis and treatment for cancer can lead to a whole range of emotions. This can occur at any time and is normal. Many people find it helpful to talk about how they are feeling with a family member, friend or professional.

There are many more side effects that may be specific to your type of treatment and treatment area, These will all be discussed with you prior to treatment and monitored during and after treatment

When you come for your treatment sessions tell the radiographers and oncologists how you are feeling. Don't be afraid to ask for help and advice if you need it. The radiographers, nurse or oncologist can refer you to one of our clinical psychologists who can see you and assess any emotional difficulties more fully. Then you and your clinical psychologist will discuss options to address the problems.

The Maggie's Centre offers free practical and emotional support. Please ask for details.

How can I help myself during treatment?

Diet

Eat a healthy balanced diet and try to eat enough food, even if you don't feel hungry. It may be better to eat little and often.

Try to eat five pieces of fruit and vegetables per day, reduce salt, saturated fats and sugars.

You can find useful information about eating well at:
<https://www.nhs.uk/live-well/eat-well/>

Drink plenty of clear fluids – at least 2 litres per day. It is important you do not become dehydrated.

Try to drink less than the recommended units of alcohol per week. (No more than two or three units a day and 14 units a week.)

You can find useful information about reducing alcohol intake at:
<https://www.nhs.uk/live-well/alcohol-support/>

Smoking

We would generally encourage people to give up smoking due to the health risks but we are aware that this is not always easy immediately after a cancer diagnosis or during treatment. We would therefore ask that you try to reduce the number of cigarettes you smoke during radiotherapy as this can often make the side effects much worse.

**Smoking may also reduce the effectiveness of treatment.
If you need help to stop smoking, please ask.**

You can find useful information about quitting smoking at:
<https://www.nhs.uk/live-well/quit-smoking/>

Rest

Your treatment can make you tired so you may need extra rest. Regular gentle exercise has been found to reduce treatment related fatigue. The staff in the Information and Support Centre may be able to provide you with leaflets and more specific information on cancer and fatigue.

Pregnancy

It is very important that women of childbearing age **are not** and **do not** become pregnant before or during radiotherapy. Please use a reliable contraceptive. This is also important before and during chemotherapy too.

Please inform a member of staff immediately if you think you may be pregnant.

You will be asked (if appropriate) to confirm you are not pregnant before starting treatment. Please discuss with your oncologist if you think you may be pregnant or if you have any other issues about your fertility.

Useful contacts and phone numbers

NCCC Main Reception Level 2 (Monday to Friday 8am to 8pm)	0191 213 8610
Radiotherapy Reception Level 1 (Monday to Friday 8am to 5pm)	0191 213 8355
Radiotherapy Scheduling Office (Monday to Friday 8am to 5.30pm)	0191 213 8777
NCCC Outpatients Reception Level 2 (Monday to Friday 8am to 5pm)	0191 213 8091
Chemotherapy Day Unit (Ward 36) (Monday to Friday 8.30am to 6pm)	0191 213 7036
Ward 33 (Available 24 hours)	0191 213 7033
Ward 34 (Available 24 hours)	0191 213 7034
Ward 35 (Available 24 hours)	0191 213 7035
Sir Bobby Robson Unit (Monday to Friday 8am to 4.30pm)	0191 213 8453
Infection Control Team (Available 24 hours)	0191 233 6161

Newcastle upon Tyne Hospitals NHS Foundation Trust

www.newcastle-hospitals.org.uk

<https://www.nhs.uk/Services/Trusts/Overview/DefaultView.aspx?id=RTD>

Macmillan Information and Support Centre

Northern Centre for Cancer Care,

Level 2,

Freeman Hospital

0191 2138611

Email: nuth.macmillansupport@nhs.net

Open Monday – Friday 10.00am - 4.00pm

Macmillan Cancer Support

Freephone 0808 800 0000

www.macmillan.org.uk

Maggies Centre (Newcastle)

Telephone: 0191 233 6600

E-mail: newcastle@maggiescentres.org

Smoking cessation

Newcastle and North Tyneside Stop Smoking Service 0191 219 5111

<https://www.nhs.uk/smokefree/>

<https://ash.org.uk/home/>

The Patient Advice and Liaison Service (PALS)

Telephone: 0800 032 02 02

E-mail: northoftynepals@nhct.nhs.uk

If you would like further information about health conditions and treatment options, you may wish to visit the NHS website at www.nhs.uk

Cancer Services and Clinical Haematology
Out of hour's helpline

0191 213 9302

Contact the helpline immediately if you:

- Have a temperature of 37.5°C or above
- Feel shivery or flu-like
- Experience problems after radiotherapy

If you would like any further radiotherapy information please contact:

Mr Dean Ainslie,
Clinical Specialist Therapeutic Radiographer,
C/O Radiotherapy Department
Northern Centre for Cancer Care
Freeman Hospital
Newcastle upon Tyne
NE7 7DN

Email: nuth.radiotherapypatientinformation@nhs.net
Phone: 0191 213 8777

If you have any comments about NCCC, please write to:
The Directorate Manager,
Northern Centre for Cancer Care
Freeman Hospital
Freeman Road
Newcastle upon Tyne
NE7 7DN

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