

Learning Environment



Renal Home Therapy

Learner Booklet

Welcome

We would like to warmly welcome you to Lancashire Teaching Hospitals NHS Foundation Trust (LTHTR). Incorporated on the 1st of April 2005, LTHTR was the first trust in the county to be awarded “Teaching Hospitals” status.

We have created this pack as a useful resource to help you to settle in with us. The purpose of this booklet is to provide you with information to help you on your learning environment.

About LTHTR

We have three equally important strategic aims:

- To provide outstanding and sustainable healthcare to our local communities
- To offer a range of high-quality specialist services to patients in Lancashire and South Cumbria
- To drive health innovation through world class education, training and research

We provide a range of Hospital based health services for adults and children and cover a range of specialities. These include cancer services such as radiotherapy, drug therapies and surgery, disablement services such as artificial limbs and wheelchair provision. Other specialities include vascular, major trauma, renal, neurosurgery and neurology including brain surgery and nervous system diseases.

Our five core values:

- Being caring and compassionate
- Recognising individuality
- Seeking to involve
- Building team spirit
- Taking personal responsibility



We deliver care and treatment from three main facilities:

- Royal Preston Hospital
- Chorley and South Ribble Hospital
- Specialist Mobility and Rehabilitation Centre, Preston

In relation to car parking, please refer to your Induction to the Trust, for information regarding car parking. Additional information can be found on our Intranet page.

<https://legacy-intranet.lthtr.nhs.uk/car-parking-documents>



Learning Environment

We would like to welcome you to your learning environment.

The Renal directorate of Lancashire and South Cumbria provide a specialist service to a population of 1.8 million people. There are 13712 people who are known to the service with 498 patients requiring dialysis in centre, 106 patients dialyzing at home or training, 683 patients under the care of the kidney choices team and 791 transplant patients (Figures correct, May 2022).

The LTHTr renal directorate (specialist services) consists of:

- Acute Dialysis bay
- Chorley Dialysis Satellite Haemodialysis Unit
- Home Therapy Team
- Nephrology Ward (Ward 25) comprising of 23 beds and a treatment room for day cases
- Renal Consultants and medical team
- Renal Specialist Nurses
- Royal Preston Hospital Haemodialysis Unit (hub unit)
- Westmoorland Renal Centre (Kendal)

There are 4 other satellite renal centres, which are run by 2 private companies called Diaverum and Fresenius Medical Care. The centres provide haemodialysis and renal outpatient clinics to enable patients to be seen closer to their homes, ideally within 30 minutes travel time.

- Clifton Haemodialysis unit (Blackpool)
- Furness Renal Centre (Barrow in Furness)
- John Sagar Renal Centre (Burnley)
- Laurie Solomon Renal Centre (Blackburn)

The Kidney and it's Functions

The kidney's main functions:

1. The production of erythropoietin (epo)
2. Active in production of vitamin D
3. Active in acid base homeostasis
4. Conserve water, salts and electrolytes
5. Separate urea, mineral salts, toxins and other waste products from the blood

Renal function is assessed in accordance with the Estimated Glomerular Filtration Rate (eGFR) which is divided into five stages. When the eGFR is less than 15mls/min/1.73m² then the patient is considered to have Established Renal Failure and will require conservative management, transplant or renal replacement therapy.

Common causes of chronic renal failure are:

Cardiovascular Disease/Hypertension

Diabetes

Certain ethnic backgrounds including South Asian, Afro Caribbean and Chinese (Kidney Care Services 2008).

Less common causes of chronic renal failure are:

Autoimmune diseases

Multiple Myeloma

Genetic Abnormalities

Trauma

Common clinical features of renal failure can include:

Nausea and vomiting (which can result in weight loss)

Lethargy

Pruritus

Oedema (both peripheral and pulmonary)

Shortness of breath

Reduced urine output

Hypertension

Headaches

(Levy, Morgan and Brown 2009)

Home Therapy Unit

The Home therapy team cares for patients undergoing peritoneal dialysis (PD) and home haemodialysis (HHD) at home along with staffing the main training unit at Chorley hospital. The training unit consists of 4 haemodialysis stations and has space to train PD patients. The unit also offers a drop-in service for patients who need assessments for problems such as peritonitis or exit site infections and patients can ring the unit from 07:00 to 18:00 Monday to Friday for advice. There is also an on-call every evening from 18:00 to 00:00 for patients requiring urgent advice.

The team deal with any PD patients who are receiving inpatient care who are not on ward 25. There is also a small team of community sisters who visit patients at home where they can assess dialysis techniques, general well-being and plan their care. The assisted automated peritoneal dialysis (aAPD) team visit patients at home to clear the used consumables and set up the machine for use that night. This service is offered to patients who wish to have APD but are unable to set up the machine, but able to connect themselves to dialysis. The home therapy team may allow you to accompany them on home visits, however you are expected to be aware of the lone worker policy which is available on the intranet and you will be required to provide a contact number, address and NOK details.

Some of the things you may experience with the Home Therapy team:

Peritoneal Dialysis

When a patient is commenced on Peritoneal Dialysis they have a tube inserted through the lower abdomen wall into the peritoneal cavity, half of the catheter lies inside the abdomen and half lies outside, this is called a Tenckhoff Catheter. Through this the dialysate fluid is drained into the peritoneum to allow the exchange of toxins and fluid, through the process of osmosis and diffusion through the peritoneal membrane. Toxins are removed from the blood stream by the process of diffusion. The toxins are drawn into the dialysate fluid therefore reducing their concentration in the blood. The fluid movement is determined by osmosis. Fluid will move across the peritoneal membrane to the area of higher osmotic pressure. The dialysis fluid used comes in different strengths, the stronger the bag then more fluid can be removed, however we do try to avoid using strong bags as this can damage the peritoneum and reduce the time a patient will spend undergoing PD. Once the fluid has been in the peritoneum for a minimum of 4 hours it will then be drained out, therefore removing the toxins and excess fluid from the body.

There are two main types of PD, which are Continuous Ambulatory Peritoneal Dialysis (CAPD) and Automated Peritoneal Dialysis (APD). CAPD consists of 4

exchanges a day during which the effluent is drained out and new dialysate fluid is put in situ until the next exchange. APD is performed every night whilst the patient is asleep. A dialysis machine is used and this drains the fluid in and out over a set time and a set number of cycles. In order to undertake PD the patients are trained in the procedures for hand washing and sterile techniques, as a lack of care in these areas can lead to complications arising. These complications are treatable if identified early.

Peritonitis

This is an infection of the peritoneum and if left untreated it can cause severe complications. The first signs of Peritonitis are high temperature, abdominal pain, nausea and vomiting along with cloudy effluent bags. It is generally caused by poor hygiene techniques, which allow the bacteria to travel up the Tenckhoff catheter into the peritoneum. Inappropriate hand washing or drying and dirty surfaces can be the cause as well as open windows, blowing fans and coughing over the area. Peritonitis is treatable and patients need to attend the training unit so samples of the dialysate fluid can be obtained and sent to the Pathology Lab for White Cell Count (WCC) and Cultures. The patient is given antibiotics following the Peritonitis Protocol and the nurse would also check the patients exit site for signs of infection and this can also cause peritonitis. Each episode of peritonitis scars the peritoneum and shortens the time a patient will spend on PD. More severe cases of peritonitis can result in a hospital admission.

Exit site infection

This is an infection around the area of the site where the Tenckhoff catheter is inserted, which is called the Exit Site. Once again this can be caused by poor hygiene techniques. However breakdown of the skin can occur if the patient has a reaction to the plaster or cleaning agent. When an exit site becomes infected, the patient complains of pain around the site, it can appear red around the site and along the length of the catheter and there could also be some discharge. Once the patient has been assessed, a swab will be taken and antibiotic treatment commenced.

Home Haemodialysis

Patients who wish to be independent at home with dialysis can have their home assessed and if suitable they can then undertake training. There are 3 types of haemodialysis machine used on the training unit to offer more choice to patients based on patient tolerance and suitability for their home.

The training unit is open Monday to Friday and patients generally attend daily for 6-12 weeks to train on haemodialysis. Patients will learn all aspects of haemodialysis,

including learning to insert their own needles if they have a fistula. Once the patient is competent and ready to go home, the renal technicians install all the necessary components for the patient to dialyse at home. During the first weeks at home, the patients are supported by the community sisters who will visit on a daily basis to support the transition. As confidence builds at home, the support of the community sisters lessons and patients are encouraged to ring the training unit with any problems.

Common Renal Drugs

There are common medications used in the renal directorate:

- Anti-Hypertensives
- Anti-glycaemic medication
- Phosphate binders
- Calcium supplements
- Sodium bicarbonate
- Anticoagulants
- Erythropoietin
- Iron (oral and intravenous)

Some medications are classed as nephrotoxic drugs; this means that they are toxic to the kidneys; these drugs can cause Acute Kidney injury or long-term kidney damage. Some of these drugs include:

- NSAIDs (nonsteroidal anti-inflammatory drug) like ibuprofen
- Opioids such as morphine sulphate
- Pethidine
- Losartan

Uniform

Please refer to the uniform policy available on the intranet.

Sickness

Learners and trainees should follow the university protocol and also inform their placement area. You will also need to email learner.absences@lthtr.nhs.uk

Induction

The Local Induction process will take place throughout the first week of your placement.

This will comprise of:

- Trust and department orientation, including housekeeping information
- Location of emergency equipment
- IT access
- Reading & acknowledgement of Mandatory Trust policies such as Health & Safety, Fire Safety, Infection Control, Information Governance, Staff Code of Conduct, Social Networking and Dress Code policies.
- Adult Basic Life Support training if applicable
- Trust Moving & Handling Training if applicable
- COVID-related policies & procedure
- Orientation
- Professional voice: - freedom to speak up, datix, chain of command, open door policy
- An awareness of our Educational Governance Team- evaluation and importance of feedback
- Inter-professional Learning Sessions
- Practice Assessment Record and Evaluation (PARE) training, if applicable
- Collaborative Learning in Practice (CLiP™), if applicable
- How the role of Practice Development Facilitator can support you, where applicable



What to bring on your first day

- Uniform: All other items in the dress code policy must be adhered to <https://legacy-intranet.lthtr.nhs.uk/search?term=uniform+policy>
- A smallish bag which would fit into a small locker.
- You may wish to bring a packed lunch and a drink on your first day.

Inter-professional Learning Sessions and eLearning Resources

At our Trust, our Education Team facilitates a yearly programme of Inter-professional Learning (IPL) sessions. This programme consists of various teaching sessions, delivered by our Specialist Teams, to support and enhance our learners and trainees' learning experience with us.

Inter-professional learning is an important part of your development and allows you to build professional relationships and communication skills with the wider multi-disciplinary teams. Our IPL sessions are valuable in supporting you to stretch your knowledge and experiences to enhance your clinical practice. They also help bridge the gap between theory and practice, allowing you to hold a deeper understanding of the topics discussed. Our sessions are open for all learners and trainees on placement at our Trust to attend and these learning opportunities are an extension to your learning environment; therefore, these hours need to be recorded on your timesheets. We encourage our staff to facilitate enabling a learner/trainee to attend these sessions.

Please note: You must inform your learning environment prior to attending a session. These IPL sessions need to be discussed in a timely manner with your learning environment.

You are required to complete a reflection on each of your IPL sessions, as well as documenting on your HEI documentation what you have learnt and how this relates to your current placement.

You can book onto our IPL Sessions by accessing this link <https://elearning.lthtr.nhs.uk/login/index.php> and searching for 'IPL'.

You can access our policies and procedures via our Intranet page, which will help expand and stretch your knowledge.

Support with evidencing your learning outcomes or proficiencies

We encourage you to use the Trust learning logs to collate and evidence your skills, knowledge and abilities achieved. You can then present your completed learning logs to your Practice Assessor/Educator during your assessment meetings. Any staff member who is involved in coaching you can complete your learning log feedback.

You can request time during your placement hours to complete these and request feedback prior to the shift ending. To obtain a copy of our learning logs, please visit our Health Academy Webpage on the link below, where you will see a copy of our CLiP™ Learning Log available for you to download, on the right hand side - <https://healthacademy.lancsteachinghospitals.nhs.uk/support/clinical-placement-support/collaborative-learning-in-practice-clip/>

Chain of Command

Keeping patients safe, providing the best care that we can and learning in an environment where you feel safe and valued is important to us. Speaking up about any concern you have on your learning environment is also important. In fact, it's vital because it will help us to keep improving our services for all patients.

There may be occasions where we witness, experience or are asked to do something that causes us concern. Often, these concerns can be easily resolved, but sometimes it can be difficult to know what to do.

Our Clinical Placement Support Team are available Monday – Friday, 8.00am – 4.00pm should you need to contact them in relation to any concerns regarding your learning environment. If your concern relates to patient safety and/or your concerns are outside of these hours, please follow the chain of command in your learning environment and speak with the person in charge.

Please visit our Freedom to Speak Up page on the Intranet for more details.



We value your feedback

Our Trust values your feedback. To continuously improve, we offer opportunities for our learners and trainees to provide feedback regarding both your learner experience and your learning environment. We would encourage you to kindly complete your end of placement evaluation, within your clinical hours.

We will keep you updated with the improvements that we make based on the feedback you provide us with.

Learning Environment Improvement Forum

Our Learning Environment Improvement Forum began in November 2021, with key stakeholders attending; Learners, Trainees, Clinical Staff, Education Leads and our Nursing Directorate. Monthly meetings are held to share new and innovative ideas as to how we can collaboratively enhance our learning environments, to support both learners, trainees and staff.

All attendees at the Learning Environment Improvement Forums contribute their suggestions and guidance on our projects. Collaboratively, exciting improvements are implemented to enhance our learning environments.

Innovative changes made by our Learning Environment Improvement Forum, within Academic Year 2021-2022;

- NEW Learner Boards designed and placed on our learning environments
- Learner booklets made available on our Health Academy webpage to prepare our learners and trainees for their clinical placements, as suggested by our learners and trainees
- PARE and CLiP™ training embedded into our Learner and Trainee Inductions
- Quick Reference Guide designed and created to welcome our learners and trainees to the Trust and prepare them for their clinical placements

We welcome any of our staff, learners and trainees at the Trust to attend our Learner Environment Improvement Forums, to contribute your ideas and suggestions for our new and innovative projects. You can join via the E-Learning Portal - <https://elearning.lthtr.nhs.uk> and going to Courses, then selecting the tab 'Inter Professional Learning', where you will see our forum listed.