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Developing a Home OPAT Service through Cross Organisational Working

Excellent care with compassion

@LancsHospitals

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Overview

- Background to OPAT at LTH
- Previous experience of home antibiotics
- The collaboration
- The process
- Results from a fledgling service
- Challenges and future plans

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Setting the scene

- Royal Preston Hospital, Chorley and South Ribble Hospital (~900 beds)
- Specialised services for Lancashire and South Cumbria (1.5m)

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Clinic-based OPAT

- Piloted in 2012
- Daily attendance at treatment centres
- Microbiologist/specialist nurse led
- Admission avoidance (cellulitis)
- Step down
- Telemedicine for cross site working

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Clinic-based OPAT

- Popular and successful

		2013	2014	2015	2016
RPH	**Bed Days**	1748	1700	2195	1971
	Patient Episodes	126	134	173	165
CDH	**Bed Days**	1062	1694	1702	1512
	Patient Episodes	60	65	66	90
TOTAL	**Bed Days**	2810	3394	2368	**3483**
	Patient Episodes	186	199	239	**255**

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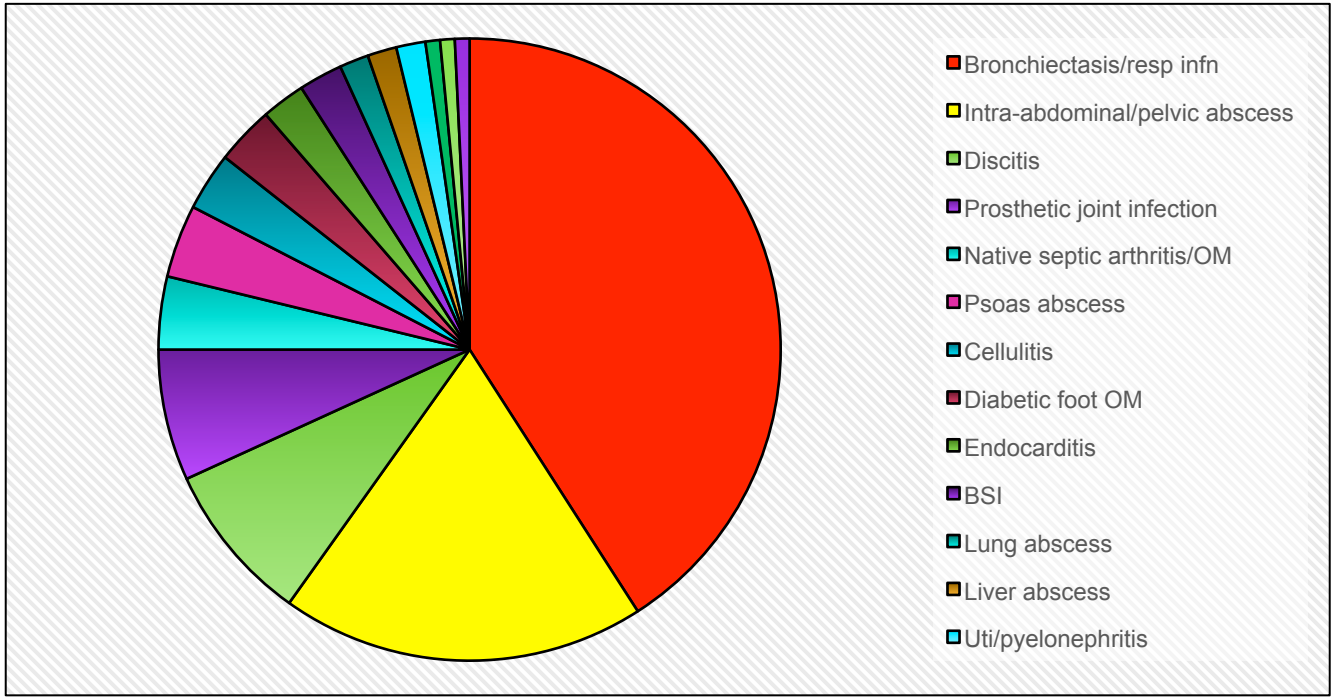
But still an unmet need?

- Private provider commissioned by CCG 2015-2016 to provide "hospital at home"
- Medically *stable* patients
- IV antibiotics, fluids, nursing care etc.
- Three visits per day
- Saved an additional 3138 bed days over 17 months (184 patient episodes)
- Primarily bronchiectasis


Bronchiectasis/resp infn
Intra-abdominal/pelvic abscess
Discitis
Prosthetic joint infection
Native septic arthritis/OM
Psoas abscess
Cellulitis
Diabetic foot OM
Endocarditis
BSI
Lung abscess
Liver abscess
Uti/pyelonephritis

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Lessons learned

- Governance
- Line/port care/training
- Clinical oversight

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But

- Service then withdrawn
- Void for frail/immobile patients needing more than once daily antibiotics

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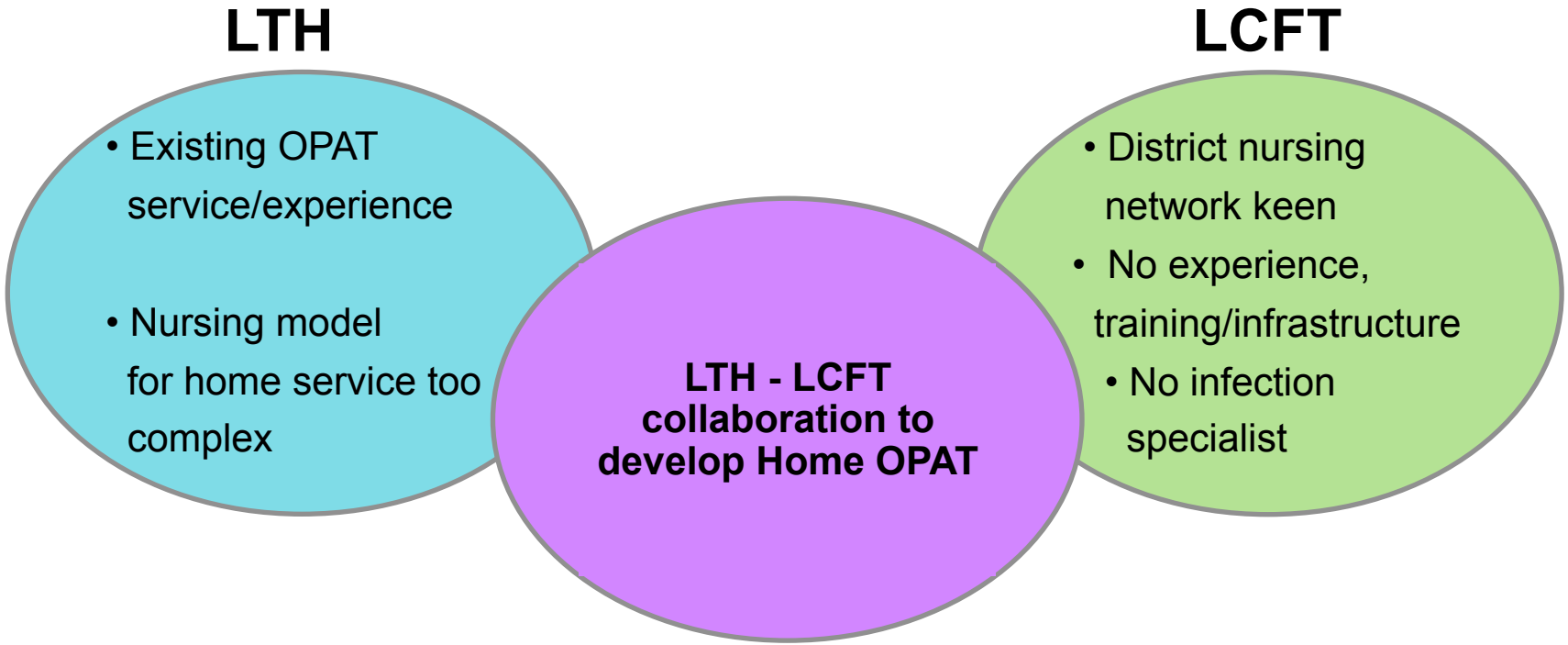
The Solution



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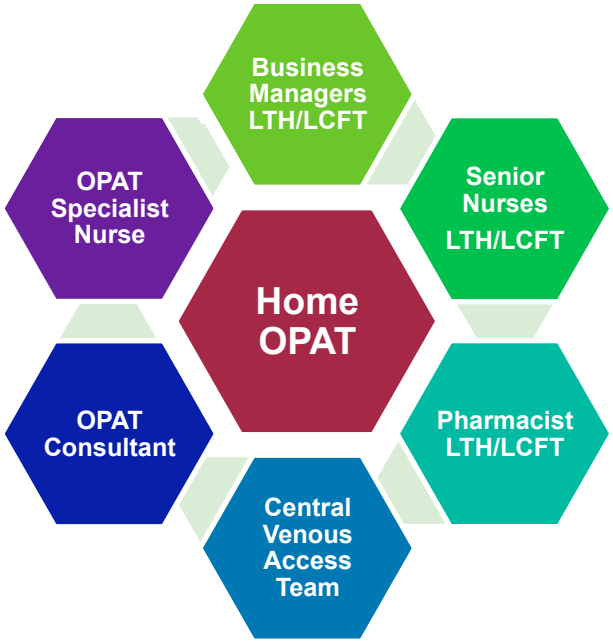
Task & Finish Group



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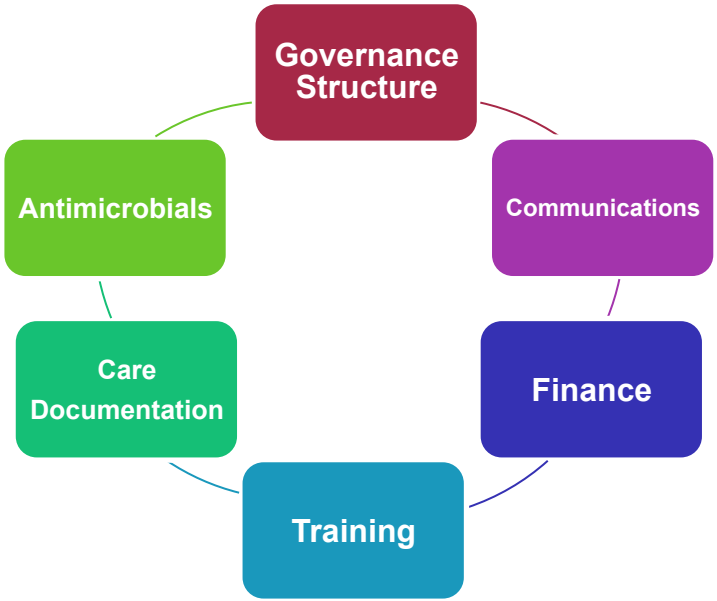

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Tasks

Governance Structure

- Existing LCFT & LTH governance arrangements
- H-OPAT MDT members
- Clinical responsibility
- Inclusion & exclusion criteria
- Process for complaints & incidents
- Referral and escalation pathways
- LTH new service checklist

Finance

- LTH to purchase nursing care from LCFT via SLA
- LTH to write internal business case for new service
- LTH to use locally agreed OPAT tariff for each visit

Communications

- Strategy for informing users agreed
- Information governance
- Processes for communication between LCFT & LTH

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Tasks

Antimicrobials

- LCFT reluctant to reconstitute: pre-filled antibiotic devices chosen
- Consumables
- Pharmaceutical waste
- Cold chain – collection, parking
- Supply of oral antibiotics

Training

- Nursing competency document & training sessions
  - PICC & port care
  - Use of pre-filled antibiotic devices
  - Collecting blood samples
  - Line removal

Care Documentation

- Referral template
- Care pathway
- Patient information leaflet
- Patient satisfaction questionnaire
- MDT summary document

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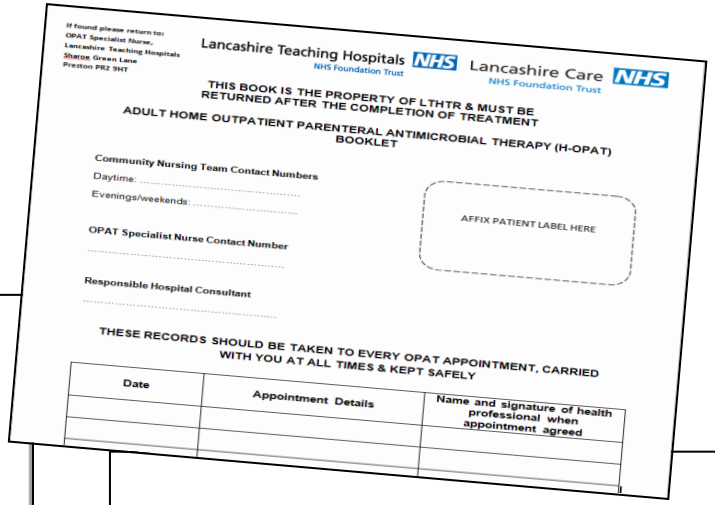
Talking, listening & negotiation

Community Team (LCFT)

- Reluctant to reconstitute powdered antibiotics
- Travel time
- Cannulation
- Port care
- Consumables

Hospital Team (LTH)

- Lead time and extra cost of pre-filled devices
- Supply of oral antibiotics
- Communication
- Information governance



If found please return to:
OPAT Specialist Nurse,
Lancashire Teaching Hospitals
Sharoe Green Lane
Preston PR2 9HT

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Lancashire Care NHS Foundation Trust

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ADULT HOME OUTPATIENT PARENTERAL ANTIMICROBIAL THERAPY (H-OPAT) BOOKLET

Community Nursing Team Contact Numbers

Daytime: .....

Evenings/weekends: .....

AFFIX PATIENT LABEL HERE

OPAT Specialist Nurse Contact Number

.....

Responsible Hospital Consultant

.....

THESE RECORDS SHOULD BE TAKEN TO EVERY OPAT APPOINTMENT, CARRIED WITH YOU AT ALL TIMES & KEPT SAFELY

Date	Appointment Details	Name and signature of health professional when appointment agreed

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Home OPAT (H-OPAT) Referral Pathway Summary Flowchart

Treating hospital consultant identifies patient as potentially suitable for H-OPAT

Treating hospital consultant contacts **consultant microbiologist** to discuss suitability

Referrals accepted 09:00 to 17:00 Mon – Fri via extension 2155

Consultant microbiologist will ensure that:

- Patient is medically fit for home therapy (no unresolved medical or surgical issues)
- IV antimicrobials are appropriate and necessary and that a regimen suitable for home delivery is available
- Patient is aged 18 or over
- Patient is registered with a GP in Greater Preston or Chorley and South Ribble CCG
- Treating consultant will conduct VTE risk assessment for H-OPAT
- The referring consultant understands that they will remain responsible for the patient's care and that any necessary follow up has been arranged

Patient accepted to H-OPAT by microbiologist who will:

- Inform OPAT CNS (Bleep 2106)
- Complete microbiology aspects of H-OPAT pathway including IV1 Authorisation Form
- Write prescription for antibiotics on outpatient script for LTH pharmacy
- Document patient acceptance and treatment plan on Swisslab and Quadramed

OPAT Clinical Nurse Specialist (CNS) will:

- Send email referral and IV1 Authorisation Form to community nursing team (via Main Access Point)
- Arrange for treating team to complete their sections of H-OPAT pathway
- Liaise with antimicrobial pharmacist to arrange supply of antibiotic
- Request PICC via Quadramed.
- For hospital inpatients, will meet the patient to explain the service/plan, gain consent and provide information leaflet
- For outpatients, will co-ordinate attendance for PICC insertion, first dose of antimicrobial (to be given at Day Treatment Centre or Clinical Investigation Unit), consent and provision of patient information

Start date/time for first visit agreed with community nursing team

Patient will be given H-OPAT pathway which will be kept at their home

Patient will be given a week's supply of line dressings and flushes

Community nursing team will:

- Visit daily each morning to administer antimicrobial and perform observations (and blood samples as required)
- Line dressings will be changed on a weekly basis
- Patients with portacaths will visit LTH on a weekly basis for needle change by the CVAT team (01772 524781)
- Patients will be reviewed in the weekly MDT

Home OPAT (H-OPAT) Escalation Pathway

Please first consider contacting your District Nurse Team Manager

Problem with line or portacath e.g.

- exit site redness/discharge
- migration > 2 cm
- inability to flush or bleed
- ballooning of line
- limb swelling

Mon – Fri 08:30 to 16:30
Contact LTH Central Venous Access Team (CVAT)
Tel: 01772 524781 or Bleep 3410 via LTH switchboard (01772 716565)
Weekends
Contact Day Treatment Centre RPH: 01772 522960 (08:30 – 14:30) or Duty Nutrition Nurse Bleep 3057 via LTH switchboard (08:30 -16:30)

Concern relating to infection being treated
e.g. worsening symptoms/signs

Mon – Fri 08:30 -16:30
Contact OPAT CNS Bleep 2106 via LTH switchboard (01772 716565)

Out of hours and/or if OPAT CNS unavailable
Contact duty microbiology consultant via switchboard: 01772 716565

OPAT CNS/microbiologist will assess situation and liaise with parent team for advice/to arrange reassessment or readmission

New problem (unrelated to infection)

Community nurse will escalate/refer according to nature and urgency of problem e.g. to Urgent Care/Emergency Department or to patient's own GP

Assessment will be conducted using LCFT Guidelines for use of EWS and Sepsis Screening for Community Settings (Adult Patients)

Community nurse will notify OPAT CNS or microbiologist of problem and action taken

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The Service

LTH OPAT team
- identify suitable patient
- plan treatment
- PICC sited
- order antimicrobials
- refer to LCFT district nursing team

Patient discharged home with
- consumables
- pathway document
- information leaflet

LCFT visit once daily
- nursing observations
- antibiotic administration
- line care
- blood sampling

Weekly MDT
- district nursing team leaders
- OPAT consultant
- OPAT specialist nurse
- antimicrobial pharmacist
- input from referring consultant

Progress and plan reviewed

End of therapy
- outcome and adverse event recording
- patient feedback

Monthly Service Review Meetings
- activity, outcomes
- incidents, complaints
- review of processes

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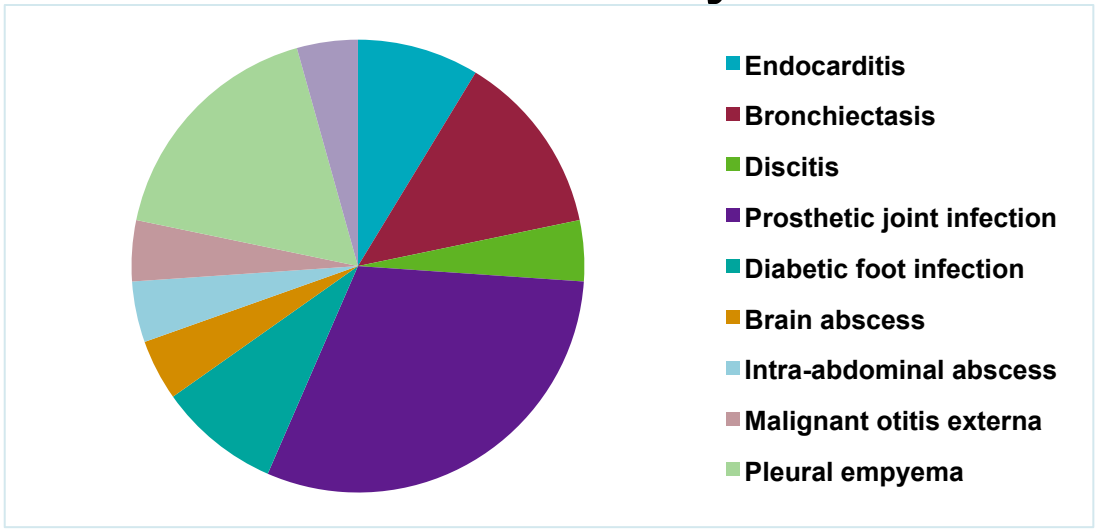
? Finish

- Agreed a 6 month project pilot pending SLA and business case
- First meeting 25th January 2017
- Pilot launched 6th March 2017

Pilot Results

- 23 patients treated, 449 bed days saved
- Conditions:



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Pilot Outcomes

Patient infection outcome	19 cure/improved 4 failure
OPAT outcome	19 success 3 indeterminate 1 failed oral switch
Clostridium difficile infection	0
S. aureus bacteraemia	0
Drug reactions	1 LFT deranged due to rifampicin
Line complications	6 migrations (3 PICCs re-sited) 1 infection

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Challenges

Incident reviews:

- Line infection – cross-organisational review led by LCFT IPCT
- Out of date device attached to incorrect patient
- Community fridge failure

Challenges

- Pre-filled devices

  lead time, travel time for collection, fridge failure, expense, wastage

- Communication

  complex district nursing team, difficulty cascading information and experience, patient experience

- Discharge planning

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Happy Patients

(5) Do you think H-OPAT is preferable to inpatient treatment? YES, YES, YES!!!

☑ Strongly agree ☐ Agree ☐ No view ☐ Disagree ☐ Strongly disagree ☐ N/A

(6) Were you able to return to work or education whilst receiving H-OPAT?

☐ Yes ☐ No ☑ Not applicable

(7) Would you accept this form of treatment if the need arose again? Absolutely YES!!! ☺

☑ Yes ☐ No ☐ Not sure ☐ N/A

12) Please provide any additional comments regarding your experience with the H-OPAT service.

The H-OPAT team is simply wonderful. If it wasn't for this service I would have been stuck in hospital for months. The nurses became like family and I actually looked forward to them coming. They did more than just give me IV's, they supported me during the first few months of becoming a new mum, listened to me, supported me and were a part of my journey. It may sound odd but I miss seeing their friendly faces every day.

To all the nurses, from the bottom of my heart, THANK YOU ☺

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Future Steps

- Reconstitution of antibiotics
- Weekly phone calls to patients
- Expansion of LTH team for case finding
- Finalise SLA and business case

Kim Slater – LCFT DN Team Manager

Hajara Ugradar – LTH Antimicrobial Pharmacist

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Sarah Hewinson – LCFT DN Team Manager

Russell Dineley – LTH Acting Divisional Director

Andrea Bramley – LCFT DN Team Manager

Joan Bibby – LTH Administrator

"Thank You"

David Orr – LTH Clinical Director

Dorothy Walmsley – LTH Specialty Business Manager

Kathryn Woods – LCFT Associate Clinical Director

Joanne Orton – LTH OPAT Specialist Nurse

Tracey Wells – LTH Specialty Business Manager

Sarah Marquis – LCFT DN Team Manager

Heather Grice – LTH Matron

Janet Purcell – Consultant Microbiologist

Lindsay Holden – LCFT Deputy Lead Pharmacist

Amanda Housley – LCFT Manager

Linzi Tierney LTH Lead CVAT Nurse