

Bronchiectasis experience of the OPAT team in the NHSCT

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Overview

- Role of teams in managing the Bronchiectasis service.
- Managing a busy caseload of patients.
- User experience of the OPAT team
- Improvements to the management of patients with Bronchiectasis.



Bronchiectasis Team

- ▶ Consultant led Clinic X2 per month
- ▶ Respiratory Nurse Specialist Led Clinic X2 per week
- ▶ Physiotherapist X1 per week
- ▶ Community Respiratory Teams X4
- ▶ Dedicated Bronchiectasis advice line Monday- Friday 8.30-16.30



Hospital Diversion Nursing Team (HDNT) NHSCT

- ▶ Working Hours 8:45- 22:45
- ▶ 4 teams.
- ▶ 7 day service
- ▶ 52 weeks
- ▶ Domiciliary
- ▶ Clinics.
- ▶ Nursing homes
- ▶ Holywell



Referrals/caseload.

▶ NHSCT & BHSCT

Hospital- various wards


Departments: Haematology, immunology, cardiology, gastroenterology, ED, DAU

Dietitians: G tubes, TPN.

Some GPs

OOH.

Palliative support to Community nursing and Maire Curie OOH.



Intravenous Antimicrobial Therapy pre OPAT team.

- ▶ Referrals from various wards/departments within the hospital.
- ▶ On occasions antibiotics were dispensed for multiple weeks of treatment, resulting in wastage when treatments were not completed.



HDNT

- ▶ Time consuming for HDNT obtaining updated/amended drug Kardex.
- ▶ Ad hoc arrangements for blood monitoring, checking levels and review.
- ▶ Treatments withheld, awaiting blood results/levels.
- ▶ No specified direct point of contact.



Bronchiectasis Service.(pre OPAT).

- ❖ Antimicrobials organised by Bronchiectasis consultant.
- ❖ Treatment usually 14 days; TID +/- OD.
- ❖ Liaised with HDNT to check availability.
- ❖ Referral made by the Consultant or Nurse.



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- ❖ Prescription and drug kardex completed by the Consultant.
- ❖ Patient informed when and where to collect drugs.
- ❖ Monitoring of levels if required by consultant.
- ❖ Time consuming and often delay in treatments commencing.
- ❖ Review with Consultant or Nurse post completion of treatment.



Bronchiectasis/OPAT

- Bronchiectasis patients identified as high frequency IV antibiotic therapy user group.
- Ambition was hospital admission avoidance.
- BTS National Adult Bronchiectasis Audit in 2018 only 45.5% of NHSCT patients with bronchiectasis requiring IV antimicrobials were managed at home.



Policy Developed by OPAT Team.

- Based on the British Society for Antimicrobial Chemotherapy (BSAC)
- 'Updated good practice recommendations for outpatient parenteral antimicrobial therapy (OPAT) in adults and children in the UK'.
JAC-Antimicrobial Resistance 2019 administration.
- Pharmacy Led Outpatient Antimicrobial Therapy Service.



OPAT Team

- Target therapy to treat difficult chronic Infections: Pseudomonas, fungal, NTM.
- Screening by the Consultant Microbiologist, determines appropriate antimicrobial and regimen for outpatient administration.
- Strengthens antimicrobial stewardship.
- Provides a gatekeeper function for patients referred to HDNT.



Service improvement.

- ▶ OPAT team provides individualised selection of antimicrobials, Intravenous and Orals
- ▶ Screen for allergies, drug interactions and contra indications.



Service Improvement

- Prescriptions and drug kardex are completed /updated by OPAT Pharmacist Independent prescribers .
- Organise drugs to be delivered to hospitals within locality.
- Ongoing communication between OPAT team, HDNT and the Bronchiectasis team as required.



Service improvement

- Provide advice/support to HDNT.
- Arrange and monitor bloods/levels as required.
- Monitor for potential side effects.
- Liaise with the clinical team when required.



Service Improvement

- ▶ Where duration of treatment is dependent upon re-imaging, the team liaise with the co-ordinator to ensure a scan is assigned at the appropriate interval and expedite if required.
- ▶ This can appropriately reduce the overall antimicrobial duration, resulting in reduced waste, risk of line infections and freeing up HDNT slots.
- ▶ Also improves efficiency in Radiology Department



OPAT data November 2022-2023

	Episodes	Treatment Days saved
Admission Avoidance	18	194
Early Discharge	10	82

OPAT Data April 2023- May 2024

Primary Infective Diagnosis: Bronchiectasis

Type	Episodes	Treatment Days Saved
Admission Avoidance	16	180
Early Discharge	8	57



Increase.

- In the number of referrals for the OPAT service.
- In incidence of NTM requiring treatments.
- In monitoring, reviewing and actioning bloods.
- In the number of patients receiving weekly dispensing of antimicrobials.
- In prescriptions and drug kardex completed by pharmacist Independent prescribers.



Positive outcomes.

- Decrease in the number of Bronchiectasis patients being admitted to hospital for IV antimicrobials.
- Decrease in waste/cost, for example if a change in treatment occurs or the patient cannot tolerate the antimicrobials.
- Decrease in bed days, facilitating early hospital discharges.



Positive feedback from patients

- ▶ Patient feedback: positive experience of OPAT and HDNT.
- ▶ Prefer to have treatments in community settings, clinic or domiciliary.
- ▶ Patients feels supported by the teams.
- ▶ Report better recovery at home: diet, rest and sleep.
- ▶ Having morning appointments enables some patients to attend work, socialise and plan their day.



Increased efficiency for HDNT staff

- Decrease in the time spent travelling for HDNT staff to undertake TID administration of antibiotics if a suitable daily antimicrobial option is available.
- Decrease in mileage, reducing the cost of travelling for staff- NHSCT covers a large geographical area.



Feedback from HDNT

- ▶ Staff reports OPAT team is approachable and supportive.
- ▶ Having a direct point of contact enables prompt decision making if there are any concerns about treatments.
- ▶ With OPAT requesting planned day for reserving and reviewing bloods, treatments are not delayed or doses missed.



Feedback from HDNT

- ▶ HDNT able to increase number of treatment slots with improved drug selection.
- ▶ Improves availability of team to arrange other work to maximize caseload.
- ▶ HDNT expanding clinical working areas to facilitate increase workload.



Feedback from Bronchiectasis Team

- This service has positively improved how therapy is administered to this vulnerable group of patients.
- The OPAT team responds promptly with clinic advice, supporting decision making for patients.
- The OPAT team can prescribe and arrange supply of treatments much quicker than the Respiratory team.
- Patients therefore commencing treatments more promptly, avoiding hospital admissions.



continued

- ▶ Given the large geographical scope of the NHSCT, OPAT can arrange delivery of drugs to the local hospital for patient/families to collect.
- ▶ By OPAT arranging to have bloods reserved by HDNT, following up, interpreting results and actioning as required has significantly improved time efficiency for patients but also the Bronchiectasis team.
- ▶ This has freed up the Bronchiectasis consultant and nurse to increase our throughput of patients and reduce response times as the Bronchiectasis service operates on a self-referral basis.



Conclude

- ▶ OPAT team has significantly improved the management of antimicrobial therapy for patients with Bronchiectasis and NTM.
- ▶ Working collaboratively, with targeted antimicrobial regimen choices, ongoing monitoring and review, has improved the patients experience, ensured safety, reduced cost and waste for the trust.
- ▶ The OPAT team frees up the Bronchiectasis team to continue with their clinical work with this fragile, chronically unwell group of patients.