

Southern Health and Social Care Trust

Outpatient Parenteral Antimicrobial Therapy (OPAT) Service

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OPAT
Outpatient Parenteral
Antimicrobial Therapy



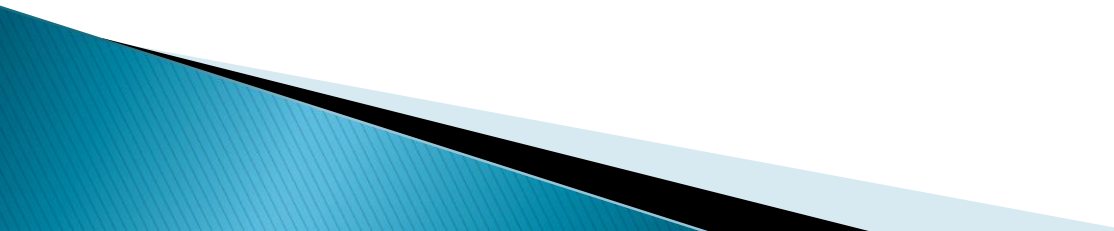
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Quality Care - for you, with you

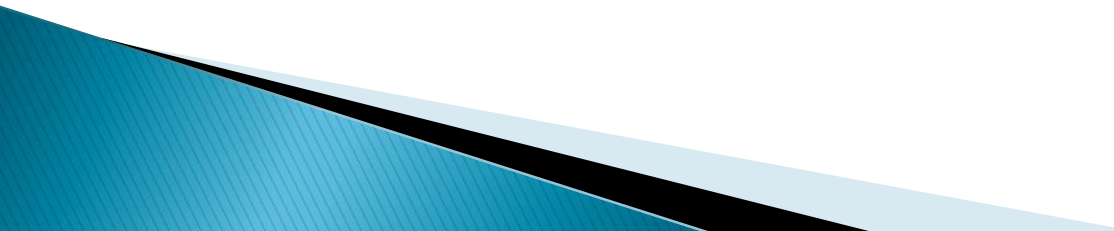
What Is It?

- ▶ Outpatient & Home Parenteral Antibiotic Therapy
- ▶ Intravenous antibiotics as an outpatient
- ▶ Models
 - return to hospital daily
 - nurse administration in home
 - teach carer to administer

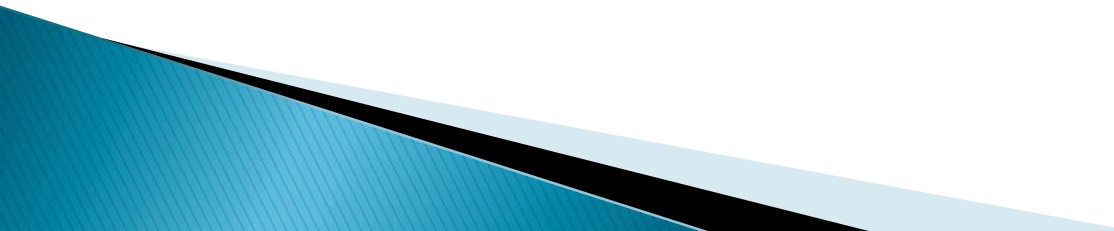
OPAT Advantages

- ▶ Patient preference “quality of life”
 - ▶ Able to return to work
 - ▶ Independence
 - ▶ Personal affairs
 - ▶ Cost effective
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Cost effectiveness

- ▶ Stop iv or change to orals:30–50%
 - ▶ Once a day drug delivery
 - ▶ Minimal drug wastage
 - ▶ Effective treatment
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Complications of OPAT

- ▶ Potential medication errors
 - ▶ Adverse drug effects: 3–10% courses stopped early
 - ▶ Complications from infusion devices
 - ▶ Complications from the original infection
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Reformed OPAT service in SHSCT

- ▶ The SHSCT OPAT service has been reformed with a concentration on quality.
- ▶ Service began November 2018 and current team in place from March 2019.
 - 0.2 WTE Consultant Microbiologist (Infectious Diseases specialist - gatekeeper role).
 - 2.6 WTE Antimicrobial Pharmacists.
 - 1 band 8A pharmacist and 1.6 band 7 pharmacists.
 - IV Nurse Co-ordinators (dedicated line service).

Reformed OPAT service in SHSCT

- ▶ **OPAT service Monday – Friday 9am–5pm includes:**
 - Antimicrobial reviews by pharmacists.
 - Consultant Microbiologist review and clinical plan prior to discharge and counselling.
 - Trouble shooting.
 - Weekly Multidisciplinary Team meetings (Consultant Microbiologists, Pharmacists, IV Co-ordinators).
 - Fortnightly patient review clinics.
 - Clinical review
 - Medication supply
 - Line/administration issues
 - Stewardship



Progress to date...

Data collected on an ongoing basis:

- ❖ Number of accepted referrals
- ❖ Bed days saved
- ❖ Comparison to old service
 - No. of referrals accepted/not accepted
 - No. of patients switched to oral therapy
 - District Nursing capacity
 - Duration of treatment

Progress to date...

- ▶ Comparison data from April–June 2018 and 2019 has shown positive results.

	April – June 2018	Applying 2019 model	April – June 2019
Number of referrals	147		117
Referrals accepted	72 (49%)	57 (38.8%)	55 (47%)
Referrals not accepted	75 (49%)		62 (53%)
Reasons referrals not accepted			
Switched to oral therapy	4 (3%)	19 (13%) (using 2019 figure)	15 (13%) (11 additional patients x 13.7 days (average length of tx) = 151 OD nurse visits; 302 BD nurse visits; 453 TID nurse visits)
No District Nurse capacity	17 (12%)		10 (9%)
Other	54		37
Pharmacy antimicrobial reviews completed	NA		44 (Saving 1.5 hours consultant time per review = 66 hours)
Bed days saved for patients completed treatment	1366*	780.9	756
Estimated bed days per day available per year	15**	8.6	8.3
Longest antibiotics duration (days)	96		64
Average length of treatment (days)	18.2	13.7 (using 2019 figure)	13.7

- ▶ *New model applied to 2018 estimated bed days saved **780.9** (Estimated annual saving of £365102 using 2019 reformed model)
- ▶ **New model applied to 2018 estimated days per day 8.6

NORS outcomes of OPAT service

- ▶ NORS outcomes for OPAT patients within 30 days after discharge from the service:-

	April – June 2018*	April – June 2019
Success	44/71 (62%)	46/55 (83.6%)
Partial Success	3/71 (4%)	0/55
Failure of OPAT	18/71 (25%)	6/55 (10.9%)
Indeterminate	6/71 (8%)	3/55 (5.5%)

*One patient resident in ROI – unable to follow up

Comparison data points of interest from April-May 2018 - 2019:

- ▶ **3 fold** increase in patients switched to oral therapy.
- ▶ The average length of treatment has reduced by **4.5 days.**
- ▶ Estimated annual saving of **£365102** using 2019 reformed model for 2018 data.
- ▶ Pharmacists have saved **157.5 hours** of Consultant time in April - September 2019.
 - Carrying out 105 antimicrobials reviews (1.5 hours each) of patients prior to discharge.



Service user feedback

- ▶ All respondents:
 - Felt that the quality of care received in their home environment compared to hospital.
 - Were satisfied with the service they received from pharmacy.
 - Would use the OPAT service again.
- ▶ No patients had any issues with their supply of IV antibiotics while under the care of the OPAT team.

Service user feedback

"Everything was perfect and thanks to everyone involved."

"Top class service. Very pleased with every aspect of care and treatment."

"I wish to sincerely commend...the OPAT team for their care and attention."

Current and anticipated need

- ▶ Continue and expand present model.
- ▶ Requires district nursing funding.
- ▶ IV Co-ordinator funding.
- ▶ Further embedding of service.
- ▶ Additional Microbiologist capacity to ensure sustainability.
- ▶ Grow patient numbers engaged with service.
- ▶ Once secondary care embedded fully, aim to move to admission avoidance through referrals from primary care.

Conclusions

▶ OPAT key messages:

- **Increased governance** via gatekeeping.
- **Reduced** readmissions by 50%
- **Increased** successful treatment by 1/3

- Effective use of **skill mix** by enhancing pharmacist role to maximise consultant microbiologist time.

- **Increased IV to oral switch 3 fold** prior to discharge.

- **Decreased average duration by 4.5 days** of antibiotics.

- **Estimated annual saving of £365102** using 2019 reformed model for 2018 data.

- Positive staff and patient **feedback**.