



The British Society for
Antimicrobial Chemotherapy



OPAT
Outpatient Parenteral
Antimicrobial Therapy

OPAT & Paediatric OPAT Standards and Practical Implications for the Hospital and Community

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UK OPAT Good Practice Recommendations -

Practical considerations and challenges

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The need for OPAT standards

- 1998 UK OPAT Consensus statement:
 - ‘treatment equal to inpatient care, if not superior’
 - Proliferation of OPAT services across a range of sectors
 - Recognition of importance of ensuring quality
 - Aims:
 - Specify minimum acceptable level of care
 - Pragmatic guidance on the development and delivery of OPAT services
- ‘to develop consistent, usable, UK-wide, good practice recommendations’

The development of the adult GPRs

- Working group established 2010
- Draft recommendations formulated, based on consensus and pre-existing standards
- Systematic review of the literature (615 references)
- Supporting evidence: mainly descriptive to illustrate that statements are reasonable and represent a broad view of best practice
- Further revisions and national consultation
- GPRs published January 2012

Good practice recommendations for outpatient parenteral antimicrobial therapy (OPAT) in adults in the UK: a consensus statement

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These good practice recommendations for outpatient parenteral antimicrobial therapy (OPAT) are an update to a previous consensus statement on OPAT in the UK published in 1998. They are based on previous national and international guidelines, but have been further developed through an extensive consultation process, and are underpinned by evidence from published literature on OPAT. They provide pragmatic guidance on the development and delivery of OPAT services, looking at all aspects of service design, care delivery, outcome monitoring and quality assurance, with the aim of ensuring that OPAT services provide high-quality, low-risk care, whatever the healthcare setting. They will provide a useful resource for teams developing new services, as well as a practical set of quality indicators for existing services.

Keywords: home infusion therapy, guidelines, intravenous antibiotics, community

Adult GPR working group

- Infectious Diseases
- Acute Medicine
- Microbiology
- OPAT nurses
- Pharmacist
- Community
- Patient organisation
- Pharmaceutical industry

Good Practice Recommendations

5 key areas:

1. OPAT team and service structure
2. Patient selection
3. Antimicrobial management and drug delivery
4. Monitoring of the patient during OPAT
5. Outcome monitoring and clinical governance

Challenges to implementation

‘consistent, usable, UK-wide, good practice recommendations’

‘pragmatic guidance on the development and delivery of OPAT services’

- Informal ‘survey’ of 9 OPAT services
 - all based in acute hospital trusts
 - limited data from community-based services

1. OPAT team and service structure

1.1 Clear managerial and clinical governance lines of responsibility	not in 1 service
1.2 Identifiable lead physician with time in job plan	no time in job plan (1 service)
1.3 Composition of the OPAT MDT	
1.4 Management plan agreed between OPAT and referring teams	
1.5 Clinical responsibility shared between referring clinician and OPAT clinician unless otherwise agreed	variable
1.6 Communication between OPAT team, GP and referring clinician	records not always available out of hours

2. Patient selection

2.1 Responsibility of the infection specialist to agree infection-related inclusion/exclusion criteria	
2.2 Agreed OPAT patient criteria	
2.3 Initial assessment performed by competent member of team	
2.4 Patients should be fully informed and able to consent/decline OPAT	
2.5 Patients who have been on thromboprophylaxis as inpatient should continue this	3 services no prophylaxis unless recommended by referring consultant; 2 inpatient guidelines

3. Antimicrobial management/delivery

Treatment plan agreed between OPAT team and referring clinician	
Pharmacy input minimum weekly at MDT meeting	pathway design, mostly involved in MDT
Compliance with RCN and local standards for antimicrobial use, IV line, drug delivery device, training patients or carers	
All administered doses should be documented	not always enforced for self-administration (1 service)
Administration of first dose in a supervised setting	1 service reported home administration of first dose

4. Monitoring during OPAT

4.1 Daily review of patients with SSTI	every 3 days (2 services)
4.2 Weekly MDT meeting	1 service does not have this
4.3 Weekly (or bimonthly if stable) reviews by OPAT nurse/physician.	
4.4 Weekly blood tests (or bimonthly if OPAT >1 month)	
4.5 OPAT team responsible for monitoring clinical response, investigations and treatment plan	
4.6 Pathway for 24-hour access to advice/review/ admission	all services have this but variable systems

5. Outcome monitoring and clinical governance

5.1 Patient data recorded prospectively	not for 1 service (yet)
5.2 Standard outcome criteria recorded	
5.3 Risk assessment and audit of individual processes	
5.4 Regular surveys of patient experience	most sporadic
5.5 Responsibility for personal CPD	

Conclusions

- OPAT GPRs generally reasonable and achievable
- Main issues for future revisions:
 - Availability of notes out of hours
 - VTE prophylaxis
 - Administration of first dose
 - Need for daily reviews of patients with SSTI
 - Pathways for 24-hour access to advice/review/ admission
- Future plans:
 - Formal survey across a larger group of services including community-based services
 - Accreditation package

So where are we at with paediatric OPAT in 2013?

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The little brother of adult OPAT?



Differences between adult and paediatric OPAT

- Lack of evidence to support practice
- Different model of service delivery
 - Few centres manage 'complex' patients
- Economy of scale
- Practical considerations
 - IV access
 - Self administration

The situation 12 months ago!

UK hospitals offering p-OPAT?	0
Presence of evidence based paediatric guidelines?	No
On the agenda for paediatric infectious diseases services?	No

Benefits of p-OPAT

Child	Parents	NHS Trusts
<ul style="list-style-type: none">• Earlier discharge from hospital• Treatment at home / potentially back to school• Reduced risk of hospital acquired infections	<ul style="list-style-type: none">• Getting back to work• Looking after other children	<ul style="list-style-type: none">• Reduction of occupied bed days / increased capacity for admissions• Patient / patient satisfaction• Hospital acquired infections

The current situation in 2013

- P-OPAT being offered in the UK
- Good practice recommendations for p-OPAT being developed
- BSAC patient management system has been adapted for paediatrics
- BSAC registry has been adapted to allow benchmarking against other Children's Hospitals

The Southampton experience: demographics

- Tertiary Children's Hospital
- Serves a population of about 2.8 million
- 124 in-patient beds
- 9000 admission per year



Tertiary specialities

- Tertiary paediatric services:-
 - Orthopaedics and surgery
 - Cardiology and cardiac surgery
 - Neurology and neurosurgery
 - Oncology
 - Haematology
 - Respiratory paediatrics
 - ENT
 - Nephrology
 - Gastroenterology
 - Rheumatology
 - Infectious diseases

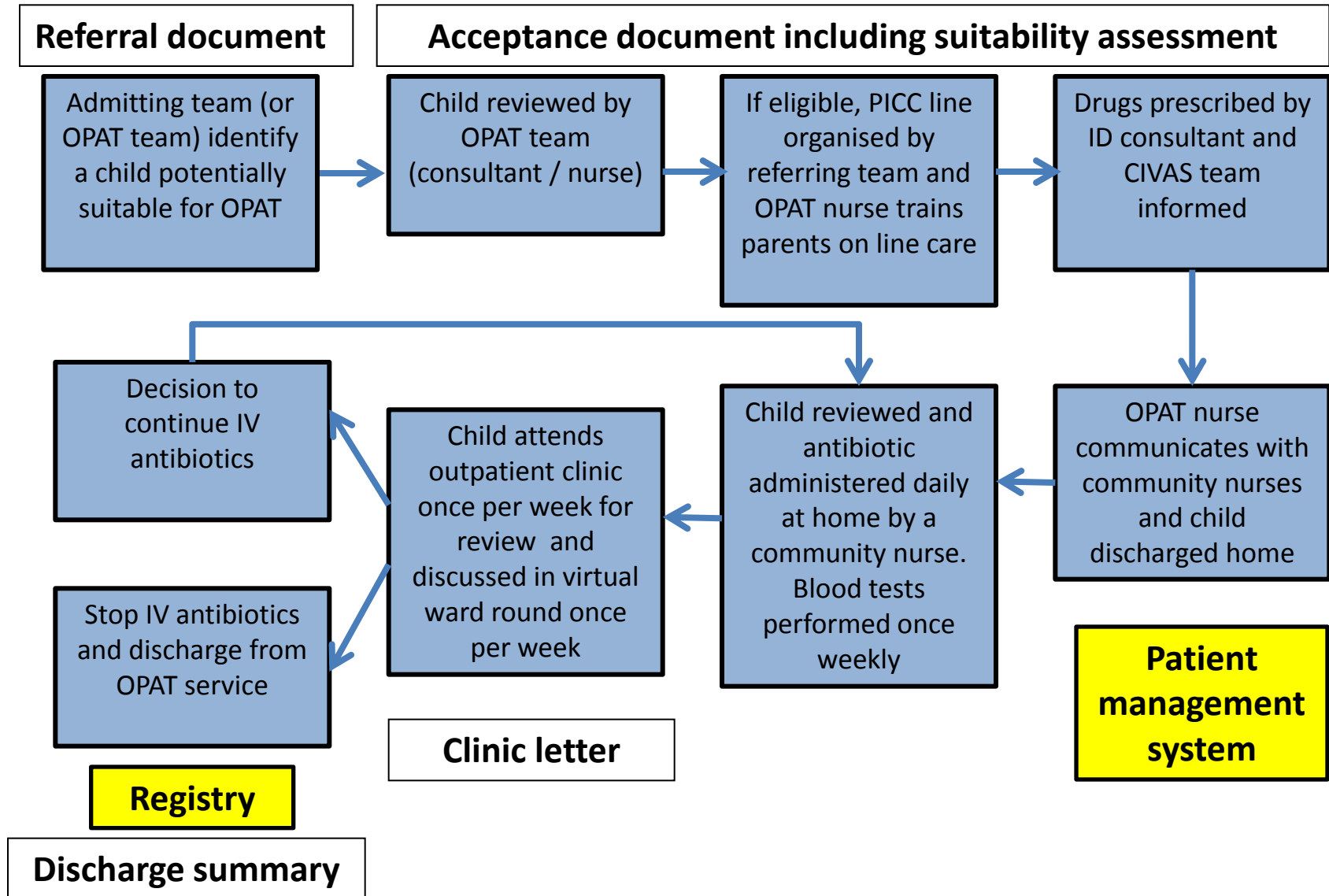
The Southampton experience: justifying the service

- 1 month prospective audit (May 2012):-

Number of patients	Total bed days	Possible OPAT days
50	369	125 (34%)

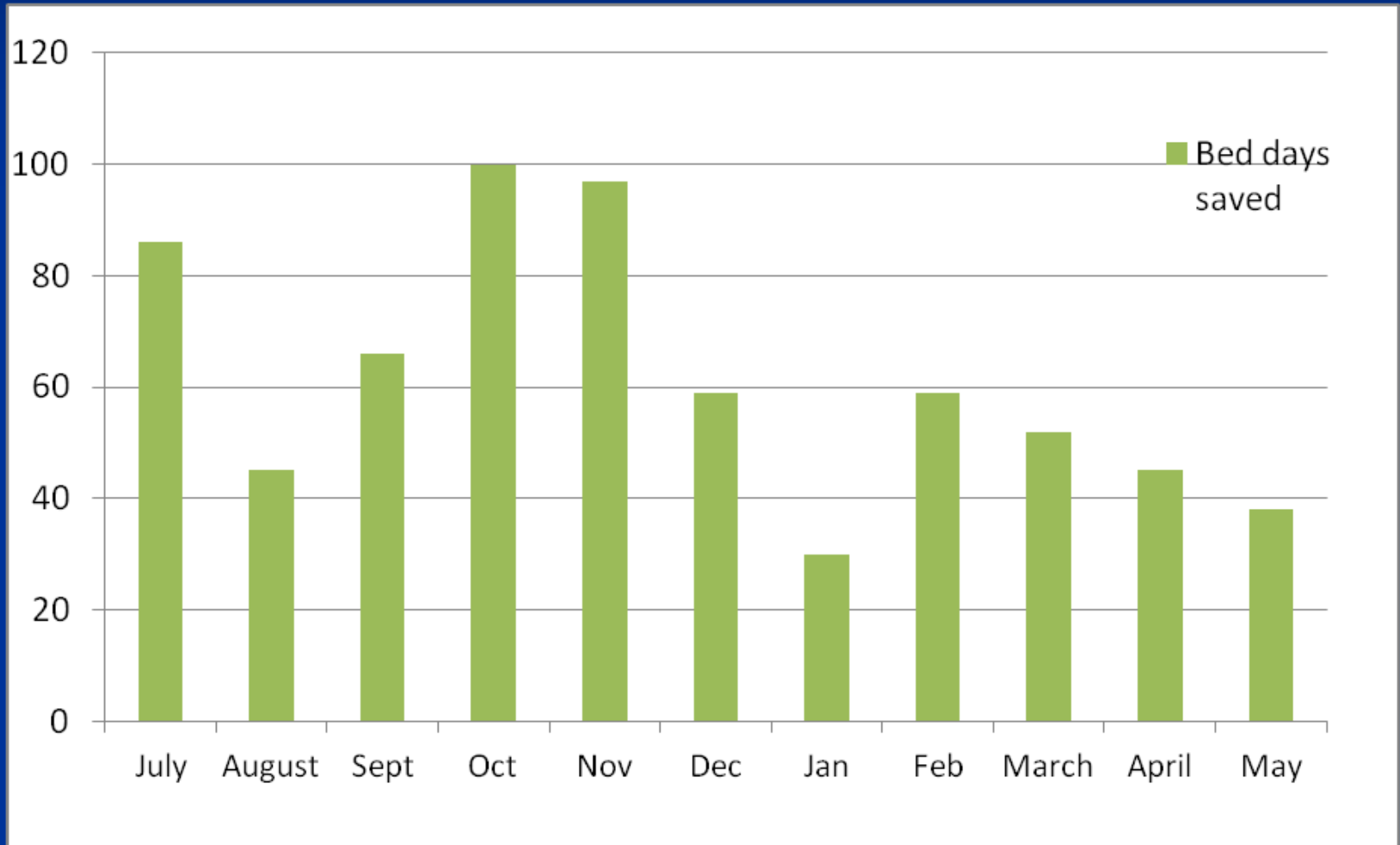
- P-OPAT service could potentially save 1500 bed days per year

The Southampton experience: p-OPAT pathway





The Southampton experience: bed days saved



The Southampton experience: outcomes

Patient outcomes

Cure	34
Improved	7
Failure	2

OPAT outcomes

Success	36
Partial success	4
Failure	2
Indeterminate	1

The Southampton experience: challenges

- Buy in from Trust
- Buy in from colleagues
- Buy in from community nurses
- CIVAS input
- IV access
- Costing model

Thank-you