

# The OPAT Good Practice Recommendations — key learning points

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# OPAT Good Practice Recommendations (GPRs)

Journal of Antimicrobial Chemotherapy Advance Access published January 31, 2012  
Journal of Antimicrobial Chemotherapy  
doi:10.1093/jac/dks003

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

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†A full list of the working group is shown in the Acknowledgements section.

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

Journal of Antimicrobial Chemotherapy  
Journal of Antimicrobial Chemotherapy  
doi:10.1093/jac/dku401 Advance Access publication 19 October 2014

**Good practice recommendations for paediatric outpatient parenteral antibiotic therapy (p-OPAT) in the UK: a consensus statement**

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There is compelling evidence to support the rationale for managing children on intravenous antimicrobial therapy at home whenever possible, including parent and patient satisfaction, psychological well-being, return to school/employment, reductions in healthcare-associated infection and cost savings. As a joint collaboration between the BSAC and the British Paediatric Allergy, Immunity and Infection Group, we have developed good practice recommendations to highlight good clinical practice and governance within paediatric outpatient parenteral antibiotic therapy (p-OPAT) services across the UK. These guidelines provide a practical approach for safely delivering a p-OPAT service in both secondary care and tertiary care settings, in terms of the roles and responsibilities of members of the p-OPAT team, the structure required to deliver the service, identifying patients and pathologies that are suitable for p-OPAT, ensuring appropriate vascular access, antimicrobial choice and delivery and the clinical governance aspects of delivering a p-OPAT service. The process of writing a business case to support the introduction of a p-OPAT service is also addressed.

- Pragmatic guidance on the development and delivery of OPAT services
- To ensure that OPAT services provide high-quality, low-risk care, whatever the healthcare setting
- A useful resource for teams developing new services
- A practical set of quality indicators for existing services

# Literature review

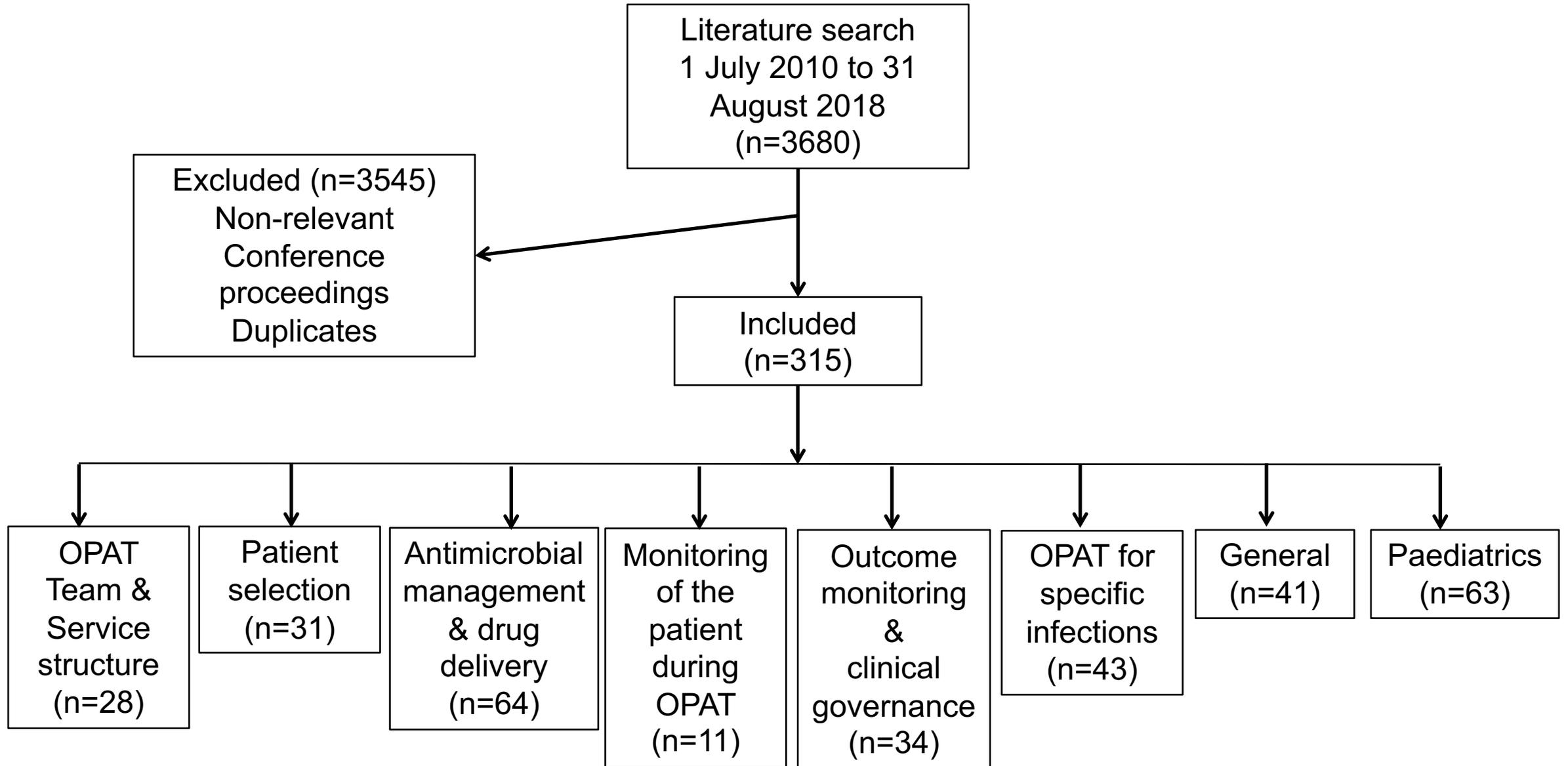
Main search	
Adults	1 July 2010 – 31 July 2017
Paediatric	1 July 2012 – 31 July 2017
Libraries searched	CINAHL, Embase, Medline, Web of Science (science citation index expanded), Cochrane Library

Search update	
Adults	31 July 2017 – 31 August 2018
Paediatric	31 July 2017 – 31 August 2018
Libraries searched	CINAHL, Embase, Medline, Web of Science (science citation index expanded), Cochrane Library

# Search terms

Adult		Paediatric
Outpatient/Home parenteral <i>antibiotic/antimicrobial/antifungal/antiparasitic</i> <i>antibacterial/antiviral/antiinfective</i> therapy/treatment Hospital in the home Home infusion therapy AND antibacterial/antibiotic/antifungal/antiviral/anti microbial/antiinfective/antiparasitic OPAT OHPAT Adult home parenteral therapy program* Parenteral <i>antibiotic</i> therapy in the home Home intravenous/IV <i>antimicrobial</i> service Outpatient intravenous/IV <i>antibiotic</i> therapy/treatment Outpatient parenteral <i>antibiotics</i> Outpatient parenteral drug delivery Outpatient treatment with parenteral <i>antibiotics</i> Non-inpatient Community-based Home parenteral therapy/treatment Home treatment/therapy	Treatment/therapy at home Home-initiated treatment/therapy Home <i>drug</i> infusion therapy/treatment Home intravenous/IV (+/- <i>antibiotic</i> ) therapy/treatment (HIVAS) Intravenous <i>antibiotic</i> therapy/treatment in an outpatient setting Ambulatory antibiotic infusion device Domiciliary IV antibiotic therapy/treatment Community intravenous antibiotic service (CIVAS) Self-administration Parental administration Ambulatory care Cellulitis / Skin and skin structure infection UTI OVIVA (oral versus intravenous antibiotics) Admission avoidance Early discharge IVDU Outcome Palliative	Search terms as per adult with the following terms:  Child* Paediatr* Pediatr* Infant POPAT

# Literature search output



Topic	Recommendations	Changes from previous GPRs
1. Service structure	10	5 unchanged 2 amended 3 new
2. Patient selection	6	4 unchanged 1 amended 1 new
3. Drugs and devices	15	12 unchanged 3 new
4. Monitoring during therapy	6	3 unchanged 3 amended
5. Outcome monitoring and clinical governance	6	5 unchanged 1 new

# Key learning points

- Importance of robust service structure
- Team-working: roles and competences
- Antimicrobial stewardship
- Infusion devices and antimicrobial stability
- Oral vs IV antimicrobials
- Monitoring of complex oral therapy
- **OPAT 'treatment intent'**
- **Assessing patient experience**

# Treatment outcomes

- Value of standardised outcomes
- NORS:        patient outcomes (cure, improved, failure)  
                  OPAT outcomes (success, partial success, failure, intermediate)
- BUT what about treatment intent?
- Issue of palliative OPAT (death is patient and OPAT 'failure')
- Issue of potentially non-curable infections
  
- New outcome measures proposed:

## Treatment Intent / Treatment Goal at the end of OPAT therapy

<b>Cure</b>	To complete an agreed OPAT duration of therapy on either intravenous and/or complicated oral antimicrobials with no requirement for long term antimicrobial therapy.
<b>Improvement</b>	To complete an agreed OPAT duration of therapy on either intravenous and/or complicated oral antimicrobials (a) as part of an agreed surgical infection management plan with further surgery planned or (b) where there is a requirement for subsequent long term or an extended course of oral suppressive antimicrobial therapy, or (c) where potentially infective prosthetic material is still in situ.
<b>Palliation</b>	To undertake a course of OPAT on either intravenous and/or complicated oral antimicrobials where there are agreed ceilings of care due to co-morbidities with death being the likely outcome.

## OPAT Service Outcomes

**Treatment Goal  
attained -  
uncomplicated**

Completed OPAT therapy as per treatment intent with:

- no unplanned changes in antimicrobial agent
- no adverse events
- no planned or unplanned readmission related to the current OPAT episode
- no readmission of  $\geq 24$  hours for unrelated event

**Treatment Goal  
attained -  
complicated**

Completed OPAT therapy as per treatment intent but with one or more of the following:

- unplanned changes in antimicrobial agent
- any adverse event including readmission for  $< 24$  hours related to OPAT

**Treatment goal  
not attained**

- Failure to complete planned OPAT therapy for any reason other than readmission due to unrelated event
- Worsening of infection requiring readmission
- Readmission for  $\geq 24$  hours for any cause related to OPAT including adverse events

**Indeterminate**

Readmission for  $\geq 24$  hours due to unrelated event

**Death**

Death due to any cause

# Assessing patient experience

- Castor et al (2018): 37 qualitative interviews (patients and family)
  - Strengthening family life
  - Promoting health
  - Creating alliances
- Twiddy et al (2018): 28 qualitative interviews (patients)
  - Functional aspects of care
    - Being at home but not well
    - Convenience and flexibility
    - Location of care
    - Is it safe?
  - Relational aspects of care
    - Communication
    - Confidence
  - 'Discrete choice experiment'

# Consultation Process

- BSAC National consultation list  
(Royal colleges, societies, other)
- BSAC members
- Delegates at OPAT conferences/workshops
- E-OPAT website: [www.e-opat.com](http://www.e-opat.com)
  
- DEADLINE 9 JANUARY 2019

# Acknowledgements

- Sanjay Patel
  - Andrew Seaton
  - Mark Gilchrist
  - Carlyne Horner
  
  - Vittoria Lutje
  
  - Respondents to consultation
- Helen Green
  - Achyut Guleri
  - Sara Hedderwick
  - Frances Sanderson
  - Susan Snape
  - Julie Wilkinson
  - Liz Wilson

Thank you