



BSAC OPAT Initiative Workshop Series 2025

Dr Sanjay Patel

Consultant in Paediatric Infectious Diseases and
Immunology, Southampton Children's Hospital
National clinical advisor for paediatric AMS, NHSE

sanjay.patel@uhs.nhs.uk

mark.gilchrist1@nhs.net



@BSACandJAC | @TheUrgentNeed

www.bsac.org.uk

BSAC OPAT workshops 2025

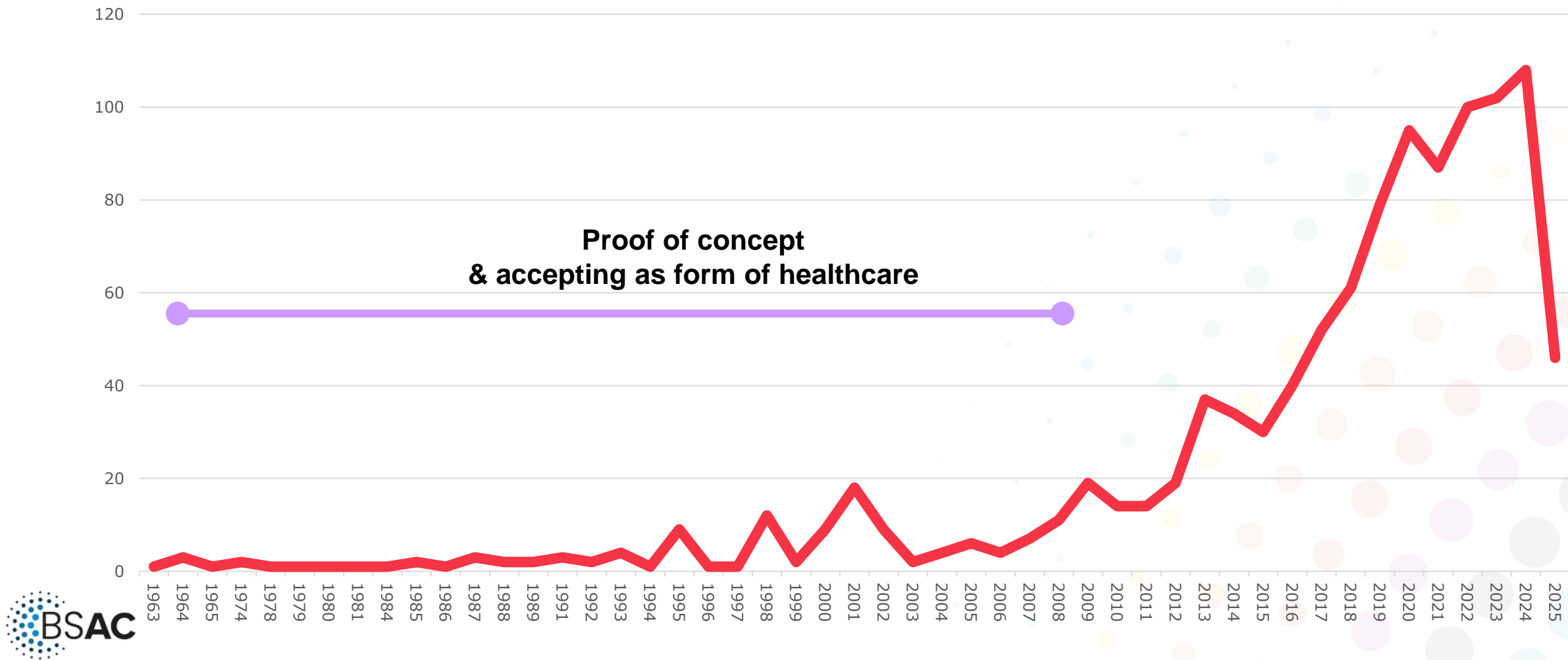
Last year (attendees):
Workshops - 400
Conference – 242

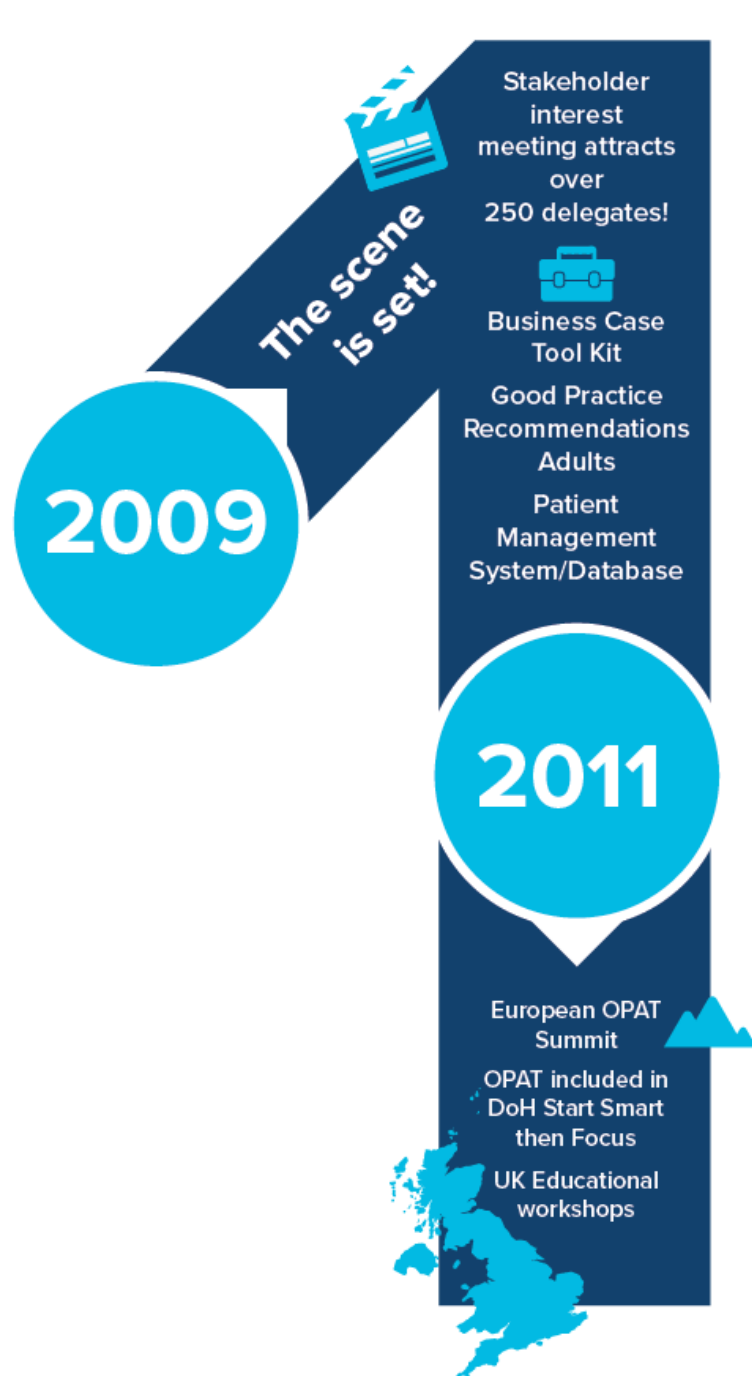
2025
Adults & Paediatrics



Implementation of OPAT continues to grow in UK & globally

1064 OPAT Publications 1974 – 2025 (June)





BSAC OPAT strategy (2022-25)

Strategy 1 - Establish a modern working definition of OPAT

Strategy 2: Secure the establishment and expansion of OPAT services wherever the clinical need exists

Strategy 3: Secure a global consensus on drug stability testing, working with licencing and standard setting authorities to harmonise current standards as and where applicable, and secure an expansion in the number of agents tested

Strategy 4 - Promote and embed OPAT as a core component of antimicrobial stewardship through the provision of a continuous programme of education and training

Strategy 5 - UK accreditation scheme for OPAT services

BSAC OPAT strategy (2022-25)

Strategy 1 - Establish a modern working definition of OPAT

- Work with peer organisations and health administrations towards a common definition of OPAT that accurately reflects changing practice including advances in antimicrobial chemotherapy, including the use of supervised complex oral antimicrobial regimens in the non-inpatient setting in order to reduce length of hospital stay.



Increase in telemedicine
/ practitioners (non
infection specialist)



Increasing use of
complex oral agents



Equity of access e.g.
increasing models of
ambulatory care



Other IV longer acting
agents + need for TDM?

BSAC OPAT strategy (2022-25)



Strategy 1 - Establish a modern working definition of OPAT

JAC Antimicrob Resist
doi:10.1093/jacamr/dlz026

JAC-
Antimicrobial
Resistance

Updated good practice recommendations for outpatient parenteral antimicrobial therapy (OPAT) in adults and children in the UK

Ann L. N. Chapman^{1*}, Sanjay Patel², Carolyne Horner³, Helen Green², Achyut Guleri⁴, Sara Hedderwick⁵, Susan Snape⁶, Julie Statham⁷, Elizabeth Wilson⁸, Mark Gilchrist⁹ and R. Andrew Seaton¹⁰

¹University Hospital Monklands, NHS Lanarkshire, Airdrie, UK; ²Southampton Children's Hospital, University Hospital Southampton NHS Foundation Trust, Southampton, UK; ³The British Society for Antimicrobial Chemotherapy, Birmingham, UK; ⁴Blackpool Teaching Hospitals NHS Foundation Trust, Blackpool, UK; ⁵Belfast Health and Social Care Trust, Belfast, UK; ⁶Nottingham University Hospitals NHS Foundation Trust, Nottingham, UK; ⁷South Warwickshire NHS Foundation Trust, Warwick, UK; ⁸Manchester University NHS Foundation Trust, Manchester, UK; ⁹Imperial College Healthcare NHS Trust, London, UK; ¹⁰Queen Elizabeth University Hospital, NHS Greater Glasgow and Clyde, Glasgow, UK

*Corresponding author. Department of Infectious Diseases, Monklands Hospital, Airdrie, Lanarkshire, ML6 0JS, UK.
Tel: +44 1236 712134; E-mail: ann.chapman2@nhs.net

OPAT team and service structure

Patient selection

Antimicrobial management & drug delivery

Monitoring of the patient during OPAT

Outcome monitoring and clinical governance

Adults and paediatrics

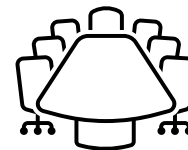
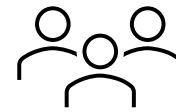
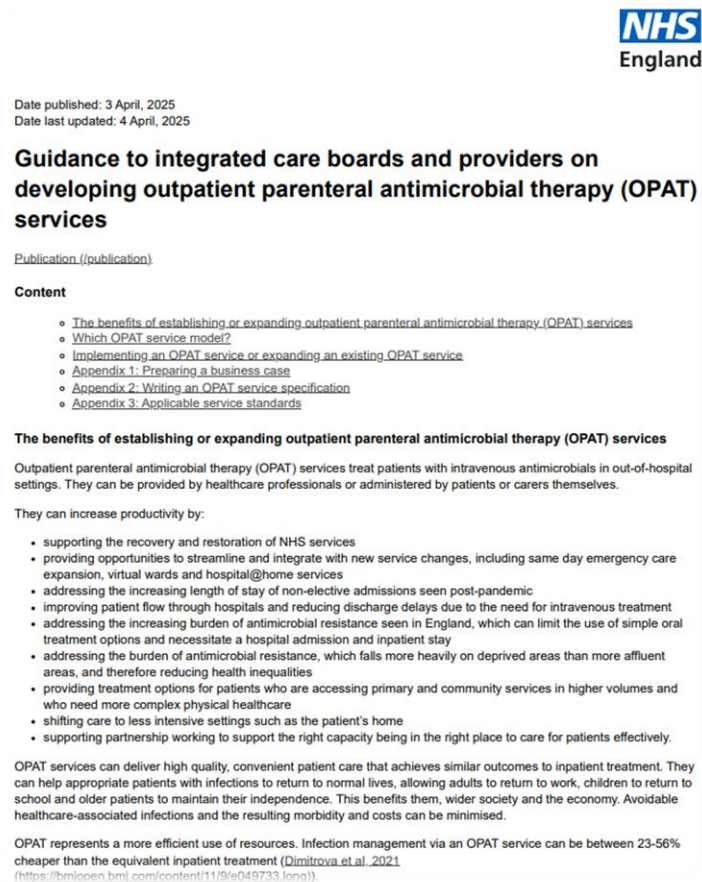
Literature search ✓

Subgroup reviews ✓



BSAC OPAT strategy (2022-25)

Strategy 2: Secure the establishment and expansion of OPAT services wherever the clinical need exists



Ultimately, both the ICB and provider(s) will need to be involved in discussions. Any agreed arrangements for providing new or different OPAT services will need to be referenced in the NHS Standard Contracts between them. The ICB will need to ensure that contracts are awarded (or varied, as applicable) in accordance with the requirements of the [NHS Provider Selection Regime](#) (PSR).

Whether the initiative comes from the ICB or a provider, a sensible starting point will be to undertake a stocktake of what OPAT services are already in place locally, what future needs for them exist and how they should best be configured. This could include consideration of:

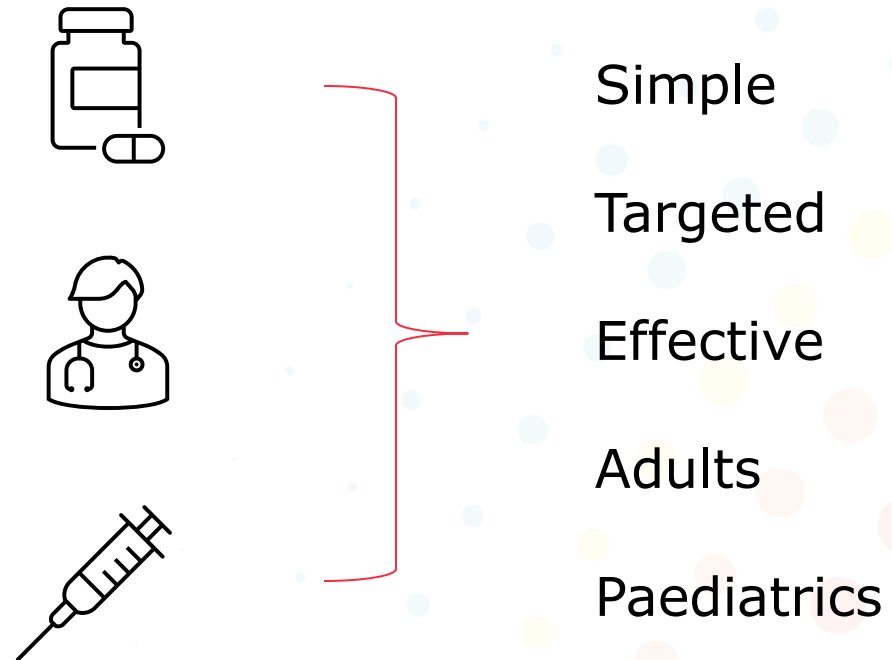
- the workforce currently delivering, or available to deliver, OPAT services and future requirements for expanding existing services
- what groups of patients or types of infections are currently being included?
- what groups of patients or types of infections are currently being excluded?
- equity of service provision to adults and children, including neonates, hard-to-reach groups, groups subject to health inequalities
- what treatment options are available to support current OPAT service models and what might be required to deliver an expansion of an OPAT service or introduction of a new service model (for example, access to ready-to-administer antimicrobials in elastomeric devices)?
- benchmarking of existing OPAT services against the [Good Practice Recommendations for OPAT services](#)
- the governance, infection management expertise and antimicrobial stewardship oversight in place for the provision of intravenous antimicrobial therapy in out of hospital settings within the ICB (for example, virtual wards).

Depending on the findings of the stocktake, a local business case may need to be developed to set out the clinical and financial arguments for establishing or further expanding a service and seek approval to proceed from the ICB or trust boards as appropriate. See Appendix 1 for a business case toolkit for OPAT services that can support this.

The procurement and contracting implications will depend on the proposed approach.

BSAC OPAT strategy (2022-25)

Strategy 2: Secure the establishment and expansion of OPAT services wherever the clinical need exists



BSAC OPAT strategy (2022-25)

Strategy 3: Secure a global consensus on drug stability testing, working with licencing and standard setting authorities to harmonise current standards as and where applicable, and secure an expansion in the number of agents tested

Antibiotics

Flucloxacillin - 2018

Meropenem – 2018

Ceftazidime - 2019

Piperacillin/ Tazobactam - 2020

Ceftolozane/ Tazobactam – 2021 & 2023

Temocillin - 2022

Amoxicillin – 2022

Ceftazidime/ Avibatam – 2024

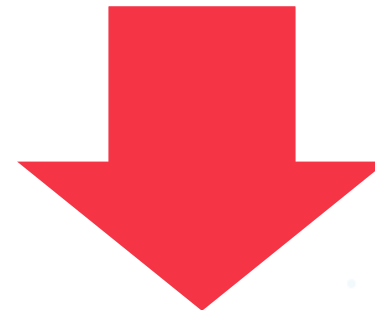
Tigecycline – 2025

Antivirals

Aciclovir - 2023

OPAT Agenda

Older/ new drugs that require
IV administration
esp Gram negative Abs



AMS perspective
re narrow spectrum
agents



MDR Gram –ve agents – new for 2025

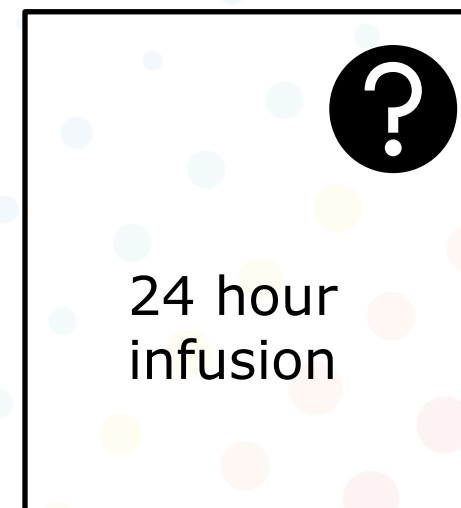
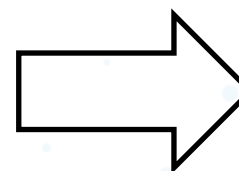
Evaluation of the stability of aztreonam / avibactam (EMBLAVEO®) in elastomeric infusion devices used for outpatient parenteral antimicrobial therapy

Table 1. Recommended intravenous dose by type of infection in adult patients with CrCL^a > 50 mL/min

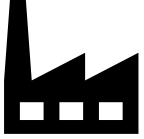
Type of infection	Dose of aztreonam-avibactam		Infusion time	Dosing interval	Duration of treatment
	Loading	Maintenance			
cIAI ^b	2 g/0.67 g	1.5 g/0.5 g	3 hours	Every 6 hours	5-10 days
HAP, including VAP	2 g/0.67 g	1.5 g/0.5 g	3 hours	Every 6 hours	7-14 days
cUTI, including pyelonephritis	2 g/0.67 g	1.5 g/0.5 g	3 hours	Every 6 hours	5-10 days
Infections due to aerobic Gram-negative organisms in patients with limited treatment options	2 g/0.67 g	1.5 g/0.5 g	3 hours	Every 6 hours	Duration in accordance with the site of infection and may continue for up to 14 days

a Calculated using the Cockcroft-Gault formula.

b To be used in combination with metronidazole when anaerobic pathogens are known or suspected to be contributing to the infectious process.



Harmonising regulatory requirements for stability studies



Set by authorities to gain market authorisation / approval for use.
Focus inpatient settings not accounting for OPAT programme use



US FDA



EMA



TGA



Yellow
cover
document



ASEAN

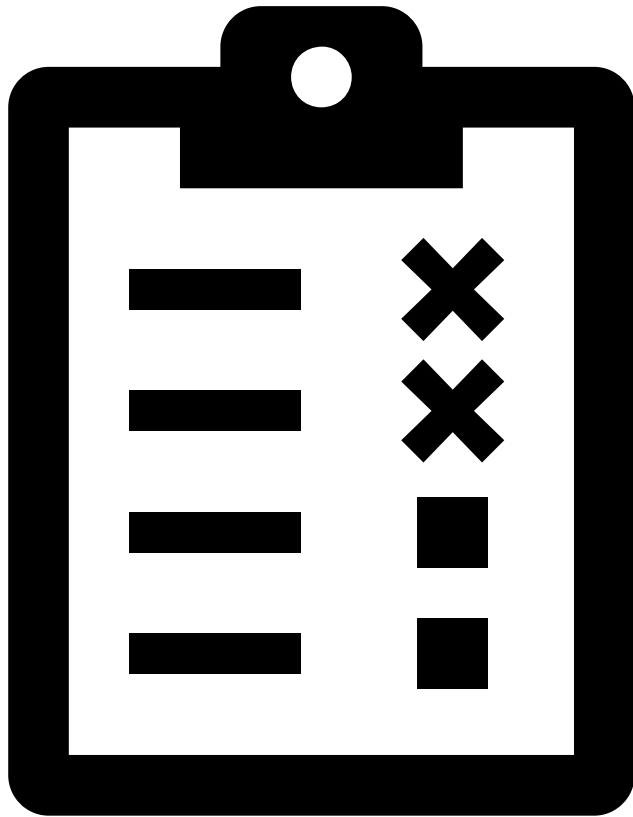


WHO

These guidance documents are directly derived from or informed by the International Council for Harmonisation (ICH) of Technical Requirements for Pharmaceuticals for Human Use



Achieving a consensus on the assessment of degradation products on OPAT



Major differences between the documents lies in the acceptance criteria that the degradation products are measured against.



This poses a regulatory anomaly and challenge for clinical practice.

Pharmacopoeias each may provide a different criterion to evaluate stability



Harmonization of the pharmacopoeias would need to occur for there to be useful global guidance on stability testing procedures and acceptance criteria for degradation products.

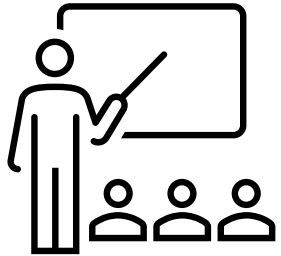
BSAC OPAT strategy (2022-25)

Strategy 4 - Promote and embed OPAT as a core component of antimicrobial stewardship through the provision of a continuous programme of education and training



BSAC OPAT strategy (2022-25)

Strategy 4 - Promote and embed OPAT as a core component of antimicrobial stewardship through the provision of a continuous programme of education and training



OPAT Masterclass in 2026

CPE accredited online masterclass that will support the optimisation and development of OPAT

Module / Webinar based
Autumn 2026 (soonest)

Global OPAT Summit 2027

Global leaders OPAT coming together to share, advance and strengthen next steps within OPAT

March 2027
QEII Conference Centre, London

Global AMS Accreditation Scheme



BSAC has established a global AMS accreditation scheme (GAMSAS)

Objective: To provide a sustainable, points-based accreditation scheme to drive improvements in AMS across all health economies

Outcomes:

- Identify local areas of practice needing improvements and support
- Develop regional networks to support spread of good practice in AMS
- Create awareness in healthcare payers and users of variation, and how this can be addressed
- Support practice and policy research aimed at improving AMS
- Develop and supply educational resources to support AMS practice (via Global Antimicrobial Stewardship Partnership Hub <https://global-asp-hub.com/>)

BSAC OPAT strategy (2022-25)

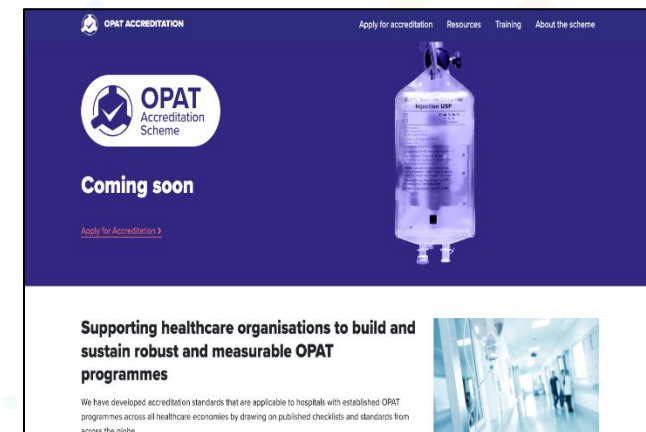
- **Strategy 5** - UK accreditation scheme for OPAT services

Adaptation of existing good practice recommendations into online protocols for service assessment and key performance indicators

Development of OPAT Accreditation website (subsuming all resources offered within current e-OPAT site)

Securement of internal governance group and accreditation assessment group

Launch, promote and secure centres



Making the case for OPAT in 2025 never been so important



Maximizing opportunities for admission avoidance and early supported discharge for patients and improving patient flow to ensure those with the greatest care needs can access the right services at the right time has never been more important.



Inpatient resources need to be optimally and efficiently deployed for acute care and safe and cost-effective alternatives to hospitalisation should be expanded with creation of capacity for both acute, elective and cancer care

Conclusions



Updated evidence based good practice recommendations have been drafted (2025) - continue to strengthen OPAT with effective AMS drivers



Global drug stability harmonisation is key to moving forward together with continuing to test old/ new agents



As healthcare advances and the complex needs population grows, infections in hospital are likely to increase. OPAT/ C-OPAT/ P-OPAT need to be ready and BSAC is aiding that endeavour



NHS 10 year plan “from hospital to community”: huge drive to develop new models of care to move patient care to patients’ homes and local communities. Need to ensure that the “principles of OPAT” remain embedded within such services

Next steps – embedding principles of OPAT into current models of paediatric care delivery

- Ensuring principles of OPAT are applied to all children being ambulated on antibiotics (inc H@H, oncology)
- Optimising drug delivery methods where beneficial
 - elastomeric devices
- Optimising IV access in children being ambulated on IVAbs
 - Right line at the right time
- Working collaboratively and embracing network working
 - Multidisciplinary “communities of practice”
 - A modern working model for pOPAT