



UK  
Paediatric  
Antimicrobial  
Stewardship



BRITISH SOCIETY FOR  
**ANTIMICROBIAL  
CHEMOTHERAPY**



# **Paediatric Antimicrobial Stewardship Staff Survey England and Scotland**

Dr Emily Chesshyre

Paediatric OPAT meeting London 4.9.25

# Antimicrobial resistance, a global threat- paediatrics is key

- High antimicrobial prescribing rates in paediatric inpatients in UK  
Gharbi 2016
- International consensus recommendations McMullan 2023
- No previous studies on paediatric AMS services in UK

BMJ Open Using a simple point-prevalence survey to define appropriate antibiotic prescribing in hospitalised children across the UK



The Lancet Infectious Diseases  
Volume 23, Issue 6, June 2023, Pages e199-e207

---

Review

Multinational consensus antimicrobial stewardship recommendations for children managed in hospital settings

# Aim

Gather data on paediatric and neonatal AMS and OPAT services for hospitalised children in NHS trusts in England and Scotland via a staff survey

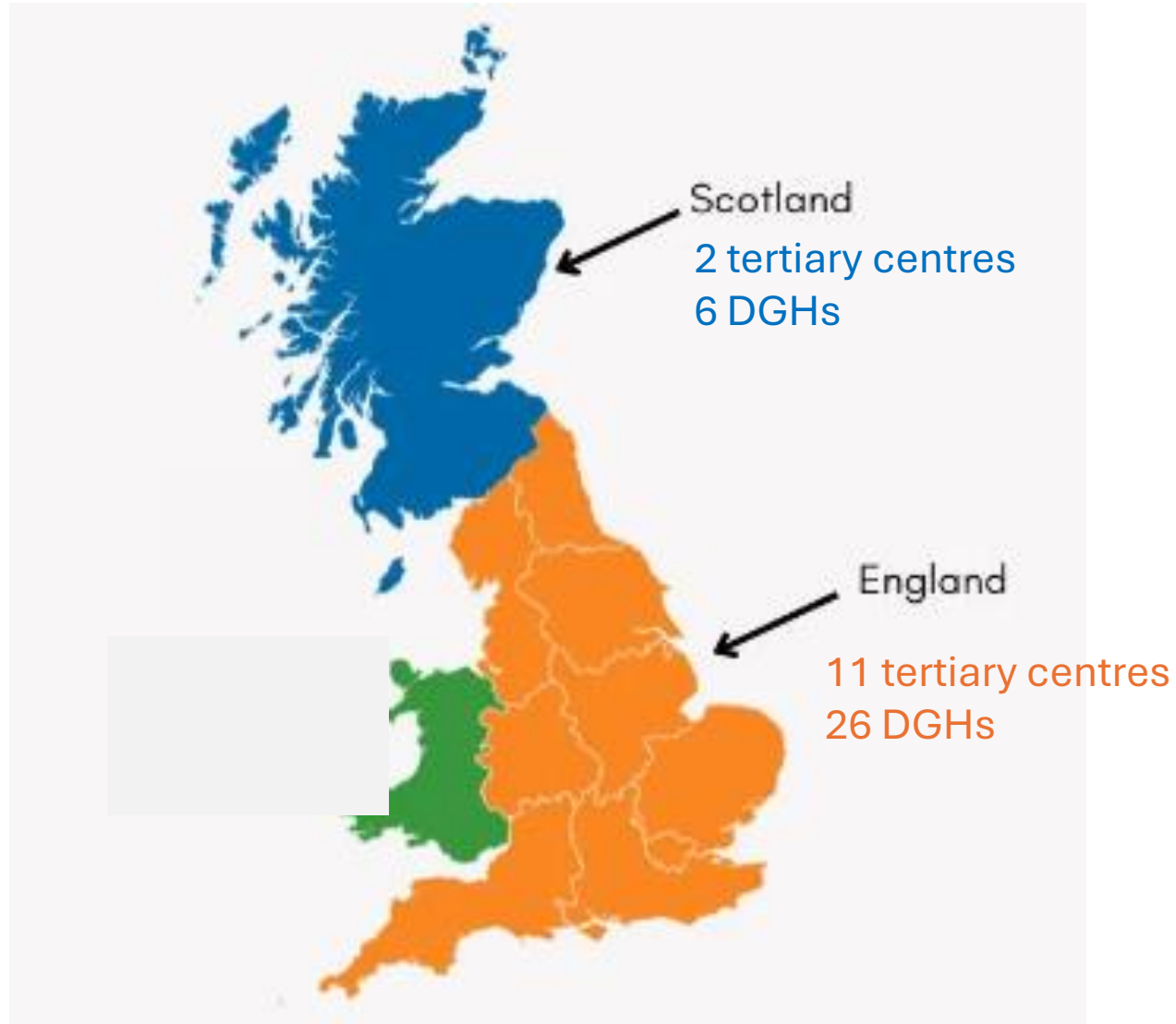
# Methods

- UK-PAS sub-group led by Sanjay Patel
- Staff survey created in REDcap<sup>®</sup>
- Survey piloted and approved by UK-PAS executive committee
  - Reviewed and supported by BSAC and RCPCH
- Survey emailed to paediatric AMS representatives in NHS trusts in Scotland (UKPAS) and England (NHS England) January- December 2024

# Methods

- Content based on international consensus recommendations
- 6 key topics covering paediatric and neonatal services
  - Empirical antimicrobial guidelines
  - Antimicrobial review on ward
  - OPAT services
  - Networks
  - AMS funding
  - Service development

# 45 survey responses from Scotland and England



## Who?

- 37 paediatricians
- 4 pharmacists
- 3 microbiologist
- 1 neonatologist

35% (45/130) Response rate



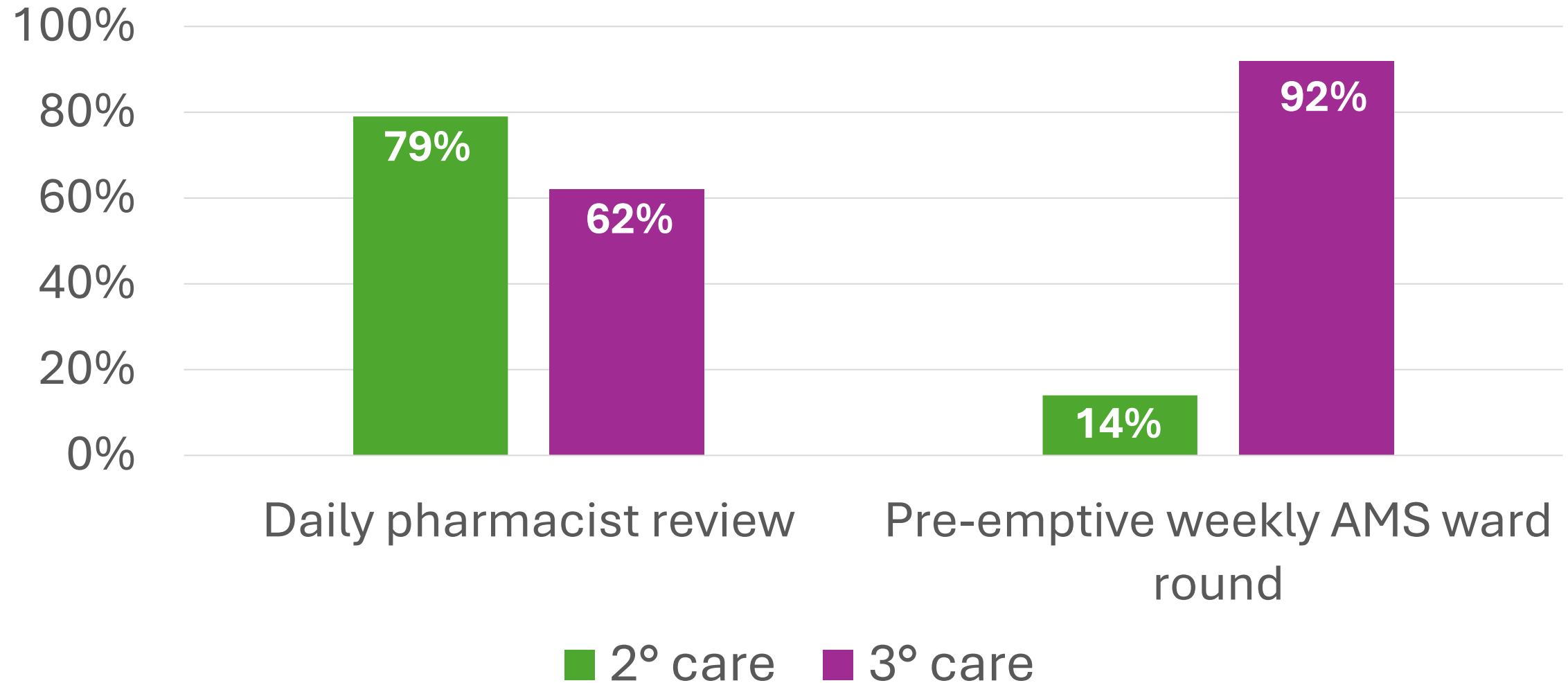
# Results:

## Empirical antibiotic guidelines for treatment of paediatric and neonatal infections

- 100% services locally agreed guidelines
  - informed by national guidelines: UKPAS, NICE
  - varied frequency of updates
    - Every 3 years (40% 2° care and 54% 3° care services)
    - Ad hoc as needed (46% 2° care and 36% 3° care services)

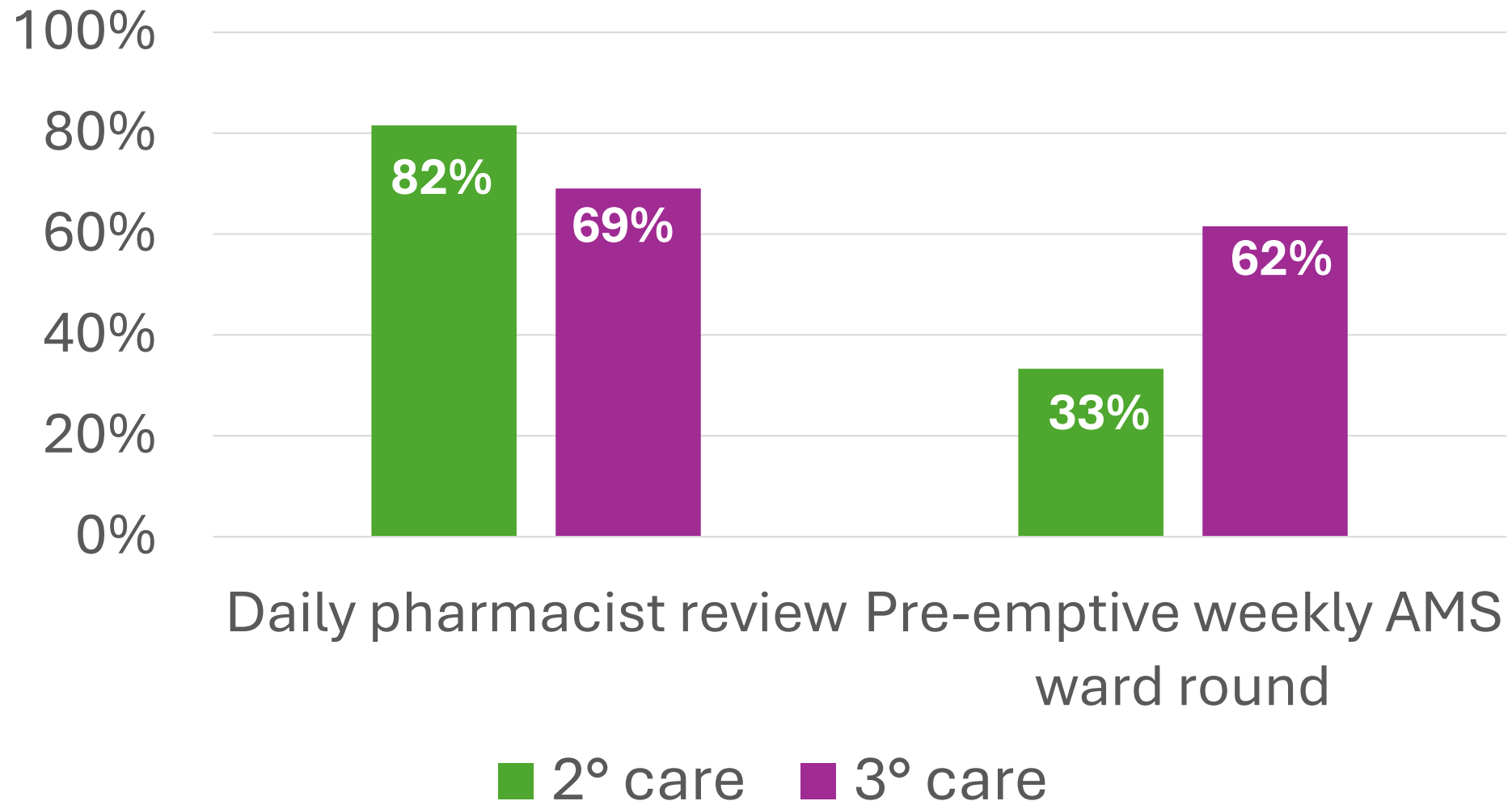
# Results:

## Antimicrobial review on paediatric wards



# Results:

## Antimicrobial review on neonatal units

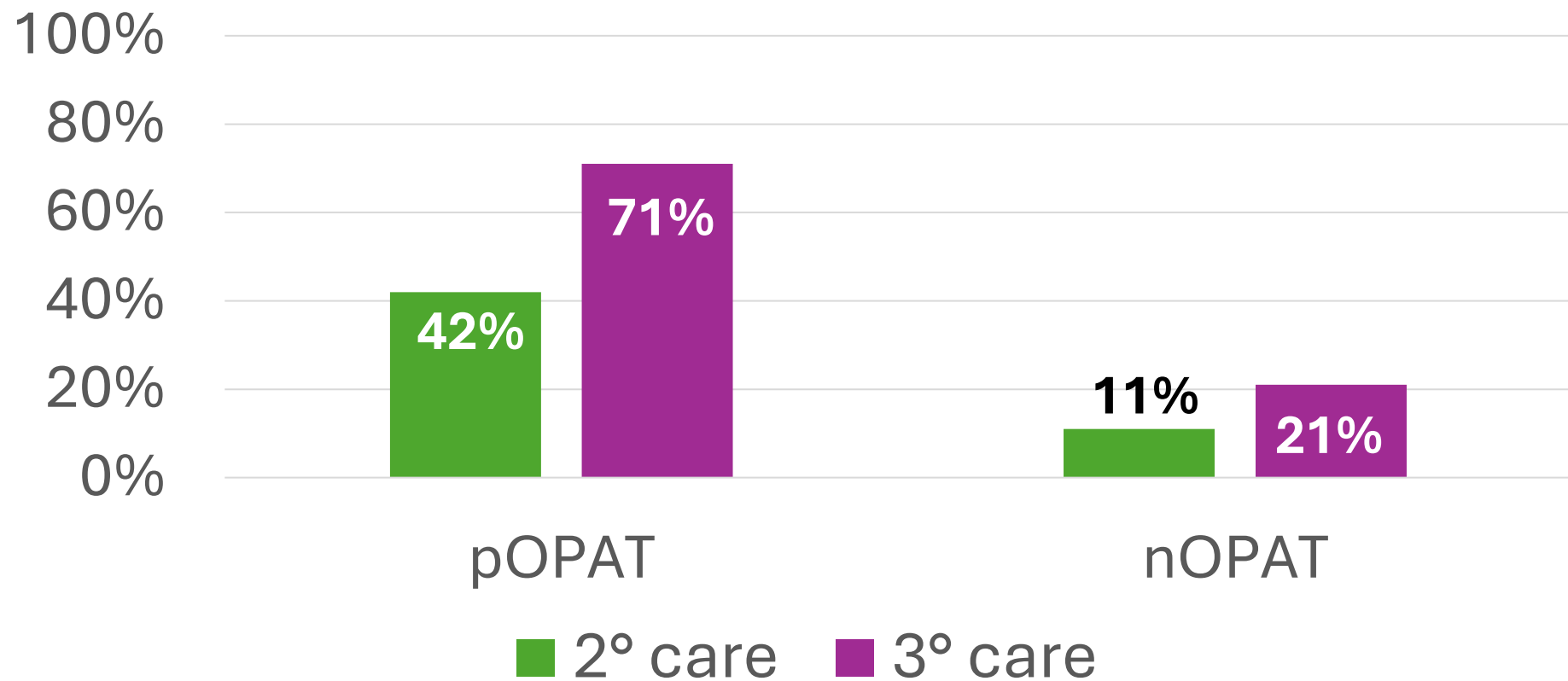


# Results:

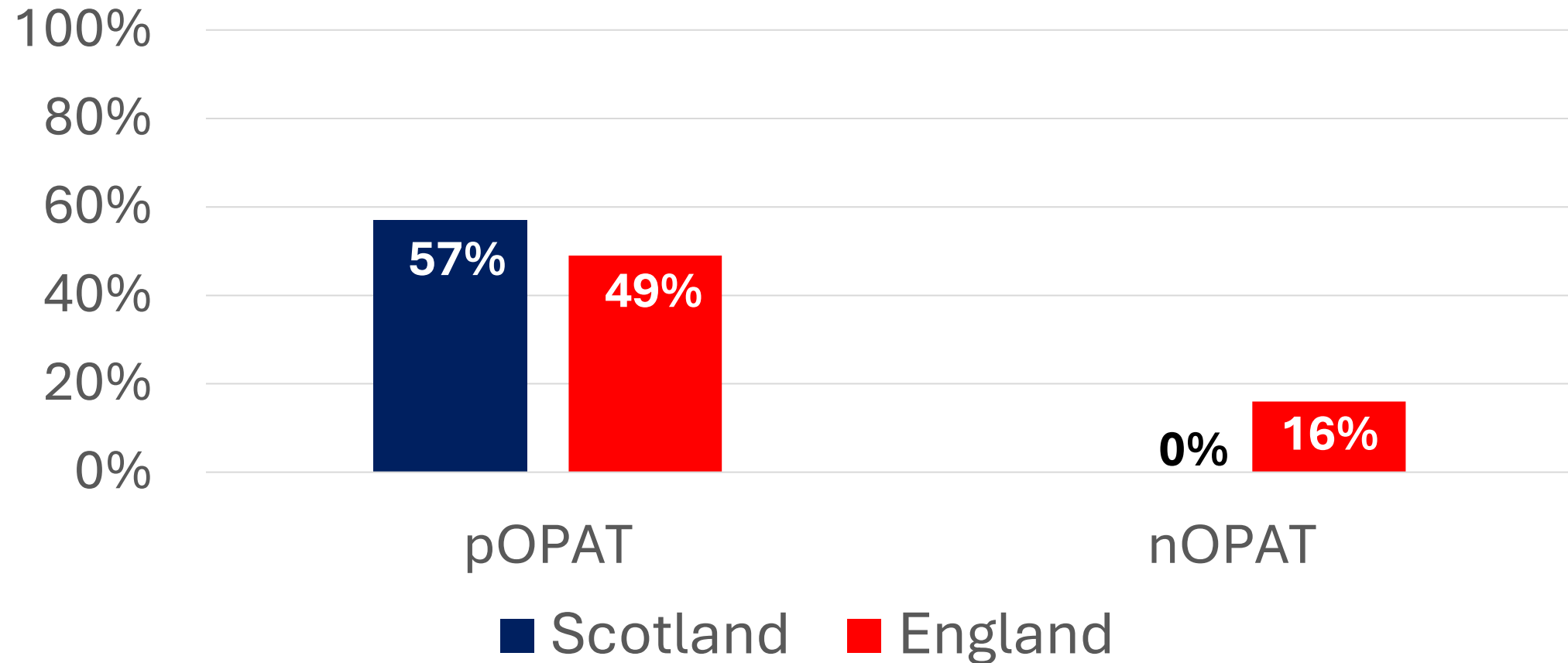
## Trust paediatric/neonatal AMS activities

	2° care	3° care
<b>AMS education to paediatric and neonatal doctors</b>	52%	82%
<b>Trust AMS committee meetings covering paediatrics/neonates</b>	82%	91%
<b>Antimicrobial point prevalence surveys covering paediatric/neonatal wards</b>	65%	73%

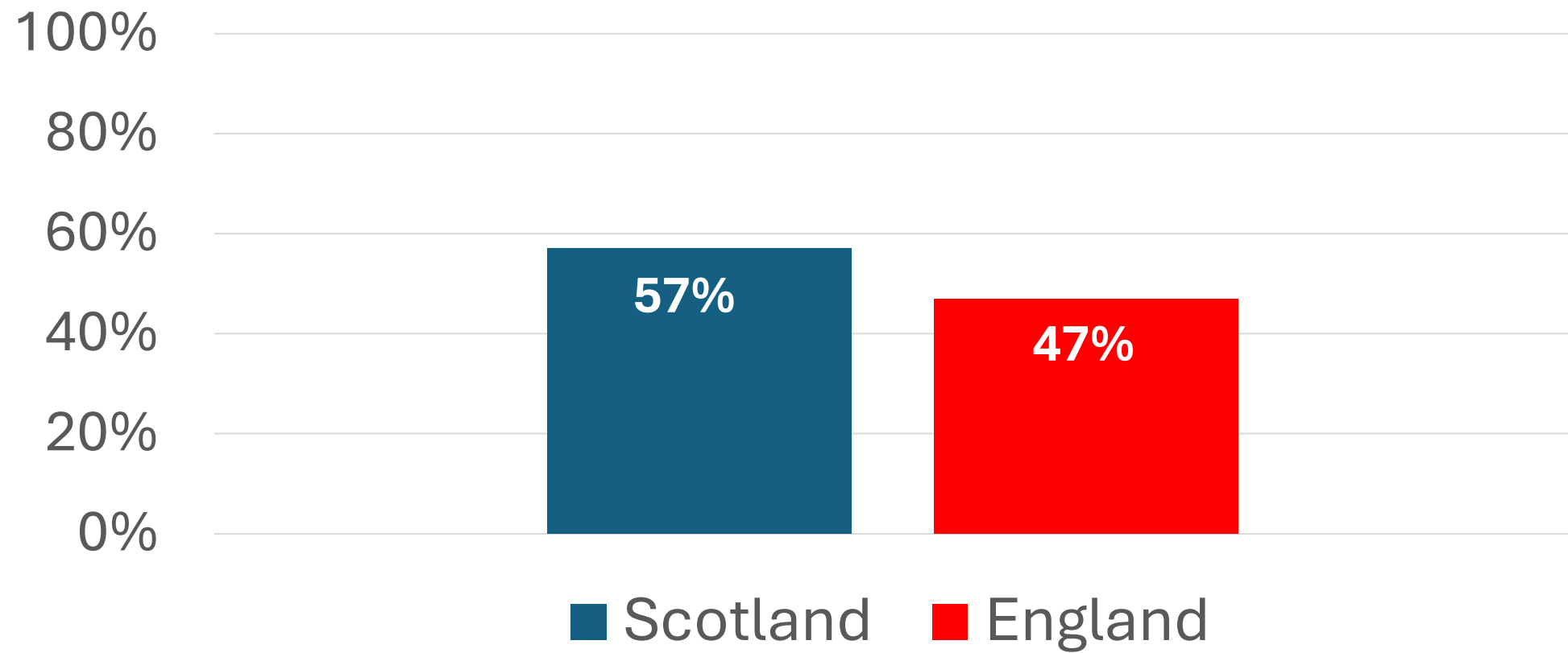
# Results: OPAT services 2° and 3° care



# Results: OPAT services Scotland and England

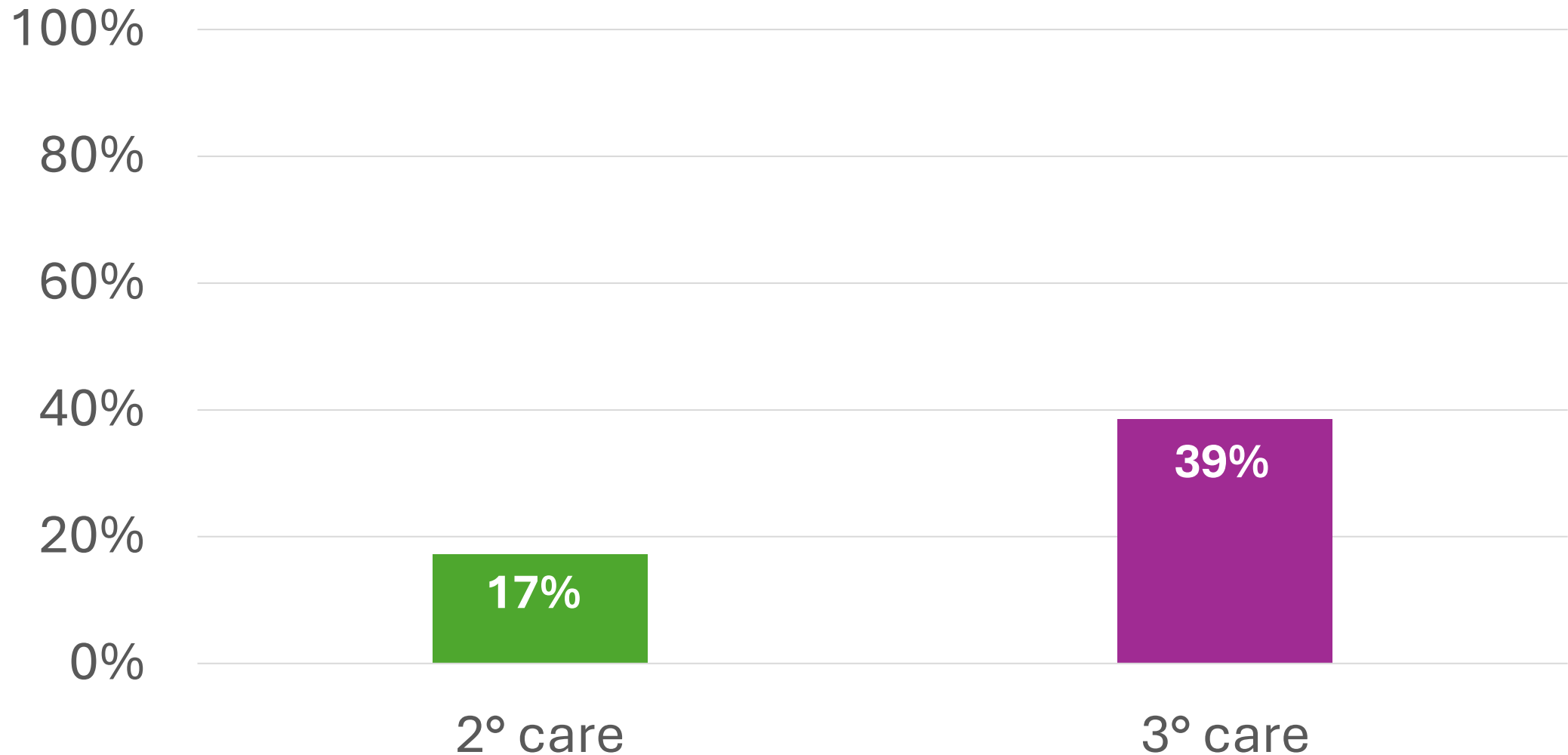


# Results: Regional paediatric ID/AMS networks



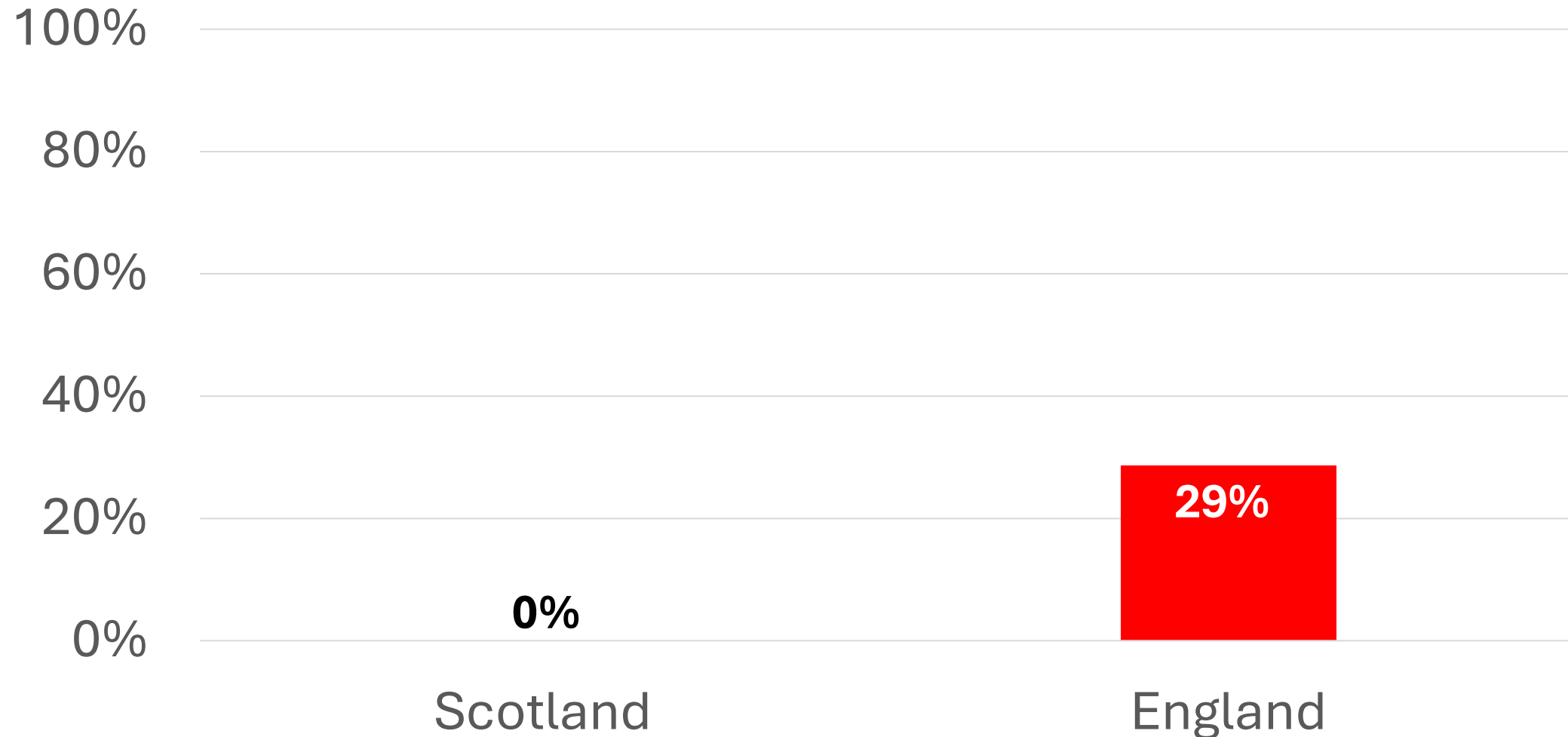
# Results:

## Dedicated paediatric/neonatal AMS funding



# Results:

## Dedicated paediatric/neonatal AMS funding



# Results:

## Factors that would support paediatric/neonatal AMS/OPAT service development in your trust

- **Dedicated funding and staff time**
- **Networks with other hospitals in region** – *practical support*
- Repository of educational resources
- Recognition and inclusion of paediatric AMS and OPAT within trust programs
- CQUIN promoting paediatric and neonatal AMS and OPAT
- Formulation of national prescribing guidance



# Summary results



- Low response rate
- Regional paediatrics ID/AMS networks reported in ~50% services
- Large variation in paediatric AMS and OPAT services
  - **2° v. 3° care:**
    - ↓ pre-emptive AMS WRs, ↓ pAMS education, ↓ OPAT, ↓ pAMS funding (17 v.39%)
  - **Neonates v. Paediatrics:**
    - ↓nOPAT services
  - **Scotland v. England**
    - ↑ pOPAT , no nOPAT, ↓pAMS funding (0 v.29%)

# Next steps



- Development of UK wide paediatric AMS/OPAT MDT networks
  - Key professional groups- pharmacists, nurses, paediatricians, neonatologists
  - Advocacy for dedicated funding and inclusion within/alongside existing adult services
- UKPAS paediatric antimicrobial guidance



# Thank you!



- Co-investigators: Dr Williams, Dr Demirjian, Dr Patel
- Dr Jamieson, NHS England for distributing the survey in England
- UK-PAS executive committee
- Clinicians and pharmacists who completed the survey
- Staff working in paediatric and neonatal AMS/OPAT services



# Questions?

