KESSEL-PAMS

How to make a change





What AMS activities are you already doing?

What barriers did you face?

How did you engage people?

How did you overcome them?



This service evaluation aims to highlight strengths and areas for improvement in AMS programmes across the region. This can be used to celebrate strengths and share learning, alongside a benchmarking tool to guide further development and support funding applications. Questions are based on those similarly used by Public Health England evaluating AMS programmes(1), alongside recommendations from a recent multinational consensus (2) and NICE guidance (3).

One form should be completed for each hospital, with responses agreed by members of the local infection team. This focuses on paediatric AMS but recognises that many programmes cover adult services also. Unless specified, please answer the following questions in regards to activity within the children's services of your trust.

Thank you for your time and

contribution.

Paediatric AMS Programme Service Evaluation



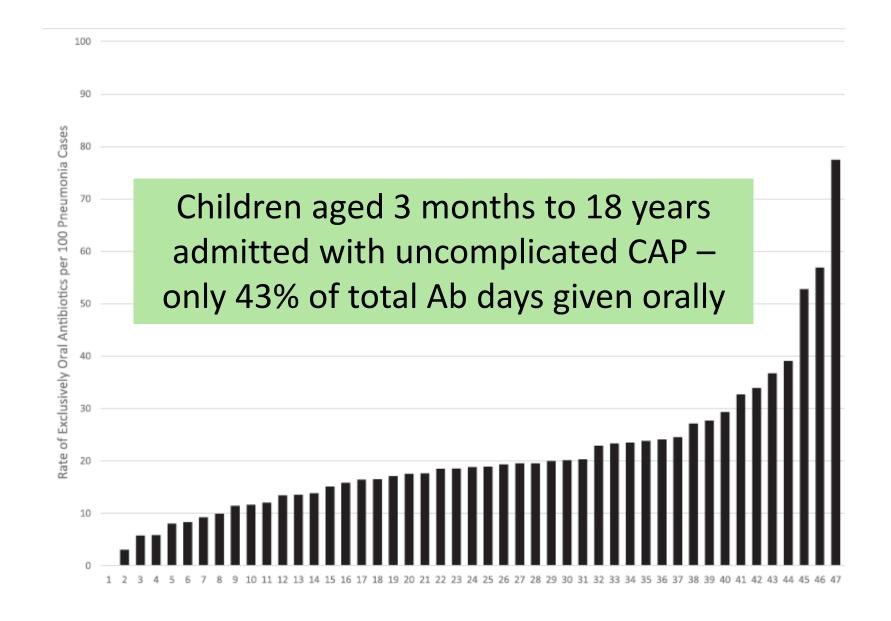
Each "infection team" to complete service evaluation for their hospital

BEHAVIOUR CHANGE

But how do we use any of this "knowledge" to change "behaviour"?



What is the "unique selling point" (USP) of clinicians in the world of AI?



Kronman, M. P. at al. Getting Over Our Inpatient Oral Antibiotic Aversion. *Pediatrics 2018, 142*(6)

Generic principles of behaviour change

Make the process easy

- Provide resources to 'improve' antimicrobial prescribing
- Use existing infrastructure

Empathise with the 'audience'

- Align your narrative with their priorities
- Empathise with their emotions
 - risk aversion / conformism; change averse; competitive
- Make the narrative personal
 - relevant to their patients and based on their data
- Actively engage them in the 'change' process

Running an AMS intervention

Planning phase

Start simple; focus on specific infectious syndrome or sub-population

Must be in collaboration with stakeholders

Measurement phase

Internal benchmarking vs external benchmarking

Use data to support narrative

Implementation phase

In-person meeting with key players

Simple strategies (be realistic)

Show results

Celebrating wins increases engagement

Complete the cycle

Results to inform next steps

Have plan for sustainability

Summary

- AMR is a rising problem in children
- Unnecessary use of antibiotics drives resistance
- Antimicrobial stewardship benefits the patient plus the population
- The network model is a collaborative approach to improving paediatric antimicrobial use across the region
- Collaboration is crucial
 - Winning hearts and minds
- Simple interventions are effective
 - Small steps as opposed to big leaps



Improving AMS programmes for paediatric services via a shared post working collaboratively across five hospital trusts

Fuller C ¹, Leavesley N ¹, Joslin F ¹, Kurain M ², Shackley F ¹, Hinds L ¹, Kerrison C ¹ on behalf of the South Yorkshire Paediatric AMS Group

South Yorkshire Integrated Care System

1. Sheffield Children's NHS Foundation Trust, Sheffield. 2. Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust, Doncaster

Aim to embed AMS principles and practices into the routine care of children accessing paediatric services in South Yorkshire

Service evaluation

Benchmarking against AMS quality indicators

- No dedicated financial support for paediatric AMS in DGHs
- Minimal paediatric representation for AMS committee (1 DGH only)
- Staff shortages in microbiologists in all DGHs
- No staff capacity to provide routine AMS team contact with ward areas (adults or paediatrics)

73% of AMS quality indicators met in adult inpatient services versus 53% in paediatrics

Barrier = staff time



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Regional AMS network created

Microbiologists
Paediatricians
Pharmacists

- Met bi-monthly
- Co-designed regional interventions

Guideline development

Monitoring (PPS)& Feedback

Education Programme

Promoting QI initiatives



Barrier = staff time

For month Oct-24 Total patients Total antibiotics CHARACTERISTICS **Patients Prescriptions**

District Hospital A

District Hospital C

District Hospital D

Sheffield Children's

Neonate (<28 days)

3-6 months

6-12 years

12 years +

6-12 months

12months - 3 years 3-6 years

General Paediatrics

Specialty

Neonatal Surgery

Other

Orthopaedics

istrict Hospital B

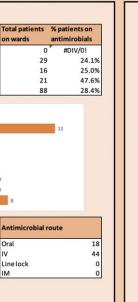
62

10

25

Age

South Yorkshire Regional Report

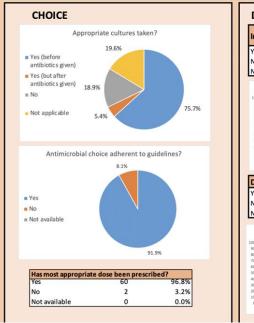


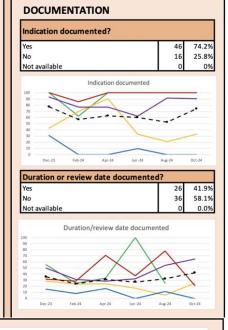
29

16

21

Line lock





Appropiate cultures taken

Review decision been documented?

*percentage reported refers to proportion of prescriptions >48h

Of those eligible, documented plan to switch

*note eligibilty entered as unclear in a proportion of IV prescriptions

No (and recevied antibiotics for >48h)*

On IV therapy, not eligible for switch

On IV therapy, but eligible for switch*

Switched from IV within 48 hours

Switched from IV after 48 hours

Oral route since beginning of course percentages reported refer to proportion of oral prescriptions 24 38.7%

1 1.6%

4 20.0%

6.8% 1 33.3%

16.7%

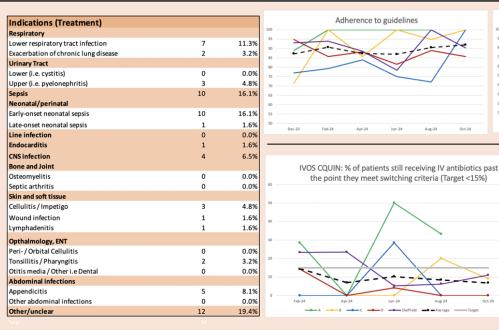
15 83.3%

Yes (within 48 hours)

Yes (but after 48 hours)

Intravenous prescriptions

Oral prescriptions*



Monitoring & Feedback

Bi-monthly pharmacyled data collection on paediatric and neonatal wards

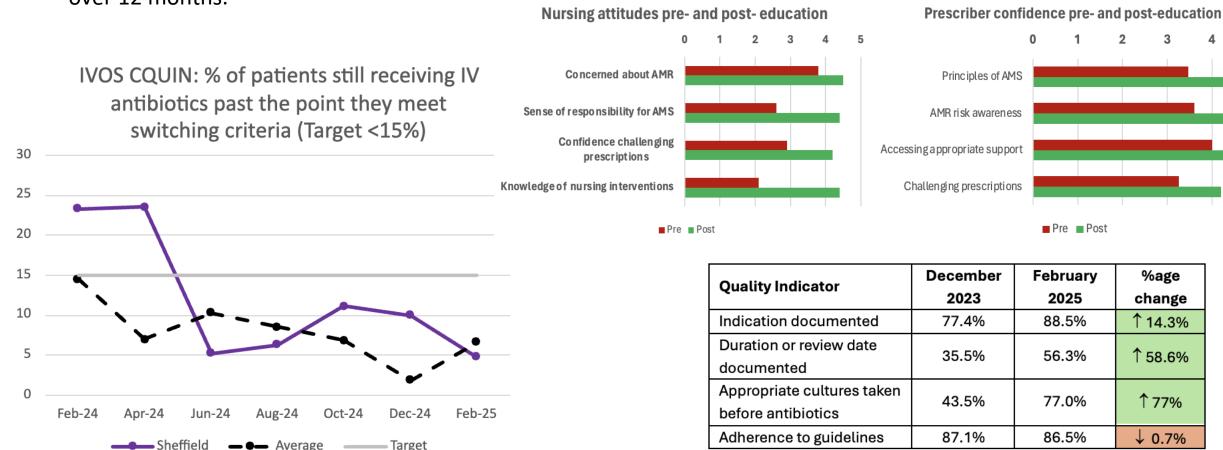
Centralised analysis and reporting / benchmarking

Impact of South Yorkshire pAMS pilot network

Quantitative (IVOS)

Qualitative (confidence & quality)

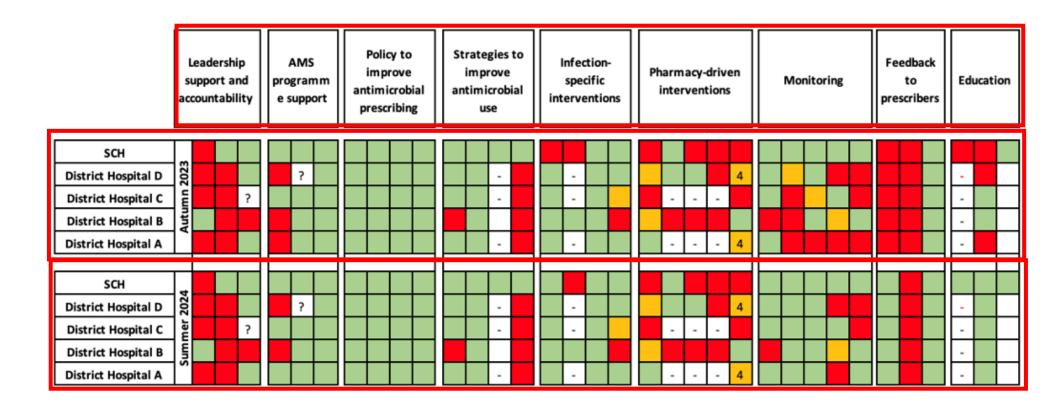
Inappropriate IV Abs reduced from 14.5% to 6.6% over 12 months.



st	■ Pre ■ Post		
Quality Indicator	December 2023	February 2025	%age change
Indication documented	77.4%	88.5%	14.3%
Duration or review date documented	35.5%	56.3%	↑ 58.6%
Appropriate cultures taken before antibiotics	43.5%	77.0%	↑77%
Adherence to guidelines	87.1%	86.5%	↓ 0.7%

Impact of South Yorkshire pAMS network - service evaluation

Process metrics - increase in % of AMS quality indicators met



53%

65%

Pre

Post

Experiences in South Yorkshire - staff morale

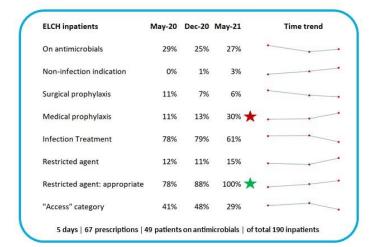
"The network has cultivated a more collaborative and proactive culture, encouraging open dialogue across departments around antibiotic prescribing practices across site for neonate and children....strengthened communication and fostered closer working relationships not only between microbiology, pharmacy, and clinical teams within our trust, but also with neighbouring trusts and Sheffield Children's Hospital... has helped drive clinical engagement and encourage a cultural shift towards stewardship as a collective responsibility... fostering a sense of community, shared purpose, and continuous improvement."

Dr Yee Pang. Consultant Microbiology Barnsley Hospital NHS Foundation Trust.

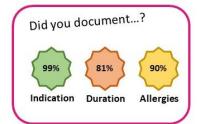


Paediatric Antimicrobial Stewardship Prescribing Monitoring April 2021











Prepared by Evelina Children's Hospital Antimicrobial Stewardship Team July 2021





Thoughts and reflections?

- What do you want to do?
 - In your hospital?
 - As a regional network?

Next steps for KESSEL-PAMS

- Own it and take it home!
- 2. Discuss with colleagues (we will share slides)

- 3. Benchmark your current AMS activities in the survey
- 4. Complete baseline point prevalence survey (links to be sent)
- 5. Think about local QI projects
- Come to virtual sessions