



Antimicrobial stewardship programme development & implementation. KNUST University Hospital Ghana & Ulster University School of Pharmacy & Pharmaceutical Sciences health partnership

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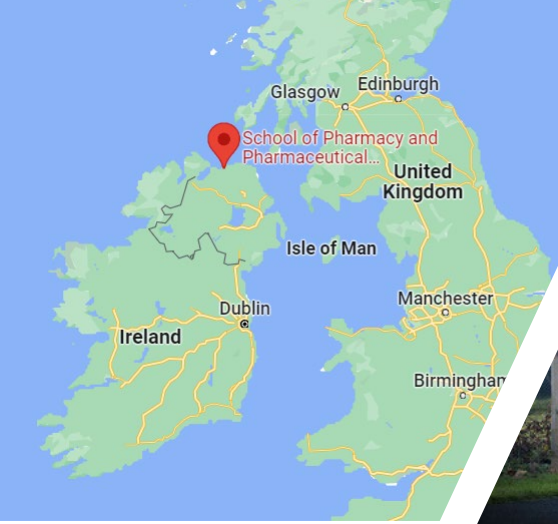
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Antimicrobial stewardship programme development & implementation.

KNUST University Hospital Ghana & Ulster University School of Pharmacy & Pharmaceutical Sciences health partnership

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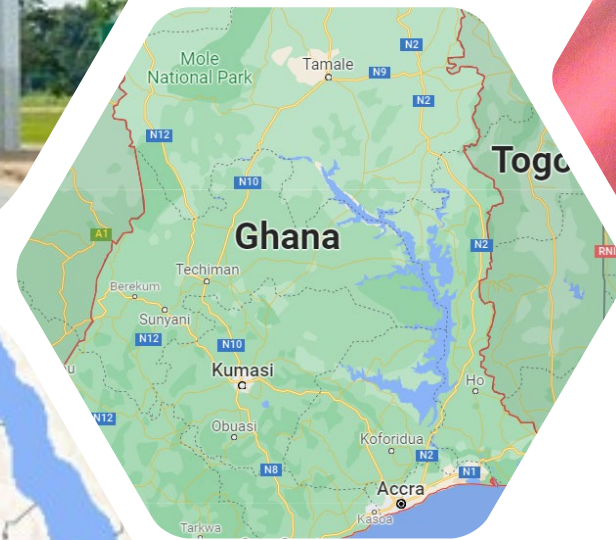


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KNUST University Hospital Ghana

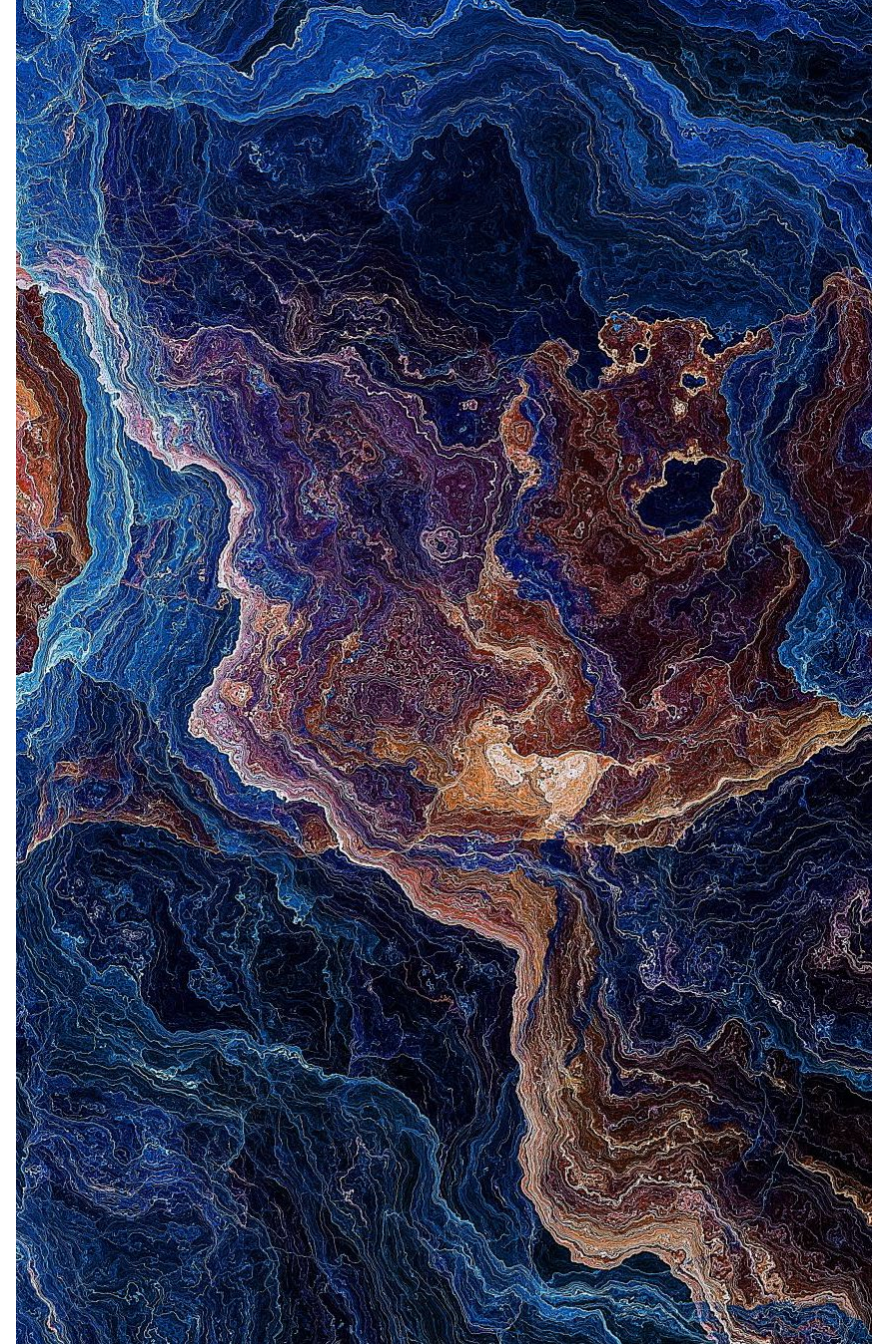
Initial training & capacity building

Training and best practice sharing with respect to Antimicrobial stewardship


Specific request for:

- Antimicrobial stewardship practice in the UK and NHS
- IV-oral switch

- Dr Nana Kwame Ayisi-Boateng – KNUST
- Dr Obed Kwabena Amponsah – KNUST
- Dr Aaron J. Courtenay – Ulster University
- Dr Ahmed Abuelhana – Ulster University
- Ms Sonja Guntschnig – Clinical Pharmacist, Austria
- Ms Adelaide Mensah – Pharmacist & Doctoral research candidate



Online seminar – Wednesday 30th March 2022



**Antimicrobial stewardship:
Systems, processes, people, and
behavioral
change**

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Section 1



**IV oral switching and AMS
Ms Sonja Guntschnig**

Section 2



**IV-PO: A collective approach
Miss Adelaide Mensah**

Section 3



Study design

Cross sectional study of HCPs at KNUST University Hospital:

- Doctors
- Pharmacists
- Nurses & midwives
- Medical laboratory technologists
- Physician associates

Contributors and delegates multidisciplinary training on Antimicrobial stewardship and IV-oral switching

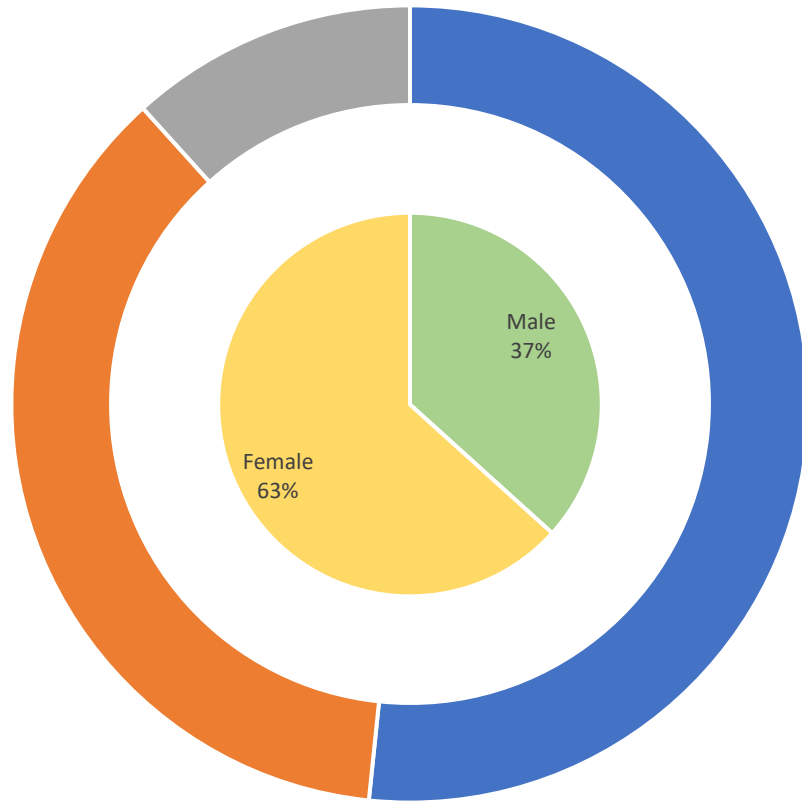
Questionnaire used pre- and post-training to capture data

Global Point prevalence survey protocol:

- Baseline
- Midpoint
- End of project

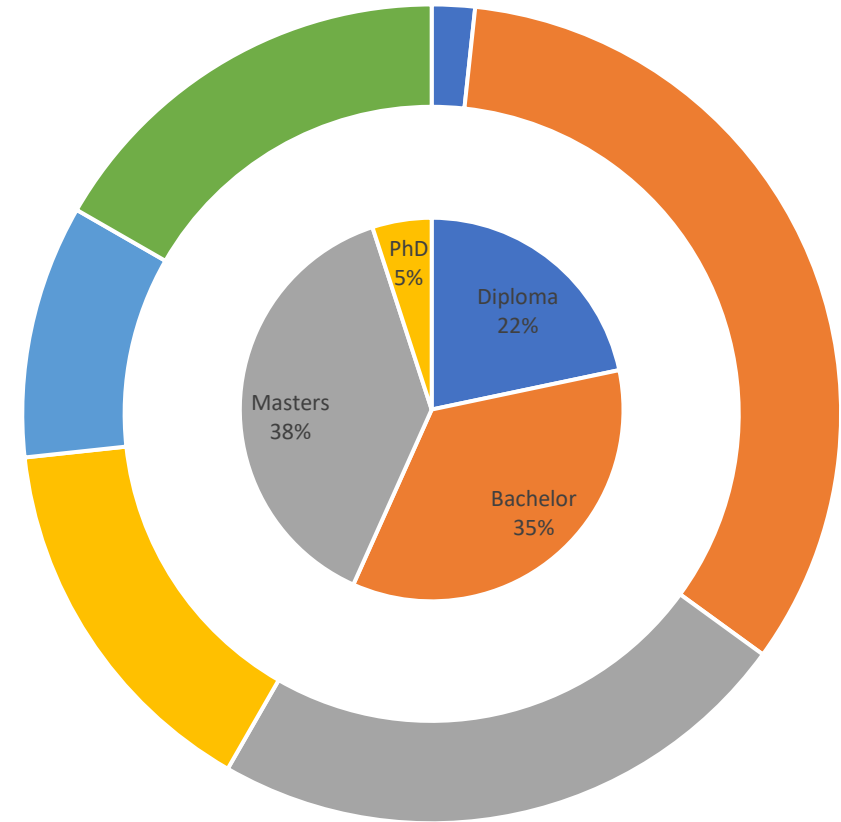
Results – basic demographics

Age & Gender profile



■ < 35 years ■ 35 – 44 years ■ ≥ 45 years

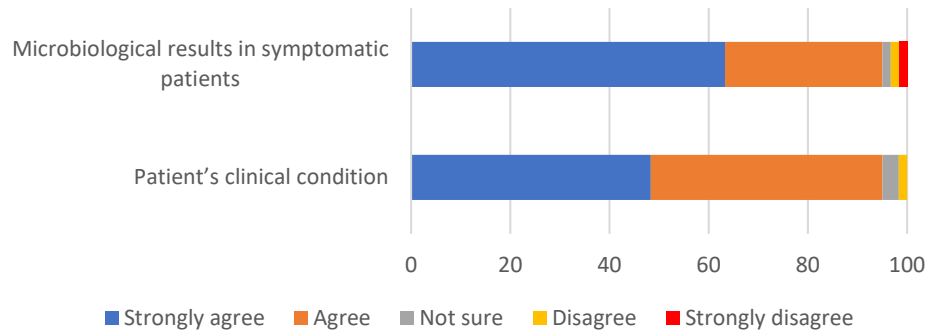
Professions & education level



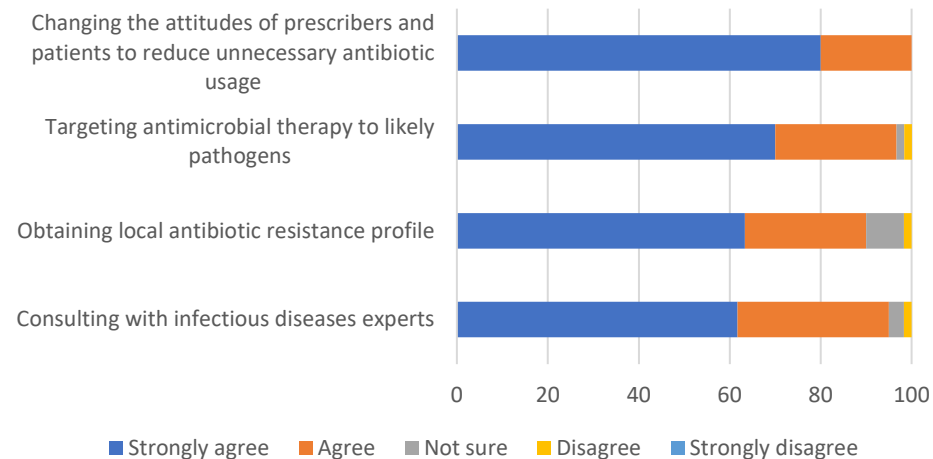
■ Physician Assistants ■ Pharmacists ■ Nurses ■ Medical Laboratory Scientists ■ Pharmacy Technologists ■ Medical Doctors

Hospital practice - AMS

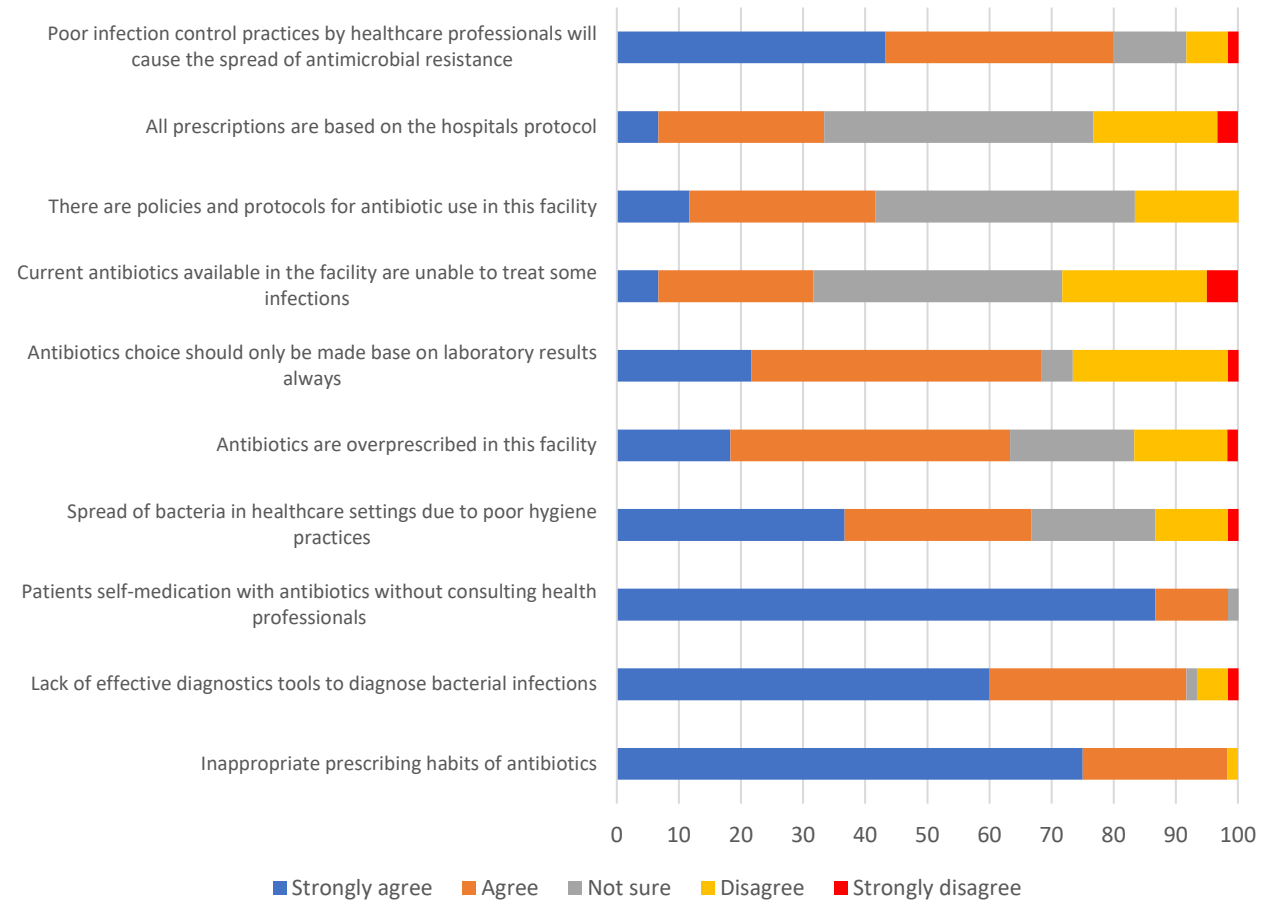
Factors that influence the decision to start a patient on antimicrobial therapy in the hospital



Practices to help control antimicrobial resistance



Practices that contribute to antimicrobial resistance in hospitals



General knowledge - AMS

Variables		Strongly agree n (%)	Agree n (%)	Not sure n (%)	Disagree n (%)	Strongly disagree n (%)
Antibiotics are used in the management of all infections						
	Before	7 (11.7)	14 (23.3)	1 (1.7)	21 (35.0)	17 (28.3)
	After	2 (3.3)	15 (25.0)	3 (95.0)	16 (26.7)	24 (40.0)
Treatment with antibiotics should be stopped once you feel better, especially the expensive ones						
	Before	4 (6.7)	0 (0.0)	3 (5.0)	19 (31.7)	34 (56.7)
	After	3 (5.0)	4 (6.7)	1 (1.7)	19 (31.7)	33 (55.0)
It's okay to use antibiotics that were given to a friend or family member, as long as they were used to treat the same illness						
	Before	1 (1.7)	0 (0.0)	3 (5.0)	12 (20.0)	44 (73.3)
	After	3 (5.0)	4 (6.7)	1 (5.0)	19 (31.7)	33 (55.0)
It's okay to buy the same antibiotics, or request these from a doctor, if you're sick and they helped you get better when you had the same symptoms before						
	Before	1 (1.7)	1 (1.7)	2 (3.3)	24 (40.0)	32 (53.3)
	After	2 (3.3)	1 (1.7)	2 (3.3)	21 (35.0)	34 (56.7)
Frequent use of antibiotics may decrease the efficacy of treatment						
	Before	30 (50.0)	20 (33.3)	2 (3.3)	5 (8.3)	3 (5.0)
	After	29 (48.3)	24 (40.0)	3 (5.0)	0 (0.0)	4 (6.7)
Antibiotics use should be strictly controlled						
	Before	48 (80.0)	11 (18.3)	0 (0.0)	0 (0.0)	1 (1.7)
	After	39 (65.0)	17 (28.3)	3 (5.0)	0 (0.0)	1 (1.7)

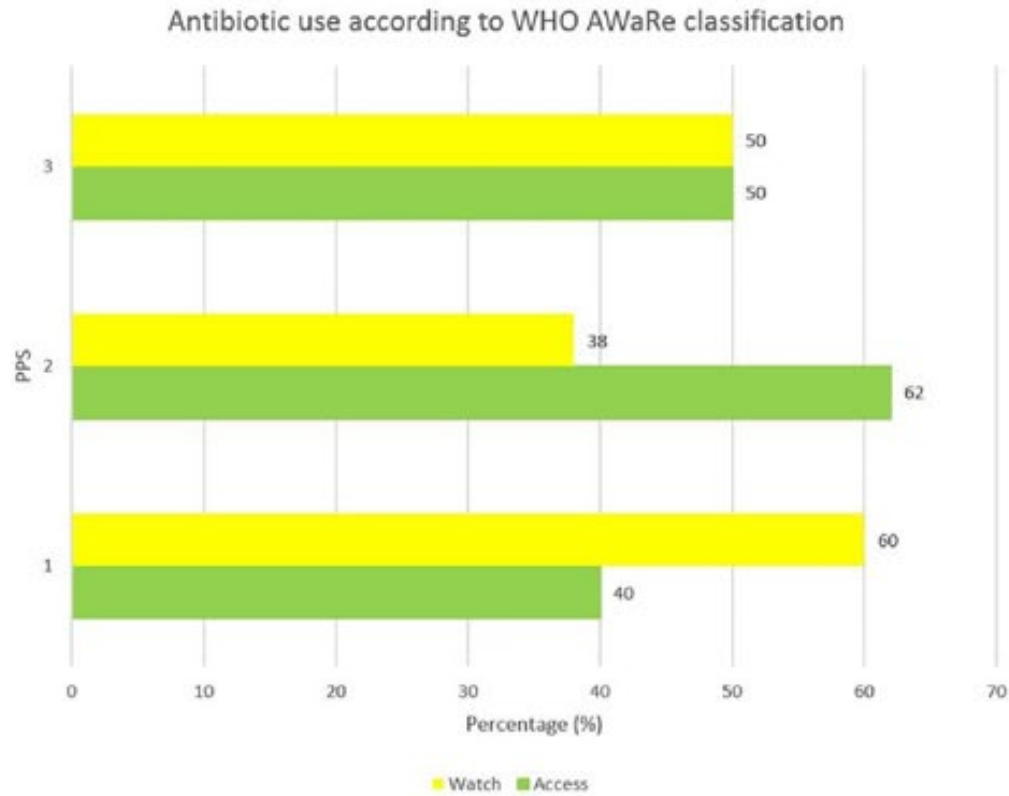


Figure 1. Antibiotic use among inpatients at the University Hospital, KNUST according to the WHO AwaRe classification at the project endpoint.

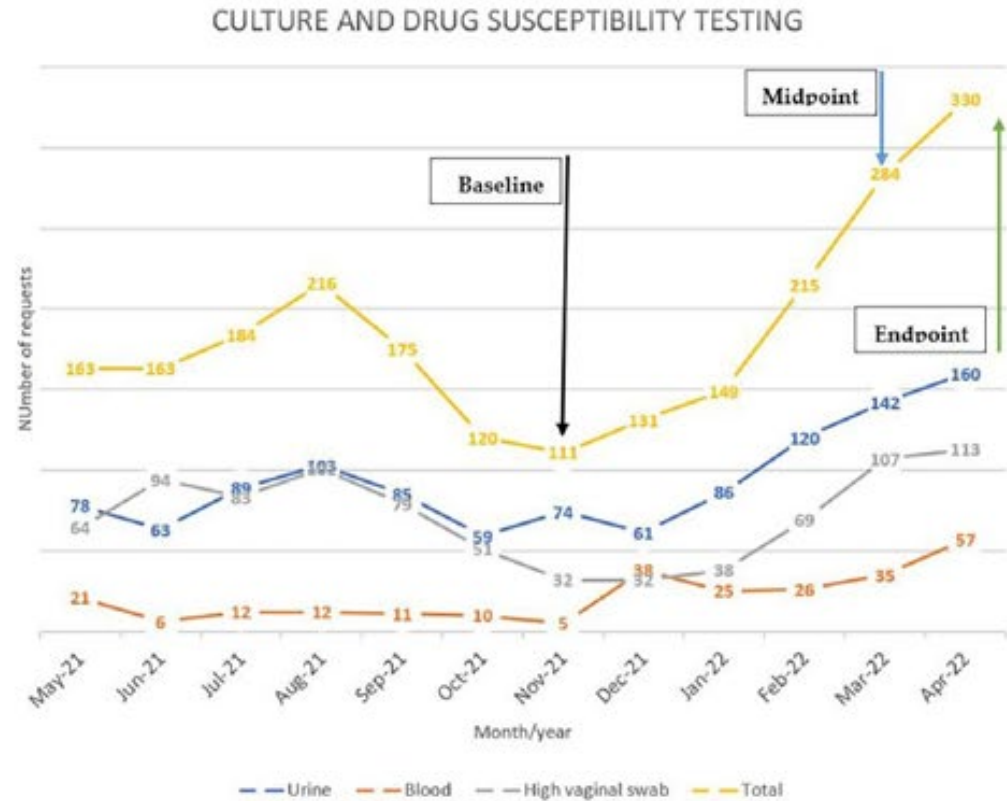


Figure 2. Culture and drug susceptibility request pattern at University Hospital, KNUST.

Impacts & outcomes

1. UU-KNUST-CWPAMS partnership MoU
2. CWPAMS Part 2 – satellite training opportunities
3. Continued PPS + antibiogram development
4. Expansion of AMS analysis
5. Programme & systems development

Positive feedback from delegates and contributors


Two-way learning – mutual benefit

Confirmation that AMS impacting UK & Ghana

**JAC-
Antimicrobial
Resistance**

JAC Antimicrob Resist
<https://doi.org/10.1093/jacamr/dlad084>

Assessing the impact of antimicrobial stewardship implementation at a district hospital in Ghana using a health partnership model

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