

# CHANGING LANDSCAPE OF NURSING

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CHAIR – SANG







### **EVOLUTION OF AMS NURSING**

- First AMS Nursing post developed
- SANG formed 2017
- Professional Nursing group for AMS nurses & specialist interest in AMS
- Representation from IPC, NES, ARHAI Scotland & BVNA
- Partnership with ASAP
- Report into SAPG







Contributed to development & delivery of nursing element for Commonwealth Partnership for Antimicrobial Stewardship Fleming Fund in Ghana



International interest in the AMS nursing role



Invited by WHO to present on AMS Nursing practice



**NES Raising Awareness of AMS** 



Benchmarking AMS content in nursing/midwifery curriculum in Scotland



Pilot of standardised undergraduate & NMP education pack for HEIs



National Nursing & Midwifery survey exploring AMS in practice



## Exploring Antimicrobial Stewardship in Nursing and Midwifery Practice in Scotland

- Informed development of first AMS educational workbook for nurses/midwives
- Total of 30 questions 10 of which replicated 2014 question set (MS Forms)
- 4 "Action" questions included to determine application to practice
- Question set peer reviewed & distributed by SANG, ASAP, SAPG & key nursing Stakeholder groups
- Comparisions made against 2014 survey
- Further comparisons made between those who had received AMS education and those who had not had exposure to AMS education
- Likert scale 1-5 used to collect responses and summerised as number and percentage
- Chi-square test used to determine statistical significance



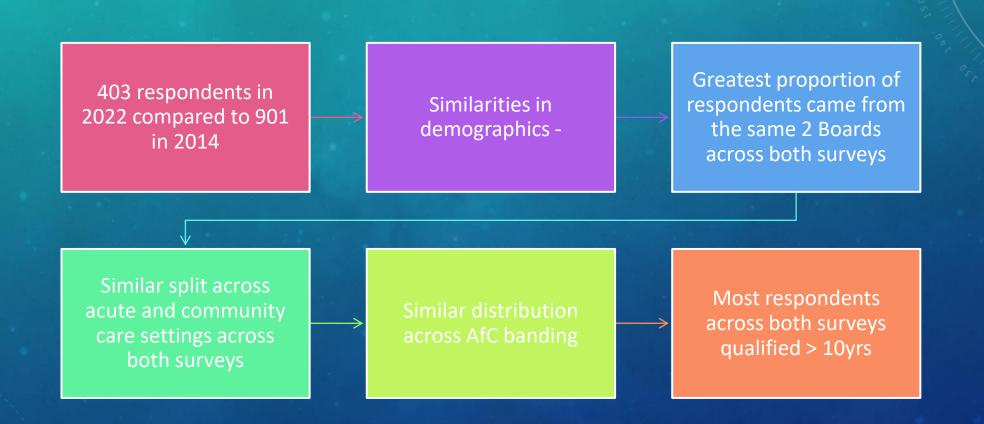




NHS

**Educational Workbook** 

## RESULTS



2014 VS 2022

Significantly more overall nurses/midwiyes in 2022 Education P value for difference ¾ of respondents across Significantly more (chisatinanthempre both surveys felt that AMSns had heard of the term nurses/midwives felt their should be introduQ14: I am aware of the criteria for IV to Oral switch (IVOST) 66% (144) 57% 85% (57/67) p<0.0001 undergraduate (87/152)accurate deutilition 63% Q15: I have suggested IV to Oral switch (IVOST) in the past 82% (55/67) p 0.005 (151/219) (96/152) Q16: I am aware of which gentamicin regimen is used within 56% 51% 67% (45/67) p 0.02 my organisation to treat infection eg Hartford regimen -(122/219) (77/152) 7mg/kg or GGC regimen - 5mg/kg Q17: I am aware of the therapeutic monitoring requirements 75% 71% 84% (56/67) p 0.04 Question (164/219) (108/152) for gentamicin Q6: How would you rat Q18: I am aware of the therapeutic monitoring requirements 69% 65% 79% (53/67) c 0.03 knowledge of antibioticof vancomycin (152/219) (99/152) O19: I know the recommercial and the second of the second 420% r/very 33% - 30 (76%)% (88/132) p<0.0001 therapy for different infections ie total course length (177/403) (89/271) Q7: Have you heard of Q20: I have highlighted duration of therapy to prescribers 46% 34% 70% (92/132) p<0.0001 antimicrobial Stewards (185/403) (93/271) Q9: Do Nurses/midwives have a role in Q21: I am aware of the recommended doses of different 76% p<0.0001 (221/403) (121/271) antimicrobials used within my organisation (100/132)Q22: I have discussed antimicrobial dosing with prescribers 48% 37% 71% (93/132) p<0.0001 (193/403) (100/271) Q23: My organisations antimicrobial guidelines are relevant 66% 55% 88%(116/132) p<0.0001 to my practice (265/403) (149/271) Q24: I have accessed my organisations antimicrobial 57% 42% 87% p<0.0001 guidelines (228/403) (113/271) (115/132) Q25: I feel confident discussing antimicrobials with 47% 34% 74% (98/132) p<0.0001 prescribers (190/403) (92/271)

% (N) of respondents answering Yes

#### FINDINGS...

First National nursing/midwifery survey exploring knowledge, awareness and application of AMS principles & practice

Significant improvements observed in nursing/midwifery AMS knowledge & awareness since 2014

Following AMS education, Nurse & midwives have significantly greater capability, opportunity and motivation to perform AMS behaviors

Areas of influence include: IVOST, promoting optimal durations and dosing of therapy



Influences on nurses' engagement in antimicrobial stewardship behaviours: a multi-country survey using the Theoretical Domains Framework

A.M. Chater \*, b, H. Family , L.M. Abraao d, E. Burnett , E. Castro-Sanchez , B. Du Toit , R. Gallagher , F. Gotterson , E. Manias , J. McEwen , R. Moralez de Figueiredo , M. Nathan , V. Ness , R. Olans , M.C. Padoveze , M. Courtenay ,

BENCHMARKING
SCHOOLS OF
NURSING &
MIDWIFERY AMS
CURRICULUM
CONTENT

Collaboration with NES

Peer reviewed questionnaire developed

Includes undergraduate & postgraduate programmes

NES supported distribution and analysis

Distributed to all 12 Schools of Nursing and Midwifery

#### RESULTS.....



RESEARCH ARTICLE

Mapping Antimicrobial Stewardship in Undergraduate Medical, Dental, Pharmacy, Nursing and Veterinary Education in the United Kingdom

Enrique Castro-Sánchez<sup>1</sup>\*, Lydia N. Drumright<sup>2</sup>, Myriam Gharbi<sup>1</sup>, Susan Farrell<sup>3</sup>, Alison H. Holmes<sup>1</sup>

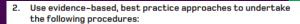
1 NIHR Health Protection Research Unit in Healthcare Associated Infection and Antimicrobial Resistance at Imperial College London, London, United Kingdom, 2 Department of Medicine, University of Cambridge, Cambridge, United Kingdom, 3 Department of Surgery & Cancer, Imperial College London, London, United Kingdom 50% of HEIs responded representing Adult, Paediatric, Mental Health & Midwifery programmes

65% of respondents included AMS in undergraduate programmes

AMS features in 71% of NMP post graduate programmes



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- 2.1 take, record and interpret vital signs manually and via technological devices
- 2.2 undertake venepuncture and cannulation and blood sampling, interpreting normal and common abnormal blood profiles and venous blood gases
- 2.3 set up and manage routine electrocardiogram (ECG) investigations and interpret normal and commonly encountered abnormal traces
- 2.4 manage and monitor blood component transfusions
- 2.5 manage and interpret cardiac monitors, infusion pumps blood glucose monitors and other monitoring devices
- 2.6 accurately measure weight and height, calculate body mass index and recognise healthy ranges and clinically significant low/high readings
- undertake a whole body systems assessment including respiratory, circulatory, neurological, musculoskeletal, cardiovascular and skin status.
- 2.8 undertake chest auscultation and interpret findings
- 2.9 collect and observe sputum, urine, stool and vomit specimens, undertaking routine analysis and interpreting findings



Infection, Prevention and Control Standards

A plain English booklet





NURSING 2030 VISION:
PROMOTING CONFIDENT, COMPETENT
AND COLLABORATIVE NUISING EOR SCOTLANDIS EU



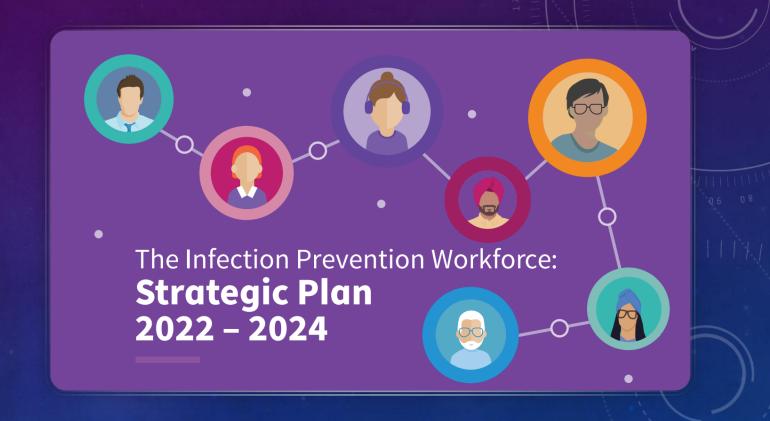


Outpatient parenteral antimicrobial therapy (OPAT)

# WHERE DOES AMS FIT IN THE CHANGING LANDSCAPE OF NURSING PRACTICE?

CNOD

## INFLUENCE AND INFORM....





Enhance educational delivery across all nursing and midwifery professional groups locally and nationally

Enhance nurse/midwife inclusion in the AMS/AMR agenda both locally and nationally

Explore opportunities to include AMS in all nursing/midwifery undergraduate and non-medical prescriber programmes

Promote local/national antimicrobial guidelines as nursing/midwifery administration guidelines

Development of additional specialist AMS nurse roles

