Approved Minutes of Scottish Antimicrobial Prescribing Group Meeting held on Tuesday 24 August 2021 at 1-3pm via MS Teams

Present:

SAPG Project Board

Dr Andrew Seaton (Chair), Consultant Physician, NHS Greater Glasgow and Clyde
Dr Jacqueline Sneddon, Project Lead Scottish Antimicrobial Prescribing Group
Mr William Malcolm, Clinical Lead for SONAAR programme, ARHAI Scotland
Dr Keith Morris, AMR/HCAI Medical Adviser for Scottish Government
Ms Sabine Nolte, Principal Educator, NHS Education for Scotland

SAPG Support Services

Dr Lesley Cooper, Health Services Researcher, Scottish Antimicrobial Prescribing Group
Ms Marion Pirie, Project Officer, Scottish Antimicrobial Prescribing Group

National Services Scotland

Ms Polly Russell, Information Analyst, SONAAR Programme
Karen Gronkowski, Senior Information Analyst, SONAAR Programme
Aidan Morrison, Senior Information Analyst, SONAAR Programme

Antimicrobial Management Teams

Dr Vhairi Bateman, Consultant in Infectious Diseases and Microbiology, NHS Grampian
Dr Stephanie Dundas, Consultant in Infectious Diseases, NHS Lanarkshire
Mrs Alison MacDonald, Area Antimicrobial Pharmacist, NHS Highland
Dr Busi Mooka, Consultant Physician, NHS Tayside
Dr Sharon Irvine, ID Consultant, NHS Dumfries and Galloway
Dr Robbie Weir, Consultant Microbiologist, NHS Forth Valley

Representing professional groups and specialties

Mrs Alison Cockburn, Antimicrobial Pharmacist, NHS Lothian (Association of Scottish Antimicrobial Pharmacists)
Ms Susan Kafka, Advanced Pharmacist - Paediatric Antimicrobials & Medicine, NHS GG&C
Dr Charis Marwick, Clinical Senior Lecturer, University of Dundee (Research representative)
Mrs Jodie Allan, Antimicrobial Stewardship Nurse Specialist, NHS Tayside (Scottish Antimicrobial Nursing Group) (*deputising for Jo McEwan*)
Ms Pamela Innes, Senior Prescribing Support Pharmacist, NHS GG&C (Scottish Prescribing Advisers Association)
Professor Andrew Smith, Consultant Microbiologist, NHS Greater Glasgow and Clyde (Dental)
Mr Samuel Whiting, Infection Control Manager, NHS Borders
Mr Bob Wilson, Infection Control Manager, NHS Ayrshire & Arran
Mrs Diane Stark, Infection Prevention and Control Nurse, NHS Highland (Infection Control Nurses)
Dr Sarah Whitehead, Consultant Microbiologist, Golden Jubilee and the Scottish Ambulance Service
Dr Deirdre O'Driscoll, General Practitioner, Glasgow
Dr Ben Parcell, Consultant Microbiologist, NHS Tayside (Infection Control Doctors group)
Mrs Rebecca Houston, Lead Antimicrobial Pharmacist, Golden Jubilee National Hospital
Ms Ysobel Gourlay, Lead Antimicrobial Pharmacist, NHS Greater Glasgow & Clyde
Dr Virginia Santiago, General Practitioner, NHS Fife and Clinical Lecturer in General Practice, University of St Andrews
Kayleigh Hamilton, Antimicrobial Pharmacist, NHS Ayrshire & Arran *(deputising for Dr Ursula Altmeyer)*

Public partner:

Mr Jim Findlay, Public Partner, HIS

Apologies:

Dr Conor Doherty, Consultant in Paediatric Infectious Diseases, NHS Greater Glasgow and Clyde

Dr John Harden, Consultant in Emergency Medicine, NHS Lanarkshire**,** and National Clinical Lead for Quality & Safety Scottish Government
Mr Russell Mackay, Specialist Clinical Pharmacist, NHS Orkney
Dr Becky Wilson, Consultant Microbiologist, NHS Grampian & NHS Orkney
Dr Scott Davidson, Deputy Medical Director of Acute Services in GGC
Dr Chris Deighan, Deputy Medical Director of Corporate Services in GGC
Ms Julie Wilson, AMR Manager, ARHAI Scotland
Professor Hazel Borland, Nurse Director, NHS Ayrshire and Arran
Dr Wendy Beadles, Clinical Lead Infectious Diseases, NHS Highland
Dr David Fallaha, Consultant Anaesthetist, Golden Jubilee
Professor Marion Bennie, Chief Pharmacist, Public Health Scotland
Dr David Griffith, Consultant Microbiologist, NHS Fife
Dr Morgan Evans, Consultant in Infectious Diseases, NHS Lothian
Dr Mairi Macleod, Consultant Microbiologist, NHS Greater Glasgow and Clyde (Scottish Microbiology and Virology Network)
Mrs Alison Wilson, Director of Pharmacy, NHS Borders
Ms Elizabeth Burgess, AMR/HCAI Policy Unit, Scottish Government
Mrs Jo McEwen, Antimicrobial Nurse Specialist, NHS Tayside (Scottish Antimicrobial Nursing Group)
Dr Adam Brown, Consultant Microbiologist, NHS Highland
Dr Ursula Altmeyer, Consultant Microbiologist, NHS Ayrshire and Arran
Mrs Christine Gilmour, Director of Pharmacy, NHS Lanarkshire

1	**Welcome, apologies for absence and declaration of interests.** The Chair opened the meeting and welcomed new members Dr Virginia Santiago, NHS Fife, who replaces Gail Haddock as GP representative, and Pamela Innes, Senior Prescribing Support Pharmacist, GG&C, covering Laura Pelan's maternity leave. Welcomed guests Anne Wilson, recently appointed Antimicrobial Pharmacist, NHS Forth Valley and Isobel Guthrie, undergraduate student at the University of St Andrews working with Charis Marwick. Chair noted that meeting will be recorded and asked for members to advise on any Declarations of Interest prior to relevant agenda item. AMT Network Event has been rescheduled to 16th November 10am-1pm (9th clashed with Federation of Infection Societies conference).
2	**Minutes and actions from previous meeting** Minutes of the meeting on 15.06.21 were approved.
3	**Update on antibiotic use during COVID-19** WM presented the most recent data on the impact of the pandemic on antibiotic use in both primary and secondary care in Scotland, comparing 2019, 2020 and 2021. WM advised limited new data on acute hospital prescribing, due to delays with activity data. **E-message GP weekly data** Use of five commonly used respiratory antibiotics has remained stable with no seasonal increase although slight increase in the last few weeks compared to 2020. Amoxicillin and clarithromycin following the same trend. Doxycycline and co-amoxiclav have returned to pre COVID levels of prescribing while azithromycin has remained unchanged from pre COVID level, except for a spike in early 2020. Overall reduction in antibiotic use across all age groups although most recent data shows that antibiotic use in 0-4 years group back to pre COVID levels. **Primary care data from Prescribing Information System** (runs 3 months in arrears) Total antibiotic use and respiratory following the same curve as e-message GP weekly data. **Total antibiotic use for paid items in dentistry** (runs 3 months in arrears). In May 2021 still 24% more prescription items than 2019 mainly due to increase in amoxicillin but metronidazole use also remains elevated compared to 2019. Pen V was recommended first line treatment in October 2021 and data demonstrates the continued uptake of this advice.

	Hospital data Total acute hospital antibiotic DDDs up to May 2021 is 19% lower than pre COVID levels. WM thanked Polly Russell for pulling data together. Members agreed that ePrescribing data is very useful to give an indication on prescribing patterns coming in to winter months. DO'D mentioned the COVID pathway for primary care was recently changed for under 5s so more children being reviewed by GPs instead of via COVID Assessment Centres (CACs). SK agreed with DO'D as there has been significant shift in the management of this age group being transferred back to primary care. In hospital also seeing an increase in children presenting with respiratory symptoms not attributable to COVID. SI noted a large increase in RSV cases within this age group in D&G. RW queried if there was data showing any unintended consequences of lower antibiotic prescribing in primary care. CM advised that various people are looking at this data but no results to share at the present time.
4	**Feedback on Antibiotic Prescribing in Primary Care (FAPPC) programme** • **Study results from pilot** CM presented Feedback on Antibiotic Prescribing in Primary Care (FAPPC) programme: a real world cluster randomised controlled trial. Intervention GP Practices in four health boards received quarterly feedback reports on antibiotic prescribing covering total antibiotic use (primary outcome measure), specific additional focused topic, 25th percentiles for board and national level, links to relevant education and behavioural change messages. Control GP Practices did not receive these reports. Prescribing data analysed at end of one year and 3 months later. Results showed small but insignificant difference in total use at 1 year and small significant difference 3 months later. Few significant differences in secondary outcomes and no difference in hospital admissions. Well-designed study but conducted against background of well-established AMS programme and falling antibiotic use rates so may be merit in targeting high prescribing practices. Reports were rolled out across all practices, initially quarterly but now reduced to annually. KM queried if individual practices with poorer prescribing rates showed an improvement. CM said they undertook a post hoc unplanned analysis although the results were anomalous. • **Feedback survey on FAPPC reports** AM presented on the evaluation of FAPPC reports via a feedback survey of recipients. Reports provide each GP practice in Scotland with information regarding their antibiotic use and how it compares to benchmarks for their NHS Board and across Scotland. The survey had a response rate of around 25%. Key finding was that the majority of respondents found the reports to be useful with 4 in 5 respondents saying the reports had an influence 1 in 5 saying they had a major influence on antibiotic prescribing. AM thanked MP for designing and issuing the survey and the GP Practices, Antimicrobial Management Teams and Health Board Prescribing Teams who completed the questionnaire. CM commented it was a good response rate but noted potential bias as respondents likely to be enthusiasts so may not be able to extrapolate to all. D'OD queried if there were any plans to resend to those that did not respond and WM advised no. Using GP clusters rather than health board as comparator for benchmarking was discussed and agreed this would be helpful. VS noted evidence that pairing education with audit and feedback is more effective as an AMS intervention in primary care than audit and feedback alone. Suggested that rather than signposting to educational resources that undertaking some educational outreach might increase effectiveness. PI confirmed in GGC they include discussion of the reports in the annual practice visits although they have very limited time so may be worthwhile having an interim practice visit to solely discuss antimicrobial prescribing and target high prescribers. WM confirmed the plan is to continue issuing the reports yearly (September). Following discussions today will consider high volume practices and VB's suggestion of using the GP cluster as a comparator although too late for this year's report.

	• **Follow on study to FAPCC** IG presented on a follow on study to FAPPC analysis describing Associations between declining antibiotic use in primary care in Scotland and hospitalisations with infection and patient satisfaction: longitudinal population study. Between 2012 and 2018 14.8% reduction in antibiotic use in primary care. Potential unintended consequences are increase in hospitalisations with complications of infections and reduced patient satisfaction around not receiving antibiotics. Study involved longitudinal analysis of practice level data on antibiotic use and associations with these two variables. Results show increase in hospitalisation with infection but no statistically significant association with change in antibiotic prescribing. Similarly no association found for patient satisfaction although this has also reduced over the time period. Noted that overall hospitalisations are rising, length of stay decreasing and more re-admissions. Planning to publish the results. Thanked Medical Research Scotland funding, SAPG and NHS NSS for data and permissions. Chair thanked IG for sharing results of very interesting study and queried if the admissions were due to a specific infection and secondly if patients were recently re-hospitalised how many were due to healthcare associated infections? IB said initially analysed all five diagnoses and then individually although there was nothing notable. CM said they did not go in detail about re hospitalisation. DO'D queried what counted as an admission e.g. acute receiving unit stays. CM advised they used general NSS definition of admission over the whole time period. Chair also queried if the admission trend reflected admissions for non-infection diagnoses. CM advised this was not known currently.
	Items for discussion and agreement:
5	**Evaluation of antibiotics for UTI supplied via the Pharmacy First service** WM presented on trends in antibiotics commonly used for UTI following implementation of Pharmacy First service. Women aged 16-65 years with uncomplicated UTIs can be supplied either trimethoprim or nitrofurantoin by community pharmacists following a structured assessment. Trimethoprim is first line in all NHS boards (except Tayside). Aim was to determine whether Pharmacy First has been associated with changes in use of antibiotics recommended for treatment of UTI. The data was captured via the Prescribing Information System (PIS) from January 2016 – April 2021. Measured both GP practice and Pharmacy First prescription items for trimethoprim, nitrofurantoin, and both combined. The results show a significant reduction in trimethoprim use over 5 years. Trend shows GP prescriptions decreasing and community pharmacy supply increasing (currently 16% of all prescriptions). Nitrofurantoin shows a slight increase and is predominantly prescribed by GPs. Combined results do not show evidence of increased use which provides reassurance on appropriate prescribing/supply by community pharmacists. Chair thanked WM and asked if there had been a compensatory increase of co-amoxiclav or ciprofloxacin by GPs (i.e. trimethoprim becoming the pharmacy UTI antibiotic). WM advised they have completed first data round of extraction and analysis for SONAAR report and will be able to provide an update. PI reported in GG&C they are in the process of updating primary care antimicrobial guidelines to take into account SIGN 160 which recommends dipstick testing. This is a change for GPs and community pharmacy and currently in the process of discussing how to take this forward. JS advised the evidence for SIGN 160 clearly shows dipstick is beneficial in making an accurate diagnosis and it is hoped in the fullness of time community pharmacies will be able to provide this.
6	**Review of Antimicrobial Management Team workforce** • **SBAR AMT workforce review August 2021** JS reported the SBAR was produced to inform the national workforce strategy and provides the historical setting up of AMTs, published evidence on stewardship workforce requirements and aspirations for the future. • **Results of AMT resource and activities survey** JS reported that they are waiting on three health boards to complete the survey although have provided data on the responses received to date. Still require to work out the work time equivalent (WTE) for AMT staffing related to the acute beds and population of the health board which will

	allow comparison across boards of varying size. For the next SAPG meeting will have data finalised and will also feed information to SG workforce strategy group. JS asked if anyone has comments on the SBAR please email these directly. KM commented that it would be very helpful if the survey captured the programme activities (PAs) for clinicians and especially AMT Leads rather than WTEs. Chair agreed and asked JS to clarify this. AMacD noted would be helpful to compare boards' aspirations as these will vary. BM commented on the core competences of the different staff groups performing antimicrobial stewardship tasks may not be apparent to those looking at the responses. Suggested including details of training routes for various staff groups, competencies and interface with infection prevention and control and health protection as keen to avoid some roles being amorphous/non-specialist when in fact important to demonstrate the depth of specialties. Noted Scottish Management of Antimicrobial Resistance Action Plan 2 (ScotMARAP) gave useful description of governance and board accountability for stewardship. Need to be explicit to avoid mission creep and define roles in a granular way for those who don't work in stewardship. SD suggested looking forward with this data to the new infection trainees, who will be joint ID/microbiology specialists, how do we represent their roles within stewardship and how does that extend to other clinical roles. Need to describe the vision 5 years down the line. Chair agreed with BM and SD. **Action: All to send JS comments on SBAR and JS to add comments from BM and SD to SBAR** **Action: JS and LC to complete survey report and share final version with AMTs**
7	**Progress with local uptake of SAPG interventions:** ***item deferred due to lack of time*** • Hospital Antibiotic Review Programme • Penicillin allergy de-labelling toolkit • End of Life Antibiotics outputs
	Items for update:
8	• **Scottish Government** 1. KM reported that the mid-term review of the 5-year National Action Plan (NAP) has now been completed and approved and sent to oversight board. 2. There is a policy discussion paper which will be circulated to various groups looking at how Gram negatives can be reduced particularly E.coli bacteraemias focusing on UTIs and CAUTIs. 3. Reconvened the working group on AMR in the Environment in Scotland including Scottish Environmental Protection Agency, Scottish Water, ARHAI SONAAR Program and SG. 4. In each of the post EU exit free trade agreements SG are pushing with UK negotiators to include antimicrobial stewardship. • **Association of Scottish Antimicrobial Pharmacists** AC reported ASAP are focusing on education. Reviewing the education programme and materials they provide to pre-registration pharmacists. Other education focus is on education half day programme on 13 September which will be run in conjunction with Scottish Antimicrobial Nurse Group (SANG). Very interesting programme which includes use of procalcitonin and treatment of prosthetic joint infections in orthopaedics. • **Scottish Antimicrobial Nurses Group** JA reported that SANG have been collaborating with NES on the survey for Nursing and Midwifery schools to assess inclusion of AMS in education programmes for undergraduates and non-medical prescribers. Survey is being coordinated by Sophie French at NES and is now live for 4-6 weeks. Will feed back results to SAPG when available. Joint meeting with ASAP took place and there is a wish to continue this collaboration. SANG now have their own logo and are active on twitter @SANGnursingAMS. Group has received number of requests for higher education input and plan to produce a standardised slide set to be delivered nationally by SANG and this year it will be pre-recorded for use in undergraduate and non-medical prescriber courses. Undertaking collaborative work with Veterinary Nurse Association on animal health and currently looking at a position statement. • **Dental Stewardship** AS reported that he is encouraged by the Pen V data. Still concerned about overall dental prescribing and Chief Dental Officer has issued an edict advising that surgical treatment is the first

	line for acute dental alveolar infections rather than antibiotics and this is also being supported via postgraduate and undergraduate education. Cautiously optimistic that BNF will change their text to recommend Pen V as the preferred first line. Working with colleagues on SAPG Dental to produce a patient leaflet and poster on dental infections which may be used for World Antibiotic Awareness Week. Particularly pleased to have a cohort of dental students from Dundee, Glasgow and Aberdeen attending SAPG Dental meetings. As the students are the future custodians of antimicrobial stewardship suggested considering having a multi-professional student SAPG Group. Chair will consider this proposal. • **OPAT** Chair reported group met last week and discussions included development of KPIs, working towards a rolling national audit and monographs of antimicrobials to be used in OPAT practice. OPAT is an integral part of interface care and stewardship and some boards will become pathfinder sites for this SG funded work. • **Paediatric stewardship** No update as paediatric rep left meeting early. Group reconvening in September. • **Education sub-group** SN reported they had issued a survey to nursing schools regarding the curriculum and have received five responses to date (as noted in SANG update). The next product review they are planning is on "Raising Awareness of Antimicrobial Stewardship" which was published in 2019 and will link in with Jo McEwan. If anyone is interested in assisting with review, please email SN. Still under pressure to review resources which are rarely utilised and would be helpful to have input on how these resources are managed in the future. Will discuss with JS on how NES can support Hospital Antibiotic Review Programme (HARP). • **SMVN group** No update. • **SMC advice** JS reported SMC has issued not recommended advice as the companies did not make a submission, for delafloxacin (Quofenix) for CAP when inappropriate to use other antibacterial agents and combination product of imipenem/cilastatin/relabactam (Recarbrio) for treatment of infections due to aerobic Gram-negative organisms in adults with limited treatment options. Chair noted the NICE led piece of work around subscription based payment for two antimicrobials is underway.
	Items for information:
9	**AOCB** Chair advised there have been two NICE outputs on acne vulgaris and *Clostridioides difficile*. NICE are recommending vancomycin first line for C. difficile and fidaxomicin for early relapse or for patients who have failed to respond to vancomycin. This guidance does differ from Scotland and will be discussed at the next meeting. Chair highlighted vancomycin "red man syndrome" (RMS) has now been renamed to vancomycin infusion reaction. Chair informed the group the JS is leaving SAPG at the end of October (and following the next SAPG meeting) to work with the British Society of Antimicrobial Chemotherapy (BSAC). Chair thanked JS for her incredible work over the last 13 years and expressed the group's huge gratitude for all her hard work and leadership over this time. Many comments were received echoing this sentiment and particularly how much Jacqui will be missed. Formal and informal leaving arrangements will be confirmed later. The replacement post and secondment opportunities will be advertised shortly and if anyone would like an informal discussion, please contact Chair or JS directly.
10	Date of next meeting **– 26th October 2021** Following meeting – 14th December 2021 AMT Network Event – 16th November 2021