

**Confirmed Minutes of the Scottish Antimicrobial Prescribing Group Meeting  
Held on Friday 17<sup>th</sup> February 2017  
Healthcare Improvement Scotland, Delta House, Glasgow**

**Present:**

Professor Dilip Nathwani (Chair), Consultant Physician, NHS Tayside  
Dr Andrew Seaton, Consultant Physician, NHS Greater Glasgow and Clyde  
Dr Brian Cook, Medical Director, Acute Services, Royal Infirmary of Edinburgh  
Mrs Alison Wilson, Director of Pharmacy, NHS Borders  
Professor Marion Bennie, Chief Pharmaceutical Advisor, National Medicines Utilisation Unit, Information Services Division  
Mr William Malcolm, Pharmaceutical Advisor, Health Protection Scotland  
Ms Julie Wilson, AMR Manager, Health Protection Scotland  
Dr Charis Marwick, Clinical Senior Lecturer, University of Dundee  
Ms Rita Nogueira, Senior Information Analyst, National Services Scotland  
Professor Ian Gould, Consultant Microbiologist, NHS Grampian and Scottish Microbiology and Virology Network  
Dr Stephanie Dundas, Consultant in Infectious Diseases, NHS Lanarkshire  
Mrs Suzanne Clark, Public Partner  
Mrs Alison Cockburn, Antimicrobial Pharmacist, NHS Lothian  
Ms Anne Thomson, Lead Clinical Pharmacist Prescribing, NHS Greater Glasgow and Clyde  
Dr Ursula Altmeyer, Consultant Microbiologist, NHS Ayrshire and Arran  
Mrs Jo McEwen, Antimicrobial Nurse, NHS Tayside  
Mr Howard McNulty, Public Partner  
Dr Gill Walker, Programme Director for HAI, NHS Education for Scotland  
Professor Alexander Crighton, University of Glasgow Dental School  
Mrs Lesley Shepherd, Nurse Consultant, Infection Control, Health Protection Scotland/Healthcare Improvement Scotland  
Mr Samuel Whiting, Infection Control Manager, NHS Borders  
Ms Ysobel Gourlay, Lead Antimicrobial Pharmacist, NHS Greater Glasgow and Clyde  
Dr Martin Connor, Consultant Microbiologist, NHS Dumfries and Galloway and Infection Control Doctors group

**In attendance:**

Dr Jacqueline Sneddon, Project Lead Scottish Antimicrobial Prescribing Group  
Dr Sian Robson, Information Analyst, Scottish Antimicrobial Prescribing Group  
Ms Andrea Patton, Information Analyst, Scottish Antimicrobial Prescribing Group  
Ms Susan Paton, Project Officer, Scottish Antimicrobial Prescribing Group

**Guests:**

Ms Jenny Armstrong, Information Analyst, Prescribing Team, National Services Scotland  
Dr Bianca Ascencao, Infectious Diseases Physician, Portugal, on placement in NHS Tayside

**Apologies:**

Mrs Christine Gilmour, Chief Pharmacist, NHS Lanarkshire  
Mrs Gillian Orange, Chair of the Scottish Microbiology and Virology Network.  
Dr Gail Haddock, General Practitioner, NHS Highland.  
Mrs Jacqueline MacRae, Head of Quality of Care, Healthcare Improvement Scotland  
Ms Deirdre Harris, Nurse Consultant Infection Control, NHS Fife and Infection Prevention Society  
Dr Linsey Batchelor, Consultant Microbiologist, NHS Dumfries and Galloway  
Dr Robbie Weir, Consultant Microbiologist, NHS Forth Valley

Mrs Fiona McMillan, NES Pharmacy  
 Dr David Wilks, Consultant Physician, NHS Lothian  
 Dr Adam Brown, Consultant Microbiologist and Infection Control Doctor, NHS Highland,  
 Dr Busi Mooka, Infection Diseases Consultant, NHS Tayside  
 Professor Alistair Leanord, Senior Medical Adviser HAI, Scottish Government  
 Mrs Abigail Mullings, HAI Professional Adviser, Scottish Government  
 Ms Rachael Dunk, Team Leader, Safe Team, Chief Nursing Officer Directorate  
 Dr Michael Lockhart, Medical Microbiologist, Health Protection  
 Professor Andrew Smith, Professor and Consultant Microbiologist, NHS Greater Glasgow and Clyde  
 and University of Glasgow  
 Dr Simon Hurding, Medicines Management Adviser, NHS Lothian  
 Dr Conor Doherty, Consultant in Paediatric Infectious Diseases, NHS Greater Glasgow and Clyde  
 Dr David Griffith, Consultant Microbiologist, NHS Fife  
 Mrs Jill Nowell, Lead Prescribing Adviser, NHS Tayside  
 Dr Alexander Mackenzie, Consultant in Infectious Diseases, NHS Grampian  
 Ms Eleanor Anderson, Lead Consultant for animal and environmental AMR, Health Protection  
 Scotland

	Item	Action
1.	<b>Welcome and Apologies</b> The Chair welcomed all present and advised of apologies and guests as noted above.	
2.	<b>Declaration of interests</b> The Chair requested that any member declarations of interest should be highlighted in advance of relevant items.	
3.	<b>Membership changes and announcements</b> Eleanor Anderson, Lead Consultant CARS has joined SAPG representing animal and environmental AMR.	
4.	<b>Minutes of the previous meeting held on 19<sup>th</sup> December 2016.</b> The minutes of the meeting held on 19 <sup>th</sup> December 2016 were agreed.	
5.	<b>Matters Arising</b> <ul style="list-style-type: none"> <li>• <b>SAPG Vice Chair</b>                The Chair advised that Dr Gail Haddock, General Practitioner, NHS Highland and GP representative on SAPG has been appointed as the new Vice Chair of SAPG.</li> <li>• <b>NHS Highland Lyme Disease Guidance – revised paper. (Paper 1)</b>                Dr Adam Brown, Chair of NHS Highland AMT has revised this guidance in line with comments at the December SAPG meeting. Further comments were that there was inconsistency around the use of Microbiology and ID advice and the suggestion was to use ‘Infection Specialist’ throughout the document. There was also concern about including oral cefuroxime as a treatment option in early Lyme disease due to current restrictions on cephalosporin use. If included then the addition of a statement about assessing the individual patient risk with respect to CDI should be added. Subject to these further amendments the guidance was accepted and once finalised will be hosted on the secure area of the SAPG website for AMTs to access.</li> </ul>	
	<b>Action: Feedback comments to AB and ask for further amendments</b>	AB
	<b>Action: Publish guidance on secure area of SAPG website</b>	JS/SP

	<u>Items for Discussion/agreement</u>	
6.	<p><b>Staph aureus bacteraemia (SAB)</b></p> <ul style="list-style-type: none"> <li> <p><b>Audit of SAB antibiotic duration and re-admission rate. (Paper 2)</b>            YG presented local data that suggest patients receiving less than 14 days of IV treatment for SAB are more likely to relapse. This information has been shared with clinical teams to improve practice. Most patients who had &lt; 14 days IV were switched to oral therapy. YG advised that following diagnosis of SAB all patients are reviewed by a microbiologist either on the ward or via a phone call and treatment advice given has been confirmed as correct            Members agreed that practice in some boards of having the SAB algorithm in the patient's notes may be helpful and in NHS Grampian a specialist bacteraemia nurse reviews all patients.</p> </li> <li> <p><b>SAPG SAB Quality Indicators. (Paper 3)</b>            JS advised that the original SAPG SAB Quality Indicators document has been updated to highlight that 2 of the 4 measures are included in the national enhanced SAB surveillance programme led by HPS. The ongoing need for these indicators was discussed and views from the Infection Control community on data collection are presented in paper 4.</p> </li> <li> <p><b>Infection Control feedback on collection of SAB quality indicator data. (Paper 4).</b>            The Chair advised that collaborative working in conjunction with infection control colleagues is required for the indicators therefore views have been sought from the Infection Control Doctors group (ICDs), the Infection Prevention Society (ICNs) and the Infection Control Managers group (ICMs). Following broad discussion, it was agreed that the key issue was resource to collect data, agreement on who should collect the data and how to do this in practice during a patient episode. Rewording of the indicators was also agreed to ensure they are objective so that data can be collected in a standardised way. The Chair thanked SAPG members for their helpful responses but suggested further engagement with Infection Control groups and HPS was required to try to integrate the measures within existing surveillance systems.  <u><b>Action: Contact Laura Imrie to set up a meeting of SAPG, HPS, ICDs, IPS and ICMs.</b></u></p> </li> </ul> <p>Noted that links to the SAPG SAB algorithm on HPS website do not work.  <u><b>Action: Send updated link to HPS</b></u></p>	<p>JS</p> <p>JS</p>
7.	<p><b>SAPG Guidance on gentamicin and vancomycin in adults (Papers 5, 5a, 5b, 5c)</b></p> <p>JS advised that the two-year review of the guidance documents for gentamicin and vancomycin has been completed. All documents are unchanged except for the addition of information directing users to dosage calculators on the antimicrobial app. The Chair suggested that references to support the guidance should now be included and SAPG members agreed this would be helpful.</p> <p><u><b>Action: Add supporting evidence for guidance recommendations</b></u></p>	<p>JS</p>

	<p>Two other issues with the vancomycin guidance were highlighted:</p> <ul style="list-style-type: none"> <li>Using the pulsed vancomycin calculator the loading dose may be lower than the maintenance dose for patients with low body weight but good renal function, which may delay achieving therapeutic levels. YG advised that to address this the time between the loading dose and first maintenance dose could be reduced.</li> <li>Advice on action required if vancomycin levels are &gt; 20mg/L may lead to a delay in reaching therapeutic levels. Suggested that additional information should be added for levels between 20 and 24mg/L.</li> </ul> <p>JS agreed to discuss these issues with Alison Thomson and amend the guidance if required.</p> <p><b><u>Action: Contact Alison Thomson for advice and report back at April SAPG meeting</u></b></p> <p>HM queried whether there was equivalent SAPG guidance for use of these antibiotics in children. JS advised that this has not been developed and YG updated that this is the subject of a current PhD project so information to support such guidance will be available soon.</p>	JS
8.	<p><b>Ultra broad spectrum antibiotics</b></p> <ul style="list-style-type: none"> <li><b>Report on carbapenem and piperacillin/tazobactam (piptazo) use (Paper 6 tabled)</b></li> </ul> <p>WM thanked Jenny Armstrong and Andrea Patton for their input to the paper and advised that further analysis of the impact of the Carbapenems project is underway. National data confirms that piptazo use decreased in 2016 and there is a suggestion that carbapenem use is starting to decrease but trend not proven yet. The Chair advised that Scotland is the only national healthcare system showing a reduction in piptazo and stability in carbapenems and that the results would be suitable for publication. It was agreed that review of board level data would be helpful to highlight good practice and share what has worked. It was also agreed that the report on national data should be share with AMTs to acknowledge the success of local interventions.</p> <p><b><u>Action: Share report on piptazo and carbapenems use with AMTs</u></b></p> <p>The Chair highlighted a paper by Mark Wilcox on alternatives to carbapenems and the need to give clinicians a range of options including controlled use of specific cephalosporins. The role of cephalosporins will be considered at a future meeting.</p>	JS/SP
9.	<p><b>Meropenem review</b></p> <p>JS advised that at the last meeting of SAPG there had been discussion on introducing a mandatory review of carbapenems and SAPG members were asked to think about how this may work in boards. Several different models were discussed and there was broad enthusiasm. Particular issues raised were potential positive impact on unnecessary prescribing in suspected penicillin allergy, benefits of HEPMA in identifying patients, role of ward clinical pharmacists and methods for feeding back data. The Chair concluded that further discussion is required on whether to mandate or recommend meropenem review and on what scale it should be introduced (specific wards or whole hospital). JS advised there would be further discussion of this at the round table session of the AMT event on 14<sup>th</sup> March.</p>	



	<p>explain the difficulties they are experiencing with submitting data. Percentage compliance is good for measures 1, 2 and 4 at around 95% and for measure 3 compliance is improving which is encouraging. SD suggested that it would be helpful for boards showing improvements in recording review/duration of therapy to share how this has been achieved.</p>	
15.	<p><b>Antimicrobial app. – further development</b>            JS advised that it is planned to move prescribing indicator data collection from the IHI Extranet onto the app, which will make it easier to collect and submit and allow clinical teams to contribute. A user guide for data collection and reporting via the app is being produced and will be shared with AMTs once complete.            JS advised that further development is also planned for all SAPG algorithms to be converted into clinical decision support tools in a similar format as the UTI decision aid. JS advised that many boards are currently uploading local guidance to the app and Tactuum have provided training on editing and updating guidance. This will also be provided in a training manual.</p>	
16.	<p><b>National Point Prevalence Survey</b>            WM updated that reports on local PPS data was sent to boards at the end of January. A webinar is planned to show boards how to utilise local data for quality improvement. The national report will be published in April and it was agreed that it would be useful to invite the PPS team from HPS to present the key findings at the June SAPG meeting.</p> <p><b><u>Action: Invite PPS team to present on national report at June SAPG meeting</u></b></p>	JS/SP
17.	<p><b>Data visualisation – Discovery and NHS Performs</b>            WM advised that data visualisation work is progressing with development of an infection indicator landing page within Discovery to make available a series of 15 HAI and AMR indicators similar to the Fingertips resource developed by Public Health England. Timeline for launch is late 2017. MB suggested that it would be useful for SAPG members to have a demonstration of the resource prior to launch.</p> <p><b><u>Action: Demonstration of Infection Indicator resource at future meeting of SAPG</u></b></p>	WM
18.	<p><b>Evaluation of education workbook for nurses and midwives</b>            GW advised that the draft report is due at the end of March. One of the items to highlight is the level of engagement of nursing staff with the workbook, which has been disappointing due to competing priorities. Some adaption is planned in 2017-18 for Chapter 5 which is hospital focused with an additional chapter 5a aimed at care homes. The Chair advised that the model in Tayside worked well for engaging staff with the workbook due to having a dedicated Antimicrobial Nurse but even in Tayside engagement in the evaluation is disappointing.            A full report on the evaluation will be available for the April SAPG meeting.</p>	
19.	<p><b>National Prescribing Safety Assessment questions.</b>            JS advised that she and Alexander Mackenzie who are both authors for the national prescribing safety assessment questions had submitted questions at the end of January. Several people helped with the writing of the questions and formal thank you letters</p>	

	<p>will be sent to everyone who contributed. The end-result was 40 questions and the next step is a workshop in May at the University of Warwick to review all submitted questions to decide whether they are of suitable quality to be added to the question bank for the 2018 tests. The Chair asked for continued dialogue with the PSA team to have a sub-section of the test on antibiotics.</p>	
20.	<p><b>European Antibiotic Awareness Day 2016 – Evaluation reports.</b>  JS advised that Evaluation surveys are underway with community pharmacy, public partners and antimicrobial management teams to seek feedback on EAAD activities.</p> <p><b><u>Action: Evaluation reports for next meeting of SAPG</u></b></p>	JS/SP
21.	<p><b>Antimicrobial Management Team national network event – 14<sup>th</sup> March 2017.</b>  The next AMT event on Optimising prescribing in Hospitals has four AMT presentations with good practice examples. SAPG members are encouraged to attend.</p>	
	<b>Items for information</b>	
22.	<b>SMC advice</b> – nothing to report	
23.	<p><b>NICE Antimicrobial stewardship – changing public behaviours</b>  New guidance published on <a href="#">Antimicrobial stewardship: changing risk-related behaviours in the general population</a></p>	
	<b>AOCB</b>	
24.	<p><b>Antibiotic prophylaxis post-irinotecan chemotherapy</b>  NHS Borders had highlighted the use of ciprofloxacin to manage severe diarrhoea following irinotecan therapy if it is unresponsive to loperamide and queried whether this use was rational given the its association with CDI. JS reported that the West of Scotland Cancer Network (WOSCAN) no longer supply antibiotics for this indication but patients seek medical advice if they experience severe symptoms. SCAN (East of Scotland network) reported that ciprofloxacin is supplied following the first cycle of treatment but is very rarely used. SAPG members were reassured that use is not extensive but agreed that it would be useful to share this information with Lothian AMT and NOSCAN since there is variation in approach.</p> <p><b><u>Action: Summary of correspondence to be shared Lothian AMT and NOSCAN.</u></b></p>	JS
25.	<p><b>Antibiotic dosing for surgical prophylaxis in obese patients</b>  The use of increased doses of antibiotics for surgical prophylaxis in obese patients undergoing C-section and in orthopaedics was referred to SAPG as several AMTs are considering this. Evidence supporting higher doses is lacking. LS advised that there are increased rates of surgical site infections (SSI) reported in various boards in patients with a high BMI undergoing C-section. BC advised that in Lothian they had undertaken some work in this area and concluded it is not always the antibiotic dose that can lead to increased SSI. Education on other factors may be beneficial and reduce SSI rates. It was agreed that a national approach to use of increased dosage of surgical prophylaxis would not be pursued.</p>	

26.	<p><b>World Health Organisation (WHO) guidance on timing of antibiotic prophylaxis in surgery</b></p> <p>JS advised that recent guidance from the WHO on timing of antibiotic prophylaxis in surgery recommends dosing within two hours of knife to skin while SIGN 104, which recommends within one hour. It was highlighted that the WHO guidance is aimed at developing countries and it was agreed that SIGN 104 should continue to be followed.</p>	
27.	<p><b>“PRECIOUS” study proposal of randomised trial of interventions after stroke with 50% of participants receiving a four-day course of prophylactic ceftriaxone.</b></p> <p>SW highlighted this trial that is recruiting patients in Scotland and raised the issue of using ceftriaxone, which has been restricted for many years to reduce CDI. The Chair advised that this is an extension of a study completed in the Netherlands and published in the Lancet in 2016. BC advised that considered by Lothian AMT but not supported.</p>	
28.	<p><b>Nystatin suspension</b></p> <p>YG raised dosage increase for the Nystan brand of nystatin suspension, now recommending 4-6 ml rather than 1ml. There is disparity between brands that may result in increased cost and practical issues as supplied as 30 ml bottles. JS advised she has raised with the Area Drug &amp; Therapeutics Committee Collaborative (ADTCC) within Healthcare Improvement Scotland, as a national approach to dosage would be helpful. Members agreed that any action locally should await a national view.</p> <p><b><u>Action: Discuss with ADTCC and advise AMTs of outcome</u></b></p>	JS
29.	<p><b>Liquid nitrofurantoin pricing</b></p> <p>MC raised the issue of the escalated price of liquid nitrofurantoin and asked if SAPG had an opinion. AT advised that pricing is being reviewed in the House of Lords and this may result in changes. Agreed that this is causing issues and advice from national procurement may be helpful.</p> <p><b><u>Action: Seek advice from National Procurement.</u></b></p>	JS
30.	<p><b>Cochrane review of Interventions to improve antibiotic prescribing practices for hospital inpatients</b></p> <p>The Chair highlighted the recent update to the Cochrane review led by Peter Davey and contributed to by CM. He suggested the Executive summary should be shared with AMTs.</p> <p><b><u>Action: Share executive summary of Cochrane review with AMTs</u></b></p>	JS/SP
31.	<p><b><u>Date of next meeting</u></b></p> <p>Date of next meeting is <b>Tuesday 18<sup>th</sup> April 2017</b> at 12:30 in Delta House, Glasgow. The following meeting will take place on Tuesday 20<sup>th</sup> June 2017 in Delta House, Glasgow.</p>	