# Accreditation of antimicrobial stewardship programmes: addressing a global need to tackle antimicrobial resistance

Jacqueline Sneddon (1) 1\*, Felicity Drummond<sup>1</sup>, Tracey Guise<sup>1</sup>, Mark Gilchrist<sup>2</sup> and David R. Jenkins<sup>1,3</sup>

<sup>1</sup>British Society for Antimicrobial Chemotherapy, 53 Regent Place, Birmingham, UK; <sup>2</sup>Department of Infectious Diseases, Imperial College Healthcare NHS Trust, London, UK; <sup>3</sup>Clinical Microbiology Department, University Hospitals of Leicester NHS Trust, Leicester, UK

\*Corresponding author. E-mail: JSneddon@bsac.org.uk @jacquisneddons X @jacquisneddons; @bsacceo; @MGilchrist123; @DafyddSiencyns

Accreditation of healthcare services provides quality assurance of hospital practice to support safe and effective care for patients. Accreditation programmes focused on antimicrobial stewardship (AMS) have been developed in high-income countries (HIC) and recently the WHO has developed a toolkit to support AMS practice in low and middle-income (LMIC) countries. BSAC has developed their Global Antimicrobial Stewardship Accreditation Scheme (GAMSAS) for hospitals based on globally applicable standards. GAMSAS aims to support healthcare organizations to build measurable AMS programmes and to support spread of best practice. GAMSAS involves a desktop assessment by BSAC experts followed by a hospital visit to gather further insight into how a hospital's AMS programme operates. A final report of compliance with the GAMSAS standards and a recommendation about accreditation at one of three levels is formally approved at a GAMSAS panel meeting involving well-established global experts in AMS. The BSAC GAMSAS team reflect on progress during the first year and ambitions for future spread.

#### **Article**

# The need for global accreditation of antimicrobial stewardship

The recent GRAM Report<sup>1</sup> confirms that antimicrobial resistance (AMR) is one of the world's leading causes of death with the largest burden of disease in low- and middle-income countries (LMIC). Overuse of antimicrobials is one of the biggest drivers of AMR, therefore robust systems for antimicrobial stewardship (AMS) are needed to ensure responsible use of antimicrobials. The accreditation of AMS programmes is a mechanism to spread good practice and develop consistent, measurable and sustainable AMS across all health economies. Healthcare accreditation has evolved over many years, initially in high-income countries (HIC) but also more recently in LMIC.<sup>2</sup> The global push for the provision of universal health coverage has been a major driver for accreditation and it has been seen as a useful tool for ensuring and improving the quality and cost-effectiveness of healthcare in both public and private hospitals by governments. While whole hospital accreditation schemes<sup>3</sup> may include an element that addresses AMS, accreditation assessments of many different departments and services risk losing sight of weaknesses in AMS practice and AMS will not figure prominently in final reports or priorities for action. Whereas accreditation schemes for AMS are available in some HIC,<sup>4-7</sup> they are designed with a particular healthcare system in mind. The WHO has developed an excellent toolkit<sup>8</sup> to support LMIC in establishing AMS programmes and we believe this provides a good basis for developing a global accreditation scheme.

# Developing the BSAC Global Antimicrobial Stewardship Accreditation Scheme (GAMSAS)

Vision of GAMSAS

GAMSAS<sup>9</sup> supports healthcare organizations to build, improve and sustain robust and measurable AMS programmes including support to enable an organization's contribution to local, national and global data collection/surveillance, a key ambition of the WHO AMR action plan. GAMSAS is focused on developing and sustaining Centres of Excellence around the world to facilitate mentorship of other organizations and spread AMS across regions and countries. GAMSAS is based on achieving a set of pre-defined standards that BSAC has developed, drawing on internationally published standards and checklists to create a quality improvement focused points-based scheme. These standards focus on AMS systems, processes and outputs but also include microbiology laboratory provision and Infection Prevention and Control practice to give a holistic view of AMS within a hospital.

## Overview of GAMSAS process Timeline 6–9 WEB PORTAL SUBMISSION months Self-assessment questionnaires Upload supporting evidence Initial report by BSAC team and assigned expert assessor SITE VISIT AMS team presentation, meet key staff, IT system demo, visit ward area, discussion of findings Final report prepared and agreed **ACCREDITATION PANEL MEETING** Report discussed and award level agreed plus areas for improvement identified Feedback to client organization

Figure 1. Overview of GAMSAS process with timeline.

#### Applying for GAMSAS accreditation

Hospitals with an established AMS programme and senior management support are eligible to apply. Applications can be made online on the GAMSAS website<sup>9</sup> by completing an online screening questionnaire either via:

- a direct/open call for applications announced by BSAC or
- a collaborative grant offered by BSAC in partnership with commercial or philanthropic organizations.

For open applications organizations can self-fund or apply for funding from BSAC.

#### The GAMSAS screening process and site visit

Following a robust screening process, using an expert review panel, successful applicants from both routes are required to complete a series of online self-assessment questionnaires, uploading all supporting evidence at the same time. The BSAC team has appointed external assessors, verified as experts in AMS. These experts are engaged in a desktop assessment initially using submitted questionnaires and supporting evidence to prepare a draft report for each organization. The external assessors then attend an on-site visit to evaluate AMS systems and processes, meet with leadership and clinical teams to review clinical engagement, assessing the organization's culture surrounding AMS. Following the on-site assessment, the report is finalized and discussed with the applicants for accuracy. An overview of the GAMSAS process and timeline is shown in Figure 1.

#### Awarding accreditation

A virtual GAMSAS panel meeting is held to discuss the report, outcomes of the on-site visit and level of accreditation to be awarded. The meeting involves the BSAC team, external assessors and panel members (who are well-established experts in AMS from various

world regions and professions). Organizations that complete the process are awarded accreditation at one of three possible levels and an organization may also be awarded Centre of Excellence if they demonstrate active AMS mentorship within a network. An important part of GAMSAS is quality improvement so all organizations receive feedback on potential areas for further work. The GAMSAS 3-year cycle for re-accreditation includes ongoing support from the BSAC team and virtual meetings to ensure maintenance of AMS and progress with identified areas for improvement and mentorship.

#### Reflections on the first year of GAMSAS

Establishing GAMSAS has been an iterative learning process allowing us to develop robust documentation and processes. More than 40 professionals have been engaged from across the world as potential experts to support assessment, and so far we have used six external assessors and five panel members. In 2023, we accredited 10 organizations: three as Centres of Excellence. Although nine of these 10 organizations are in HIC (five in the UK where the scheme was piloted), this is a global scheme with an LMIC organization in Nigeria becoming the first African hospital to achieve accreditation. A further 11 hospitals globally are working towards achieving accreditation in 2024. Feedback from clients, assessors and panel members has been positive with clients valuing opportunities for discussion of AMS with assessors and shared learning for all involved.

#### **Plans for GAMSAS**

In 2024, the plan is to increase the number of client organizations joining GAMSAS via open applications and collaborative grants. The model for training assessors overseas will support the sustainability of GAMSAS as the number and spread of clients grows. The processes will continue to evolve as experiences are learnt.

JAR

Hospitals with an established AMS programme in any healthcare setting are encouraged to consider applying to join GAMSAS and for national healthcare policy leadership to consider a national approach to accrediting AMS programmes. The GAMSAS programme are keen to engage with commercial and philanthropic organizations to collaborate to support this important initiative. Working with clinicians and collaborators GAMSAS can build and spread measurable and sustainable AMS worldwide to tackle the global threat of AMR. To find out more, e-mail: gamsas@bsac. org.uk or visit the GAMSAS website at: www.ams-accredit.com.

### **Funding**

This study was carried out as part of our routine work.

### Transparency declarations

None to declare.

#### References

**1** Murray CJL, Ikuta KS, Sharara F *et al.* Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. *Lancet* 2022; **399**: 629–55. https://doi.org/10.1016/S0140-6736(21)02724-0

- **2** Mansour W, Boyd A, Walshe K. The development of hospital accreditation in low-and middle-income countries: a literature review. *Health Policy Plan* 2020; **35**: 684–700. https://doi.org/10.1093/heapol/czaa011
- **3** Joint Commission International. Hospital Accreditation. https://www.jointcommissioninternational.org/what-we-offer/accreditation/accreditation-programs/hospital/.
- **4** Healthcare Standards Organization. CAN/HSO 5030:2020—Antimicrobial Stewardship Program, 2020, Accreditation Canada. https://healthstandards.org/standard/antimicrobial-stewardship-program/.
- **5** Australian Commission on Safety and Quality in Health Care. Antimicrobial Stewardship Clinical Care Standard, Nov 2020. https://www.safetyandquality.gov.au/publications-and-resources/resource-library/antimicrobial-stewardship-clinical-care-standard-2020.
- **6** National Institute for Health and Care Excellence. Antimicrobial Stewardship: Systems and Processes for Effective Antimicrobial Medicine Use, August 2015. https://www.nice.org.uk/quidance/ng15.
- **7** Centers for Disease Control and Prevention. The Core Elements of Hospital Antibiotic Stewardship Programs. https://www.cdc.gov/antibiotic-use/core-elements/hospital.html.
- **8** World Health Organization. Antimicrobial Stewardship Programmes in Healthcare Facilities in Low and Middle-Income Countries: A WHO Practical Toolkit, 2019. https://www.who.int/publications/i/item/9789241515481.
- **9** British Society for Antimicrobial Chemotherapy. Global Antimicrobial Stewardship Accreditation Scheme (GAMSAS). https://ams-accredit.com/