



Proceeding Paper

## Developing a Board and Online Game to Educate People on Antimicrobial Resistance and Stewardship: The AMS Game <sup>†</sup>

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**Abstract:** To support efforts towards addressing the increasingly growing global burden of antimicrobial resistance (AMR), a diverse and multicountry team of stakeholders developed a board and online game on antimicrobial stewardship (AMS). The game aims to create awareness and develop knowledge of healthcare teams at all levels. Reports from initial players reflect that the game is an innovative, engaging and inclusive education resource on AMR and AMS. The game continues to be promoted for continued and wider usage across the globe.

**Keywords:** AMS game; Commonwealth Partnerships for Antimicrobial Stewardship; CwPAMS; antimicrobial resistance (AMR); antimicrobial stewardship (AMS); board game; game-based learning; gamification; gaming; online game



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## 1. Project Overview

Innovative, effective training and skills building are vital to the success of antimicrobial stewardship (AMS) programmes, particularly when staff are new to the concept. The AMS game is a digital and physical board game intended to make AMS training engaging and inclusive, generating fun and enthusiasm, with educative purposes and outcomes.

## 2. Outcomes and Impact

The game was co-created with a diverse group of stakeholders from high-and low-income countries. The feedback from the initial players of the game highlighted that the game is enjoyable and provides an innovative and engaging opportunity to discuss AMR and AMS, whilst improving and strengthening their knowledge of key topics. There are sustainability and global impacts of the use of digital/online games and the "buy one, donate one" rollout model.

## 3. Future Development

The AMS Game is an established tool in the Commonwealth Pharmacists Association's AMR programme activities, enabling the promotion of the game in training across the Commonwealth and beyond. This will be promoted and expanded globally via the second phase of the Commonwealth Partnerships for Antimicrobial Stewardship (CwPAMS 2) programme. In addition, given the constraints on NHS training budgets, the game will be promoted as a cost-effective training resource throughout the UK. The game will be updated based on feedback and best practice. In 2023, outreach will be expanded into India with a Hindi translation of the game.

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**Supplementary Materials:** The material is available at https://www.mdpi.com/article/10.3390/msf2022015012/s1, Conference Poster: Developing a Board and Online Game to Educate on Antimicrobial Resistance and Stewardship.

**Author Contributions:** Conceptualization, F.G., D.A.-O. and S.C.; data curation, F.G., M.N., S.C., D.A.-O. and M.B.; methodology, F.G., M.N. and D.A.-O.; project administration, M.N., S.C., M.B. and F.G.; supervision, F.G.; validation, F.G.; writing—original draft, F.G., S.C. and M.N.; writing—review and editing, D.A.-O., M.N., M.B., S.C., F.G. and V.R. All authors have read and agreed to the published version of the manuscript.

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**Institutional Review Board Statement:** Ethical approval was not required as per NHS Health Research Authority guidance and the NHS health research decision tool because this was a service evaluation of CPA's programme of activities to develop and implement the AMS game as part of the CwPAMS programme. All respondents participated strictly in their professional capacity, no identifiable data were collected, and their participation in the survey was in all cases on the basis of informed consent.

**Informed Consent Statement:** Informed consent was obtained from all participants involved in the study.

Data Availability Statement: Data are contained within the article or Supplementary Material.

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