

Proceeding Paper

# Antibiotic Amnesty: Engaging with the Public across the Midlands Region of England <sup>†</sup>

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**Abstract:** Antimicrobial resistance (AMR) is a major public health threat. The hoarding, sharing and unsafe disposal of unused or expired antibiotics in domestic waste streams or sewage systems by patients may contribute to the risk of acquiring or spreading antibiotic-resistant bacteria. Community pharmacies in the UK accept returned medicines for safe disposal, including antibiotics, but awareness of this is low. We organised an antibiotic amnesty campaign in the Midlands region of England; the aim of the campaign was to raise awareness of the risks of AMR and highlight the safe disposal of antibiotics via community pharmacy, timed to coincide with World Antimicrobial Awareness Week in November 2021.

**Keywords:** antimicrobial resistance; antibiotic; antibiotic amnesty; community pharmacy; antimicrobial stewardship; awareness

## 1. Project Overview

An Antibiotic Amnesty campaign for use across the Midlands was developed collaboratively by NHS organisations with Birmingham, Solihull and the Black Country, alongside members of the NHS England regional team. To engage the public locally, the amnesty was actively promoted via the lead Clinical Commissioning Groups (CCGs) involved, GP practices and participating community pharmacies using social media, website content and posters. Community pharmacy teams were invited to participate, with information on the campaign provided via an educational webinar and campaign resources were made available digitally.

The amnesty resource pack included resources in 13 languages and was made available for use across the Midlands, examples are shown in Figure S1. Participating pharmacies promoted the amnesty using the resources provided and had ‘amnesty conversations’ with the public about the appropriate use of antibiotics. Voluntary data collection by pharmacy teams took place from 15 to 30 November 2021 and included the number of parts or full packs of antibiotics returned, use of the TARGET antibiotic checklist [1] (linking in with the Pharmacy Quality Scheme [2]) and the number of ‘amnesty conversations’ held. The Local Pharmaceutical Committee (LPC) and Local Authority (LA) collaborated to provide support for the implementation of the project.

## 2. Outcomes and Impact

The main impact of the campaign was through public engagement, providing an important antimicrobial stewardship (AMS) public health message. Over 7800 members of the public were conversed with, raising awareness of the threat of AMR in addition to the appropriate use of and the safe disposal of antibiotics (Table 1).



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**Table 1.** Outcomes from the community pharmacy based antibiotic amnesty campaign.

Outcome	Number
'Amnesty conversations' with patients and public during the amnesty campaign	7846
TARGET antibiotic checklists completed during the amnesty campaign	4600
Number of full packs of antibiotics returned	126
Number of part packs of antibiotics returned	369

Secondly, there were just under 500 packs or part packs of antibiotics returned for safe disposal. This prevented potentially unsafe disposal of antibiotics, for example, down toilets, sinks or in domestic refuse, and subsequent contamination of the environment. The amnesty also reduced the possibilities of people saving antibiotics for later or sharing them with others, and the subsequent consequences on health and AMR from this.

The final impact of the campaign was the greater collaboration of organisations across the local systems. The development and delivery of the campaign saw collaboration with and engagement from 240 community pharmacy teams, local commissioning and provider organisations, the NHS England regional team, Local Authority, Local Pharmaceutical Committees and other key stakeholders.

### 3. Future Development

Future development of this campaign involves building on the success of and lessons learned from the 2021 campaign. The aim of future developments will be to increase public engagement by enlisting the support of a wider group of organisations to advertise the campaign to both staff and members of the public. We also plan to include dental surgeries, local NHS Trusts, local universities and local veterinary practices in promoting the campaign; by collaborating with the latter, we aim to include pet owners in the campaign.

We plan to work with local universities to develop and implement pharmacy undergraduate student projects to gather more detail about returned antibiotics. We also plan to trial a public survey using QR codes to gather more qualitative information on patient engagement, attitudes and beliefs about AMR and the impact of the campaign. More considered data collection criteria will enable us to better understand public behaviour around antibiotics and evaluate the campaign more thoroughly.

Furthermore, we hope to develop a post-campaign feedback survey for community pharmacies, to understand their thoughts on what aspects of the campaign could be improved and which went well. By collaborating with the Royal Pharmaceutical Society to host and share campaign resources on their website, we hope to enable other organisations to run similar campaigns and share the resources across England, the rest of the United Kingdom and internationally.

**Supplementary Materials:** The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/msf2022015010/s1>, Figure S1: Examples of resources provided for promotion the campaign; Conference Poster: Antibiotic Amnesty: Engaging with the public across the Midlands region of England.

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2. Pharmacy Quality Scheme (PQS) 2021/22. Available online: <https://www.nhsbsa.nhs.uk/pharmacy-quality-scheme-pqs-202122> (accessed on 14 December 2022).

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