

Table 1. The Core Outcome Set for use in clinical trials aimed at improving antimicrobial stewardship in care homes

Outcome	Outcome definition	Recommended outcome measurement instrument
<i>Delivery of care</i>		
The total number of antimicrobial courses prescribed	The total number of antimicrobial courses that are prescribed for care home residents over a period of time (e.g. over a month, or a year).	'Incidence of antimicrobial use' is defined as the number of antibiotic courses started per 1000 resident-days. This can be calculated by the following formula: (Number of antimicrobial courses started / number of resident-days) × 1000
Days of therapy per 1000 resident-days	The duration (in days) of antimicrobial courses that are prescribed for care home residents, standardised to 1000 resident-days	'Rate of antimicrobial days of therapy per 1000 resident-days' can be calculated by the following formula: (Number of antimicrobial days of therapy / Number of resident-days) × 1000 It is noted that this OMI should be applied separately for antimicrobials for treatment of infection and prevention of infection (infection prophylaxis).
Appropriateness of antimicrobial prescribing	Antimicrobial courses that are prescribed in accordance with the best available evidence and are suitable for a patient, taking their medical history and medical conditions (including infection) into consideration.	OMI not available
<i>Mortality/ survival</i>		
Mortality related to infection	The number of deaths of care home residents related to infection	OMI not available
<i>Infection</i>		
Rate of antimicrobial resistance	The number of cases in which antimicrobial-resistant bacteria are identified	OMI not available

USING HUMAN-CENTRED DESIGN TO DEVELOP INNOVATIVE APPROACHES TO IMPROVE DELIVERY OF BRIEF INTERVENTIONS IN PRIMARY CARE: THE HEALTHIER PROJECT

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Introduction: A priority action of the Healthy Ireland implementation plan is the Making Every Contact Count initiative (MECC) that aims to leverage the 30 million annual contacts with the healthcare system by asking every health worker to deliver brief interventions [1]. Benefits of brief interventions are well established, but GPs and pharmacists report challenges implementing them in practice including limited training, time, and poor fit with existing practices [2].

Aim: This government-funded Sláintecare project aimed to develop a novel method for brief interventions in pharmacy/GP settings using human-centred design.

Methods: User research was carried out with twelve users, including patients (3), GPs (4), and pharmacists (5) to identify their needs and priorities. Participants were recruited via email using a purposive sampling approach and completed semi-structured interviews with a design researcher. All participants invited agreed to participate. Next, a series of design sprints were completed with the research team. Design sprints allowed the team to integrate insights from user research with findings from a literature review/secondary research to understand pain points, identify stakeholder and user goals, and develop a list of initial design specifications. This list was used to develop and iterate a series of prototype solutions. Prototype service blueprints and wireframes (simple, two-dimensional schematic illustrations of the digital interface) were developed and tested with users before final versions were agreed.

Results: Findings from the interviews and literature review indicated (1) the main barrier to adoption was time, (2) patients and pharmacists were very positive about brief interventions with GPs more hesitant, (3) an approach blending technology with a consultation was preferred, and (4) having a specific list of local supports was important. Prototyping

and evaluation processes identified that a simple interface with a clear indication of progress were preferred.

A blended intervention combining a tablet-based digital tool and structured interaction was developed. The interface was designed to maximise use of patient and healthcare professional time, and mapped to the 5As approach (which is underpinned by principles of motivational interviewing, shared-decision making, and readiness to change frameworks). The HealthEir digital tool enables patients to self-complete the Ask, Advise, and Assess phases of a brief intervention using a tablet device while waiting to see their pharmacist/GP. The pharmacist or GP then review the patient's responses, risk level, and importance confidence and readiness scores. They complete the Assist and Arrange elements during the consultation, supported by a directory of local/national patient support services before printing information tickets for the patient to keep. The HealthEir intervention has been successfully rolled out at eight pilot pharmacy sites nationally, with a mix of urban/rural sites, and independent/chain pharmacies.

Conclusions: Adopting an interdisciplinary approach based on human-centred design principles led to the development of a blended brief intervention that has been successfully introduced in pilot sites across Ireland. While the implementation has been smooth despite COVID-19 challenges, and initial feedback has been very positive, the impact cannot yet be fully evaluated as research is ongoing. Future work will involve extending the intervention to include other healthcare professionals.

References

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2. Keyworth C, Epton T, Goldthorpe J, Calam R, Armitage CJ. 'It's difficult, I think it's complicated': Health care professionals' barriers and enablers to providing opportunistic behaviour change interventions during routine medical consultations. *British journal of health psychology*. 2019 Sep;24(3):571–92.

TECHNOLOGY

THE USE OF FACEBOOK IN A COMMUNITY PHARMACIST-LED WEIGHT MANAGEMENT PROGRAMME – A LONDON-BASED PROOF OF CONCEPT STUDY

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Introduction: In the United Kingdom (UK), 63% of adults are overweight,⁽¹⁾ costing the NHS £6.1 billion/year. With the public using digital technology over healthcare professionals (HCPs) for health advice, this warrants an investigation of technology use in community pharmacy, given its previous successful use.⁽²⁾

Aim: To determine the feasibility and perceptions of a community pharmacist (CP)-led weight management

programme (WMP), enhanced by a Facebook support group (FSG).

Methods: A proof of concept study was conducted between January-March 2020. Recruitment was via a pharmacy, the university and a community Facebook group. Inclusion criteria: over 18 years; overweight; no medical conditions. Participants attended face-to-face meetings (ftf) with a CP and final year pharmacy student (PS) on two occasions (0 (baseline) and 4 weeks). At baseline, participants were given the NHS weight loss programme and set weight loss goals. During ftf, participants had height, weight, and waist circumference (WC) measurements by a CP/PS and discussed eating habits, exercise and alcohol. In between ftf, participants accessed the FSG (created (December 2019) and moderated by a CP). Here, they received posts about diet, exercise and motivation. Participants were to have their measurements taken ftf at 8-weeks, however, COVID-19 meant participants had to self-declare these via video call. Following the 8-week programme, participants completed a 4-section survey about their experience (signing up to the service; comparison to previous weight loss attempts; the FSG and overall perceptions). Question types included multiple choice, Likert scale and free text comments. Data were analysed in Excel (Microsoft Corporation 2016) with changes in height, weight, waist circumference, alcohol and exercise being calculated.

Results: Fifty-five participants were recruited. 18 were lost to follow-up, most (n=12/18) citing COVID-19. Of the 37 participants remaining (70.3% female, mean age=37 years), 22 were obese, the rest overweight. Mean weight loss, mean percentage weight loss and mean WC reduction at 4-weeks was 1.6 kg (SD+/- 1.7 kg), 1.8% (SD+/- 1.9%) and 2 cm (SD+/- 1.96 cm) respectively. At week 8 measurements were self-declared. Mean weight loss at 8-weeks from baseline was 2.7 kg (SD +/- 2.6 kg) and mean percentage weight loss was 3% (SD+/- 3%). Only five participants' self-declared WC measurements at 8-weeks with mean reduction being 3.6 cm. Five participants moved to healthier BMI classifications by week 8. All participants accessed the FSG at least weekly with 13 accessing it daily. Diet posts were the most popular (n=20/37). Participants learned about portion control and increasing fruits/vegetables intake. All participants would recommend the programme to their friends/family.

Conclusion: An 8-week CPWMP, enhanced with FSG, supported participants to lose a mean of 3% body weight. Participants accessed the page regularly and were positive about its usefulness. One limitation was that the COVID-19 lockdown prevented the 8-week ftf, therefore, self-declared measurements were used. The pandemic has highlighted the importance of pharmacy embracing technology for service delivery, particularly when in-person contact is limited. The implication of this study is that it provides proof that the concept of digital service delivery could work in practice.

References

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