The Community IntraVenous Antibiotic Study (CIVAS): a mixed-methods evaluation of patient preferences for and cost-effectiveness of different service models for delivering outpatient parenteral antimicrobial therapy

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Plain English summary

The CIVAS mixed-methods evaluation

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Intravenous (i.v.) antibiotics are sometimes necessary to treat infections either because of the severity of the infection or because there is no effective oral (tablet) medication available. Many developed countries provide i.v. antibiotics to patients living in the community if they have no other need to be hospitalised. Such services, known as outpatient parenteral antimicrobial therapy (OPAT), have been slow to become established in the UK, with four different service models in existence [attendance at hospital outpatient departments, self-administration (SA) or carer administration, and either a specialist nurse (SN) or general nurse visiting the patient at home].

The aim of this project was to compare patient preferences for, and the cost-effectiveness (value for money) of, the different OPAT service models. We evaluated the existing literature and then carried out qualitative studies with both patients and health-care professionals to determine key aspects of OPAT services. This enabled us to develop a discrete choice experiment, a survey that presents respondents with multiple hypothetical choice tasks and collects data on their choices. These data were then analysed using choice models to measure the relative importance of the OPAT-related choices available to patients. We also collected anonymised data from participants undergoing OPAT through seven centres, which between them use all four service models, and we used two different health economics techniques to analyse which model was most cost-effective.

The results favoured the SN visiting at home, as that was preferred by most patients groups and was the most cost-effective, although SA did provide cost savings for longer treatments provided that patients were appropriately trained.
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