Implementation of pharmacogenomic testing service through community pharmacy in the Netherlands: results from an early service evaluation

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Abstract

Background: Community pharmacy services have evolved to include medical and pharmaceutical interventions alongside dispensing. Whilst established pharmacogenomic (PGx) testing is available throughout the Netherlands, this is primarily based in hospital environments and for specialist medicines. Aim: The aim of this work was to describe how best to implement PGx services within community pharmacy, considering potential barriers and enablers to service delivery and how to address them. Method: The service was implemented across a selection of community pharmacies in the Netherlands. Data was captured on test outcomes and through a pharmacist survey. Results: Following testing, 17.8% of the clinical samples were recommended to avoid certain medication (based on their current medicines use), and 14.0% to have their dose adjusted. Pre-emptive analysis of genotyped patients showed that the majority (99.2%) had actionable variants. Pharmacists felt confident in their operational knowledge to deliver the service, but less so in applying that knowledge. Delivering the service was believed to improve relationships with other healthcare professionals. Conclusion: These results add to the evidence in understanding how PGx can be delivered effectively within the community pharmacy environment. Training pharmacists in how to respond to patient queries and make clinical recommendations may enhance service provision further.

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