An investigation into international community pharmacy anticoagulation management services

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Warfarin is the world's most commonly prescribed oral anticoagulant therapy. It is used for the treatment and prophylaxis of venous thromboembolism which forms a vital part of the stroke prevention strategy for people with atrial fibrillation. Patients on warfarin therapy require regular monitoring to ensure the desire clinical effect is being achieved and in order to prevent adverse events occurring. Regular blood tests are carried out to determine the patients INR to ensure that it is within the target range which has been determined by their doctor. In Ireland, INR monitoring services are carried out in hospital-based clinics and in GP surgeries.

In order to keep patients within their target INR range, it is often necessary to adjust their warfarin dose. The process of INR monitoring and warfarin dosage adjustment is collectively known as anticoagulation management. There are a number of different models of anticoagulation management service but they are not all equal.

The use of warfarin in Ireland is increasing due to the ageing population and that fact that a larger proportion of elderly people will require anticoagulation therapy. There must be sufficient anticoagulation management services available in order to provide safe and effective treatment in the face of this increasing demand. The demand for hospital-based services is already placing a burden on the operation of outpatient departments. It is therefore clear that an alternate model of care delivery is required to provide a high quality, safe, cost effective and convenient service to patients.

It is widely recognised that community pharmacies are the most accessible location for patients within the healthcare service. There is a trend towards utilising community pharmacies in the delivery of an enhanced range of community-based services. The provision of community pharmacy anticoagulation management services is a prime example of this. There is a growing body of evidence that demonstrates that anticoagulation management services can be delivered safely and effectively in the community pharmacy setting.

The aim of this research was to study a number of community pharmacy anticoagulation management services to determine how these services were organised and how they operated. This information was gained through a detailed literature review process and by conducting semi-structured interviews with key personnel from the identified services. The emphasis of this research was on the health information systems and services utilised in the delivery of community pharmacy anticoagulation management services.

The research identified the main components required for the establishment of a community pharmacy anticoagulation service in Ireland. The readiness of the Irish health information infrastructure to support these components demonstrated that significant work and investment would be required to enable a state-of-the-art community pharmacy anticoagulation management service to be delivered in Ireland.