Dear Mr McMahon,

Thank you for providing me with the opportunity to comment on the reply from Birmingham University and Professor Fitzmaurice regarding our request for a National Service Delivery Model for Warfarin Patients.

**Introduction**

Whilst I appreciate Professor Fitzmaurice’s comments, I would like to point out both the limitations of the 2006 British Journal of Haematology article that he cited and the fact that more recent studies have also been published.\(^1\)

The research programme, as stated by the authors, was only a one year study and in terms of self-management clearly details that the initial cost of equipment and training etc. was front-end-loaded. This would mean that declining costs in subsequent years offered to patients were not able to be analysed due to the short period of the study. The authors also acknowledge that this study does not take into consideration the empowerment of patients, convenience to patient or the opportunity for longer term savings to the NHS. Finally, this study also did not take into account the needs of patients with long term conditions.

I refer to the comments from the study below:

“The costs in subsequent years for PSM patients will be lower than that reported in this paper as there will be no training costs and probably fewer assessment visits per year”.


**Latest evidence**

I would like to refer the committee to several more recent studies which I have detailed below:

**The University of Aberdeen, Health Economics Research Unit (HERU)**\(^2\)

Published in September 2015 by the HERU at the University of Aberdeen, the key research findings from this policy brief on the effectiveness of self-monitoring were that:

- Self-monitoring of coagulation status using a point-of-care testing device appears to be a safe and cost-effective option for people receiving long term vitamin K antagonist therapy who have atrial fibrillation or an artificial heart valve.
Self-management in particular was found to be associated with a significant reduction in thromboembolic events and could be cost saving compared to standard care from a health and social care perspective.


**County Durham & Darlington NHS Trust**

County Durham and Darlington NHS Foundation Trust (CDDFT) is one of the largest integrated acute and community services providers in England. CDDFT serves a population of around 600,000 people across County Durham, Darlington, North Yorkshire, the Tees Valley and South Tyneside. The Trust is commissioned by local Clinical Commissioning Groups (CCGs) to provide anti-coagulation services under an Any Qualified Provider (AQP) tariff. There are 2648 registered warfarin patients supported by the Trust across a number of locations including hospital outpatient clinics, community satellite clinics and in people’s homes.

CDDFT wanted to look for new ways to deliver quality care for patients on anti-coagulation, whilst improving efficiency and capacity. Following feedback from patients and clinical staff on how conventional clinic based approaches were constraining people's lifestyle choices, the Trust explored the telehealth concept.

A digitally enabled International Normalised Ratio (INR) care pathway was developed in collaboration with the patients, clinicians working in the anticoagulation clinic and the chief pharmacist. Feedback from the study from patients included:

- **Improved clinical outcomes:** The outcome from this self-testing / self-management pathfinder for a cohort of over 200 people demonstrated a 20% improvement in a patient’s time in therapeutic range (TTR) improved for 70% of those in the pathfinder. In comparison a control cohort of clinic based patients had seen only 49% of their cohort improve by an average of 2%. “This improved TTR performance when applied to national data would predict to save in the order of 400-500 strokes per annum,” says Ian Briggs, Associate Director of Business Development at CDDFT.

- **Increased Patient Satisfaction:** 100% of patients said they would recommend the service to others; patients saved money from travel costs and parking; and they had the ability to test whilst working away from home or on holiday.

The average anticoagulation clinic attendance in the Trust is 18 times per year saving 16 out-patient appointments per year, per patient. The self-testing patients can still contact the clinic Monday-Friday during working hours for additional support and advice if they need to.

National Institute of Clinical Excellence (NICE) Guidelines

NICE guidelines, updated in September 2014, recommend the use of some coagulometers by people taking long-term anti-blood clotting therapy if they prefer and are able to effectively use this type of monitoring.

“The evidence shows that greater use of self-monitoring offers clinical and patient benefit and, over time, is likely to result in reductions in heart attacks and strokes caused by blood clots,” says Professor Carole Longson, NICE Health Technology Evaluation Centre Director.


Currently David Patterson, Emeritus Professor of Cardiovascular Medicine, at University College London and his team have been setting up a service within London and I have requested Professor Patterson to forward you information regarding the delivery and background to this expanding service with excellent clinical results and patient outcomes.

Conclusion

Whilst I acknowledge the response from Professor Fitzmaurice I think it is imperative that we review more recent studies regarding self testing and the ongoing safe and effective self management of warfarin patients. Much of the more recent research has been supported by the National Institute of Health Research (NIHR). There is a serious inequality in the service delivery of warfarin self testing and self management across Scotland. Services should be as widely accessible and inclusive as possible to ensure that they contribute to tackling health inequalities.

The responses from our Health Boards would strongly suggest that this is not the case, with only 0.37% of warfarin patients self testing in Scotland and 10/12 of Health Boards who responded following no formal protocol. Therefore a standardised national approach should be adopted for the self testing and the self management of warfarin patients in Scotland to collect data, train, educate, evaluate, share best practice and provide a person centred care approach in line with the Scottish Government’s 2020 Vision, the self management strategy “Gaun Yersel”, NICE guidelines updated in September 2014, SIGN guideline 129 and The Royal College of Physicians Edinburgh Consensus Statement.

I would be grateful if the committee would review the updated evidence and studies as detailed and request the petition to be referred, if within the criteria, to the Health and Sports Committee.
Kindest Regards,

Mary Hemphill

Published on 21 August 2015. The NIHR Health Technology assessment adds to a substantial evidence base that supports self-monitoring and self-management of oral anticoagulation. Available online here:
https://discover.dc.nihr.ac.uk/portal/article?id=10.3310/hta19480