

Health Economic Evaluation of a Vascular Health Programme in Ireland

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Introduction: Croí, a registered Irish heart and stroke charity, has developed nationally recognised expertise in cardiovascular disease (CVD) prevention, through the delivery of the European Society of Cardiology (ESC) endorsed MyAction Programme. Launched in 2009, this community-based integrated primary and secondary prevention model has now reached over 1,100 individuals and is considered a national exemplar in preventive care. Given the current economic climate, is imperative that public sector organisations are also able to demonstrate their value for money.

Objectives: An independent health economic analysis was carried out to assess the costs and benefits, and estimate the net benefits of the Croí MyAction programme when compared to usual care.

Methods: The economic model drew on the clinical effectiveness data from the 617 participants with follow up data. To model was informed by the high retention rates at 1 year follow-up (86%) and utilised the following clinical outcome data: Smoking quit rate of 51%; 4.5 Unit increase in the Mediterranean Diet Score; Physical activity targets from 13% to 52%; Increase in blood pressure to target from 55% to 74%, with a mean reduction of 8.6mmHg (systolic) and 3.7mmHg (diastolic); and achievement of cholesterol targets from 39% to 70%, with a mean reduction in Total Cholesterol of 0.73mmol/L and LDL Cholesterol of 0.62mmol/L. Usual care was modelled on brief intervention and general practitioner consultation.

Results: Every €1 invested in Croí MyAction generates on average €8 in benefits. The benefits generated by the programme over the lifetime of an individual is €7,784 per person or €4.8m for the whole cohort. Of the €4.8m in benefits generated, €817,356 was in health cost savings. The economic case for Croí MyAction is stronger for secondary prevention, where benefits exceed costs both in the short and long term. Whilst there is still a compelling case in primary prevention the benefits are realised more longer term. The incremental cost effectiveness ratio (ICER) for Croí MyAction is highly dominant.

Conclusion: By adopting Croí MyAction over usual care there is both an improvement in life-years gained and a reduction in costs. This rigorous analysis provides a strong economic case for applying this protocol-driven, outcome focussed and integrated approach to managing atherosclerosis as a “single family of diseases” more widely.