

# NIPC

National Institute for  
Preventive Cardiology

**CR**♥**Í**  
*Fighting Heart Disease & Stroke*



NUI Galway  
OÉ Gaillimh



Leadership in the Prevention and Control of Heart Disease, Stroke, Diabetes and Obesity

# Informing the Transformation of Preventive Care in Ireland

- Outcomes from a 5 year community based CVD  
prevention programme

# Background

- By 2020 the prevalence of chronic diseases are expected to increase by 40% in Ireland (DOH, 2013)
- It is well established that up to 90% of CVD is preventable through modification of risk factors (Yusuf et al., 2004)
- Guideline implementation for the prevention of CVD is sub-optimal across Europe (Kotseva et al., 2015)
- Preventive cardiology should involve multidisciplinary teams of health care professionals, focusing on lifestyles of patients and their families (Kotseva et al., 2015)



# Purpose

Aim – To utilise the health promotion principles in the design and delivery of a CVD prevention programme over a 5-year period.



**CRoI**  
**MyAction**  
Making changes for a healthy you

**5 YEARS OF POSITIVE  
PATIENT OUTCOMES**

2009-2014

A Report Prepared by the  
National Institute for Preventive Cardiology

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# Croí MyAction Programme



- 12 to 16 week, intensive lifestyle & medical risk factor management programme with baseline, end of programme & 1 year follow-up
- Patient and partner attend for 2.5 hrs once per week
- Weekly MDT meeting with Physician
- Liaising with GP & Practice Nurse
- Adopts a settings-based approach to health promotion
- Underpinned by values such as empowerment, public participation, equity & partnership





# Croí MyAction Programme

## Effective project management approach taken:

- Needs assessment, planning, implementation and evaluation.
- Outcomes based on primary endpoints for lifestyle, risk factor and therapeutic goals (ESC 2012).

## Partnership and cross sectional work:

- Working with key stakeholders facilitating the integration of care - high risk of developing CVD (SCORE  $\geq 5\%$ ), newly diagnosed Type 2 Diabetes, TIA, Stroke.
- Academic institutions – Imperial College London (evidence base for MyAction was developed).
- Community organisations in recruiting lower socio-economic groups e.g. travelling community, homeless services and those living in rural isolation.



# Croí MyAction Programme

## Actively empowering people and communities:

- Individualised approach to behaviour change – techniques of MI, exploring barriers to changes, goal setting, use of personal record cards.
- Family-based approach – enrolling participants and partners.
- Focus on long-term maintenance of change.

## Equity of access:

- Programme is community based, removing the barriers associated with attending GP/hospital.
- Flexible programme schedule e.g. day/evening



# What has been achieved?

## Enabling change

- promoting patient empowerment, participation and partnership

| What has been achieved over a 5-year period? | Outcome   | Impact on CVD Risk  |
|--|---|---|
|  | Smoking quit rate of 51%  | 50% reduction in CVD events <sup>3</sup>  |
|  | Greater adherence to the cardio-protective Mediterranean Diet, with an increase in 4.5 units being observed   | 9% reduction in total mortality, CVD mortality and cancer <sup>4</sup>                    |
|  | Increase in physical activity targets from 13% to 52%   | 20-30% reduction in cardiovascular events <sup>5</sup>                                    |
|  | Improved aerobic fitness of 1.5 MET's   | 15-25% reduction in all-cause mortality <sup>6,7,8</sup>                                  |
|  | Increase in achievement of blood pressure targets from 55% to 73%, with a mean reduction of 8.6 mmHg (systolic) and 3.7 mmHg (diastolic) being observed                   | 20% reduction in risk of CHD <sup>9</sup><br>35% reduction in risk of Stroke <sup>9</sup> |
|  | Increase in 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 being observed | 15% reduction in CVD mortality and non-fatal myocardial infarction <sup>10</sup>          |

CVD, cardiovascular disease; CHD, coronary heart disease; MET, metabolic equivalent

<http://www.nipc.ie/research.html>



# What has been achieved?

## Advocating for Prevention - robust research outcomes

Original scientific paper

### Translating guidelines to practice: findings from a multidisciplinary preventive cardiology programme in the west of Ireland

Irene Gibson<sup>1</sup>, Gerard Flaherty<sup>1,2</sup>, Sarah Cormican<sup>2</sup>,  
Jennifer Jones<sup>1,3</sup>, Claire Keane<sup>1</sup>,  
Caroline Costello<sup>1</sup>, Jane V. O'Connell<sup>1</sup>  
and James Crowley<sup>1,5</sup>

Infanti et al. *Trials* 2013, 14:121  
<http://www.trialsjournal.com/content/14/1/121>

STUDY PROTOCOL

Open Access

An evaluation of Croí MyAction community lifestyle modification programme compared to standard care to reduce progression to diabetes/pre-diabetes in women with prior gestational diabetes mellitus (GDM): study protocol for a randomised controlled trial

Jennifer J Infanti<sup>1\*</sup>, Fidelma P Dunne<sup>1</sup>, Angela O'Dea<sup>1</sup>, Paddy Gillespie<sup>2</sup>, Irene Gibson<sup>3</sup>, Liam G Glynn<sup>4</sup>, Eoin Noctor<sup>1</sup>, John Newell<sup>5</sup> and Brian E McGuire<sup>6</sup>

European Journal of  
Preventive  
Cardiology



EUROPEAN  
SOCIETY OF  
CARDIOLOGY®

European Journal of Preventive

Cardiology

0(00) 1–11

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Cardiology 2013

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DOI: 10.1177/2047487313498831

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# MyAction is Cost Effective and Cost Saving

For every €1 invested in MyAction generates  
€8 in savings over a lifetime

- 617 participants generated **€817,356** in health cost savings.
- Benefits generated by the programme (cost savings + improvements in quality of life) exceed its costs by **€7,784 per participant (€4.8 million across the whole cohort)**



# Bridging the Implementation Gap



# Conclusion

- Croí MyAction is the first CVD prevention programme of its kind in Ireland.
- Croí MyAction is delivering a unique evidence-based service model that is effectively implementing best-practice in achieving CVD prevention guidelines and represents an efficient use of resources.
- It is delivering to the recommendations of the National CV Health Strategy and the National Integrated Care Programme for Chronic Disease Prevention and Management.
- Programme success is due to its application of health promotion principles which also align to the Healthy Ireland framework for improved health and well-being.



# THANK YOU



**National Institute for Preventive Cardiology**

Croí Heart and Stroke Centre

Moyola Lane

Newcastle

Galway

Telephone 091 893299

Email [info@nipc.ie](mailto:info@nipc.ie)

[www.nipc.ie](http://www.nipc.ie)

