ESC Prevention of Cardiovascular Disease Programme

Phase I: Secondary Prevention after Myocardial Infarction

Survey on existing gaps between knowledge & implementation

SUMMARY REPORT

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EAPC European Association of Preventive Cardiology

ESC COUNCIL Cardiovascular Nursing and Allied Professions

Acute Cardiovascular Care Association ACCA

EUROPEAN SOCIETY OF CARDIOLOGY®

Led by the **European Association of Preventive Cardiology (EAPC)**
in collaboration with the **Acute Cardiovascular Care Association (ACCA)**
and the **ESC Council on Cardiovascular Nursing and Allied Professions (CCNAP)**

SURVEY STEERING COMMITTEE

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BACKGROUND & AIM

1 in 5 people who survive a Myocardial Infarction has a second cardiovascular event in the first year - even when receiving optimal treatment and care. [1] Up to 45% of deaths following a Myocardial Infarction could be prevented with the correct secondary prevention strategy. The personal suffering and morbidity behind these statistics compel us to call for action to reduce this burden and its consequences: effective secondary prevention measures after Myocardial Infarction play a crucial role in this battle.

Therefore the European Association of Preventive Cardiology (EAPC) in collaboration with the Acute Cardiovascular Care Association (ACCA) and the ESC Council on Cardiovascular Nursing and Allied Professions (CCNAP) have decided to address this challenge with a dedicated programme on **Secondary Prevention after Myocardial Infarction.**

A survey was conducted from October to December 2015 in the framework of this programme to understand the needs and assess the existing gaps between knowledge and implementation among healthcare professionals in selected representative countries, in order to inform the development of adapted management tools and educational activities.

[1] Jernberg, EHJ 2015

METHODS

An international survey targeting a population of up to 30 000 healthcare professionals with a potential interest in Secondary Prevention and Cardiac Rehabilitation was performed across 11 selected countries* where the current picture of secondary prevention is different, significant and in need for major improvements. Data were collected using a questionnaire on perceived barriers and needs, country specific information, information on daily practice of respondents in regular contact with cardiac patients and on respondents' profile.

The survey was disseminated via e-campaigns, individual and grouped emails to relevant contacts, publications on ACCA & EAPC LinkedIn Groups, and promotion on ESC website.

*Nine countries were selected among ESC member countries who participated to the Country of the Month initiative covering northern, eastern, western and central Europe (France, Germany, Italy, Poland, Russia, Spain, Sweden, Turkey and United Kingdom) plus two ESC Affiliate countries: China and Brazil.

RESULTS

Population Background

A total of 831 responses were collected with the following distribution:

- 657 participants from targeted countries
- 150 participants from non-targeted countries
- 24 participants did not state their country of work

The majority of respondents were male (65.0%) and 53.4% were aged 36-55 years old. 75.2% were cardiologists or cardiologist trainees. The proportion made up by nurses (7.2%) and general practitioners (4.2%) was relatively low but fairly representative of the proportion of these two professions from the original targeted group.

General cardiology, Cardiac rehabilitation & prevention, Interventional cardiology and Acute cardiology were all well represented as areas of specialism (*figure 1*).

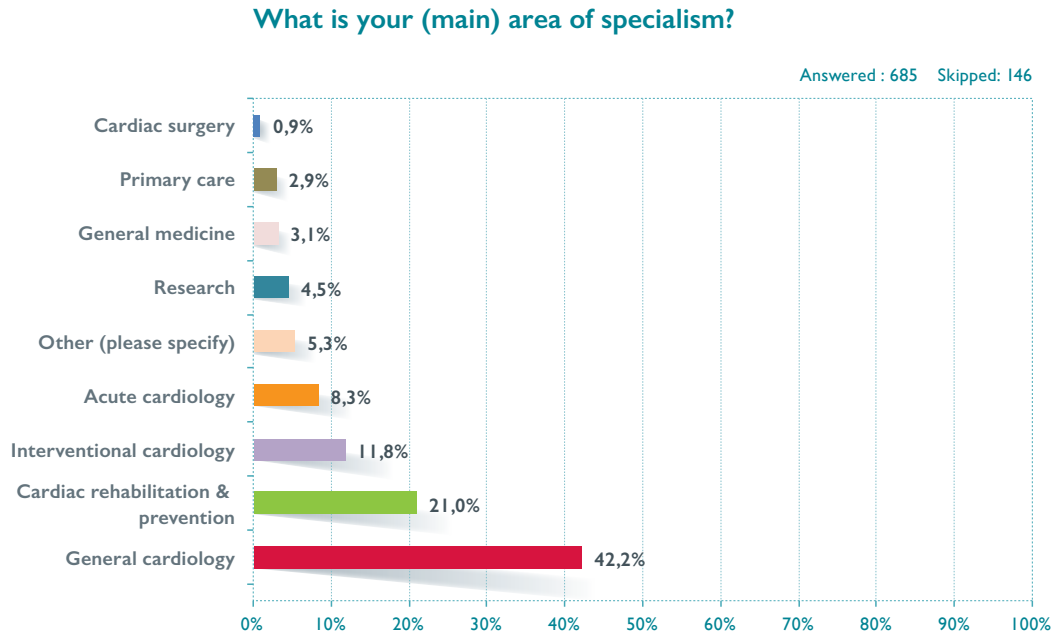

Figure 1. Main area of work-specialty

Importance & Motivation to be engaged in Secondary Prevention in daily practice

Most responders were motivated and actively engaged in secondary prevention in their daily practice, with 91.3% in regular contact with cardiac patients. On a five-point scale with 5 being the highest, the weighted average score regarding importance of secondary prevention in daily practice was 4.6 and the motivation to be engaged in secondary prevention in daily practice was 4.5.

Patient Adherence & ESC Role for Education

Close to 90% thought patient adherence to secondary prevention (both medication & lifestyle) would benefit from better education of professionals working with cardiac patients and 81% saw a role for educational tools for patients and professionals provided by the ESC and adapted to their country.

More than half of respondents identified six key areas in need of better educational tools to achieve guidelines goals. These areas were, in order of priority: Physical activity, Smoking, Motivational counselling for behavioural changes, Nutrition, BMI/weight, and Dyslipidemia (*figure 2*).

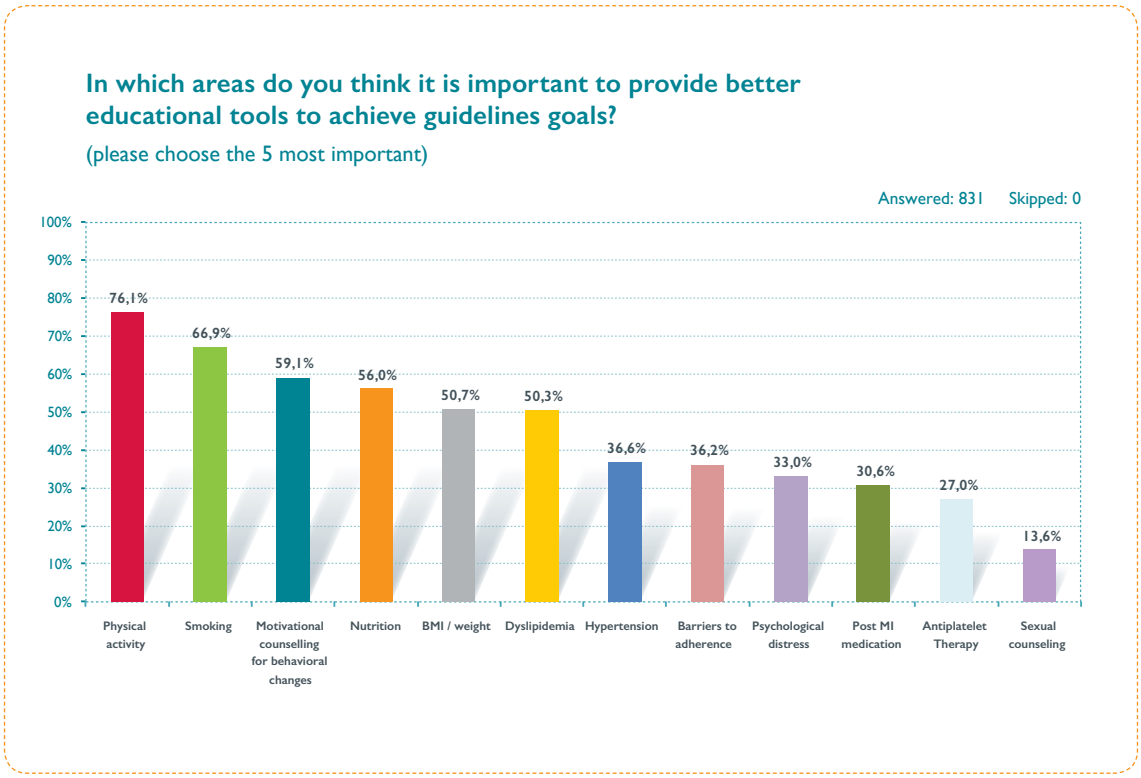

Figure 2. Educational needs assessment to achieve guidelines goals

The results also identified tools that may improve secondary prevention after Myocardial Infarction (*figure 3*). The four most important areas endorsed by 50% or more of respondents were:

1. Awareness and educational resources for patients
2. Multidisciplinary programmes
3. Monitoring of performance measures
4. Adapted educational activities for Health Professionals

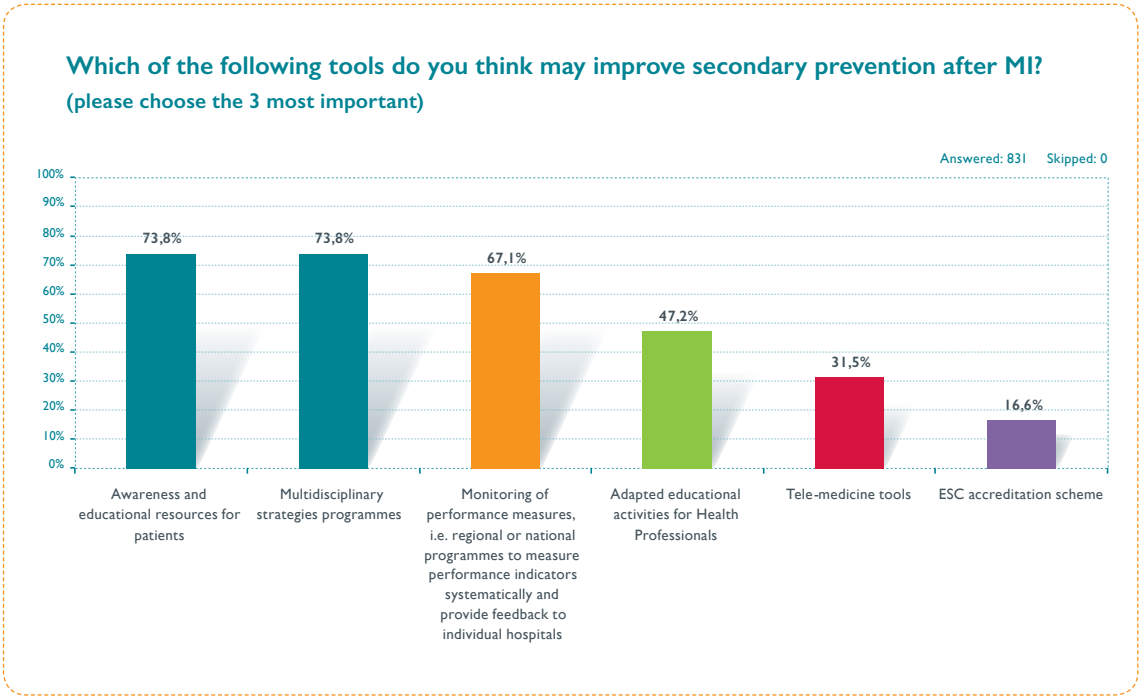

Figure 3. Tools that may improve secondary prevention after Myocardial Infarction

Main Barriers to achieve guideline goals

The survey identified 5 main barriers to achievement of guidelines goals regarding secondary prevention (*figure 4*):

1. Lack of availability of cardiac rehabilitation programmes
2. Lack of structured long-term follow-up
3. Patient disease perception
4. Lack of perceived importance of secondary prevention among professionals
5. Lack of referral to cardiac rehabilitation programmes

Importantly, lack of national guidelines on CVD prevention was not perceived as a barrier.

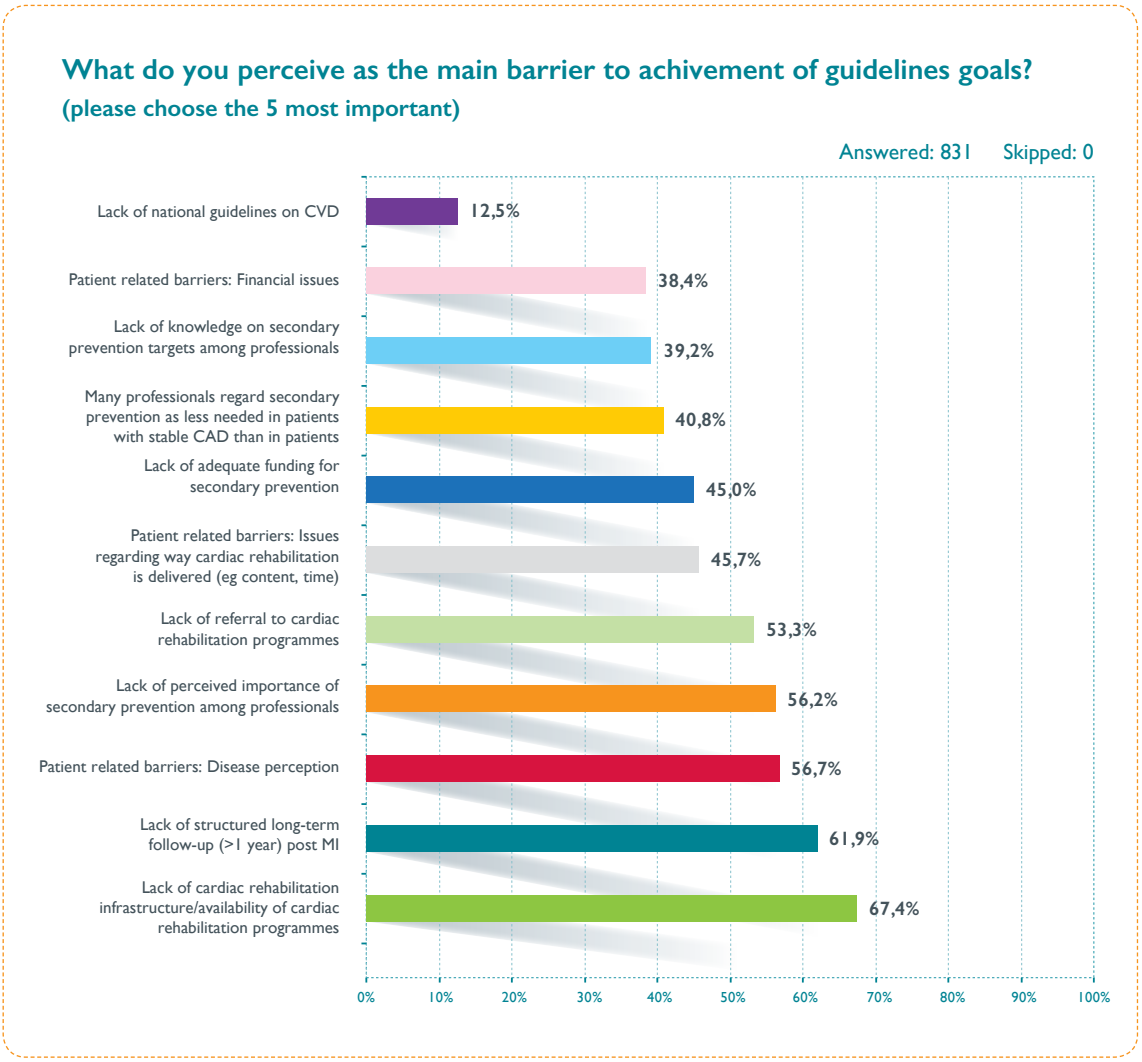

Figure 4. Main barriers to achieve guidelines goals

Availability of multidisciplinary cardiac rehabilitation programme

Overall 52% of participants indicated having a multidisciplinary cardiac rehabilitation programme generally available in their country. However, there was considerable variation between countries, ranging from 25% in Brazil to 90% in the United Kingdom (*figure 5*).

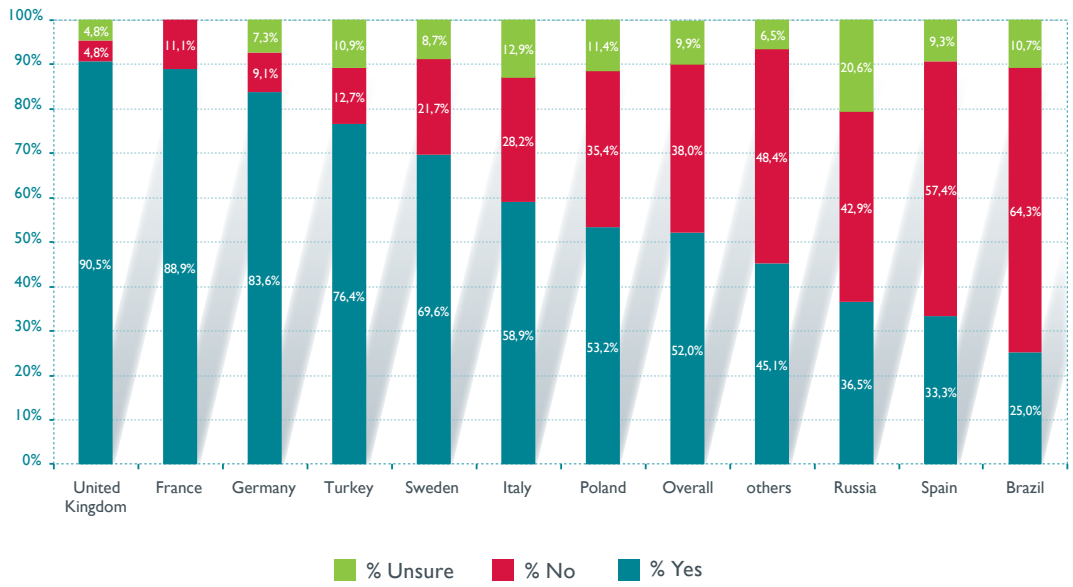

Figure 5. Availability of multidisciplinary cardiac rehabilitation programme, broken down by country

Knowledge of national secondary prevention guidelines

Overall, 55.9% thought professionals working with cardiac patients knew the secondary prevention guidelines recommended in their country. However, the proportion showed considerable variations and it was low in the following countries:

- Brazil at 39.3%
- Turkey at 29.1%
- Other non-targeted countries at 24.2%
- Italy at 21.8%
- Germany at 20%

Proportion of patients following guidelines' recommendations

The vast majority of respondents (75.6%) estimated less than 80% of their patients reach treatment targets. Most respondents (67.3%) thought 30% or less of patients in their country participate in a cardiac rehabilitation programme after myocardial infarction. Similarly, 81% of respondents believe 30% or less of their patients with stable CAD participate in a cardiac rehabilitation programme. Also, compliance to pharmacological therapy was regarded as low: a majority of respondents estimated less than 70% of patients receive lipid lowering medication for 2 years following an MI event. This also showed considerable variations between countries, ranging from 50% in Spain to 97% in Russia. The break down per country is shown in *figure 6*.

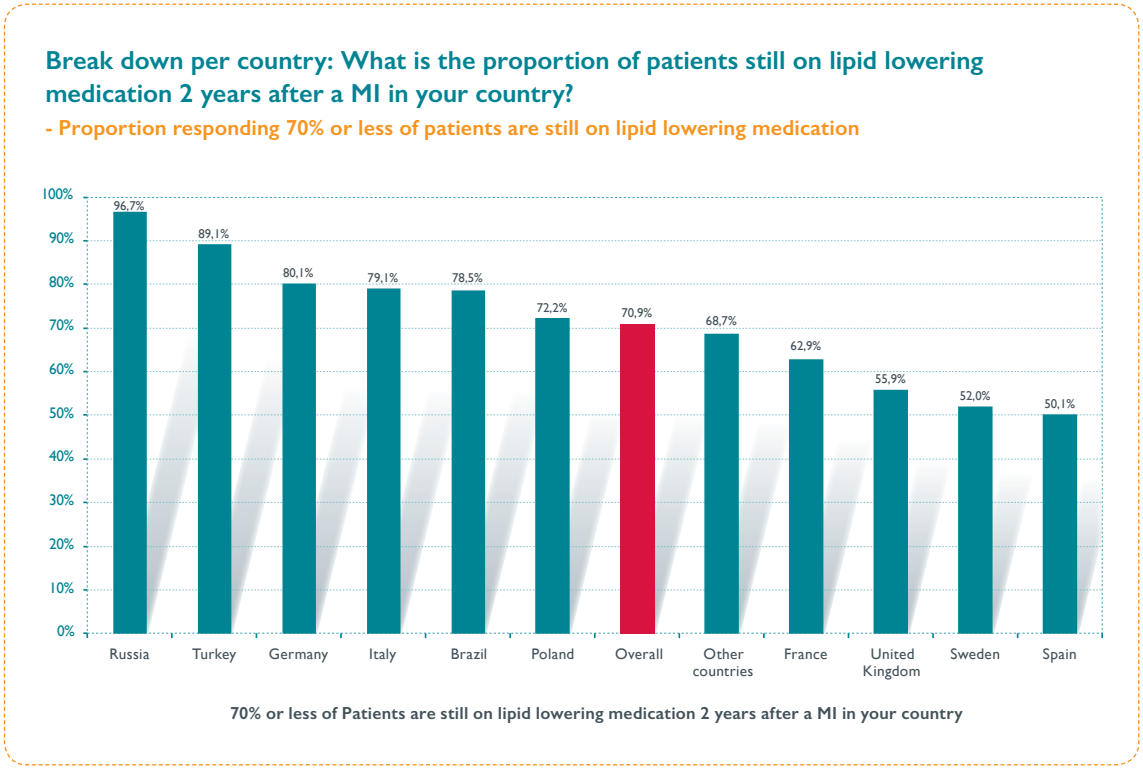

Figure 6. Break down per country: 70% or less of patients are on lipid lowering medication 2 years after MI

Long-term follow-up of patients post-MI

In order to target the professionals in charge of secondary prevention the survey asked who was responsible for long term follow-up of patients after MI. Overall, 55.2 % cited outpatient-clinic cardiologists and 32.2% General Practioners (GPs). Cardiologists were responsible in most countries with the notable exceptions of Sweden (70.6%) and United Kingdom (84.2%) cited GPs as responsible for the long term follow-up.

CONCLUSION

The survey achieved responses from a sufficient number of healthcare professionals engaged in secondary prevention of cardiac patients to reach conclusions with confidence.

The survey indicates that the strategy of the ESC in providing guidelines and the adaptation of these to national guidelines have been highly successful. Lack of national guidelines was not listed as a main barrier to secondary prevention.

The survey confirms that less than optimal secondary prevention remains a contributing factor to the risk of recurrent events in patients with MI. Low participation rates in cardiac rehabilitation and low confidence in achievement of secondary prevention goals were confirmed.

Additionally, the lack of perceived importance of cardiac rehabilitation and secondary prevention for patients with stable CAD identified areas of concern. Moreover, the lack of perceived importance of secondary prevention among professionals identified areas in need of attention.

The following areas in need of attention to improve secondary prevention were identified:

- Increased availability of CR programmes
- In some countries: increased financial resources coming from raised awareness of the cost-benefit implications of such allocation of resources
- Improved structured long-term follow-up of patients post-MI
- Introduction of national performance measures for CR and secondary prevention
- Improved collaboration and communication between hospitals, cardiologists and GPs in shared care of the patient
- Increased patient and family awareness of the importance of secondary prevention, in particular life-style adaptations by patient and family involvement in education
- Tele-medicine tools, although not ranked in the top 3 most important tools needed to improve secondary prevention were identified by 31.5 % of the respondents

The educational tools that received the highest priority were mainly within behavioural and life-style factors (physical activity, smoking, nutrition, motivational counselling, body weight and dyslipidemia) whereas the perceived need for education in risk factors managed pharmacologically (i.e., treatment of hypertension, antiplatelet therapy and medical treatment after MI) was less prominent.

Accreditation is not perceived to have a direct impact on patient care (identified by only 16 % of the respondents).

RECOMMENDATIONS

The European Society of Cardiology (ESC) can play an important role by:

- Developing adapted educational activities and management tools for healthcare professionals. The survey identified behavioural risk factors as areas in which development of educational tools should be prioritised.
- Providing resources for patients to have a more realistic perception of their disease.
- Developing strategies to empower patients to better understand the risk factors after MI and take a central role in their recovery: improve awareness by providing educational resources in their own language and include families in this approach.
- Explaining the role of each professional in the heart team, from the acute phase through to follow up care post-hospital discharge and establishing a robust multidisciplinary approach over the long term. This multidisciplinary approach should engage together: lifestyle changes and counselling for behavioural changes as well as adherence to evidence-based medication. Within this framework raising healthcare providers' perception of how important secondary prevention is in reducing morbidity remains crucial.
- The survey identified the lack of perceived importance of secondary prevention among healthcare professionals as a barrier. Providing continued attention to secondary prevention and reiterating among healthcare professionals the importance of secondary prevention is the key.
- Implementing tools and adapted continuous educational activities for all healthcare professionals involved in order to improve the way secondary prevention is delivered from the hospital stay through long term follow-up.
- Developing a strategy to engage general practioners and nurses - who play a major role in the success of effective secondary prevention – to participate in educational activities. Also, the ESC may engage in a secondary prevention programme targeting general practioners and other primary care providers, cardiologists and cardiovascular specialists, nurses and other allied health professionals, multidisciplinary cardiology teams in hospitals.
- Improving the monitoring of performance measures regarding medical treatment and physical condition of the patient.

The Survey Steering Committee would like to thank:

- Prof. Eva Prescott (EAPC), Prof. Donna Fitzsimons (CCNAP), Ms. Mary Kerins (CCNAP), Prof. Héctor Bueno (ACCA 2014-2016 President), Prof. Lale Tokgözoğlu (Turkish Society of Cardiology President), Prof. Antonio Pelliccia (EAPC 2014-2016 President), and Dr. Catriona Jennings (CCNAP 2014-2016 Chairperson)
- Prof. Joep Perk (EAPC 2014-2016 Prevention Implementation Committee Chairperson)
- Prof. Arno Hoes (ESC Council on Cardiovascular Primary Care and EAPC 2016-2018 Prevention Implementation Committee Chair)
- EAPC National CVD Prevention Coordinators and National Cardiac Societies

INDEX

CAD: Coronary Artery Diseases
CR: Cardiac Rehabilitation
CVD: Cardiovascular Diseases
ESC: European Society of Cardiology
GP: General Practitioners
MI: Myocardial Infarction

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