CVD Prevention Guidelines implementation roadmap

Practice oriented guidance document from the ESC Prevention of CVD Programme

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2019
Outline of the road map

1. Background

2. Objectives

3. Implementation barriers
   • General guideline implementation barriers
   • Prevention guidelines implementation barriers in ESC affiliated countries
   • Risk factor management in ESC affiliated countries

4. Implementation strategies
   • European
   • National
   • ESC support

5. Annex: national implementation checklist
Annex 1: Implementation checklist

Guideline implementation: a clear defined implementation strategy

5 basic steps:

1. Needs assessment: identify target groups and stakeholders
2. Define objectives: desired changes in behavior and environment
3. Selection appropriate strategies
4. Creation of implementation plan
5. Evaluation of the outcomes

NB Adoption, adapt and implement prevention guidelines
First: General implementation barriers

Guideline implementation by professionals is hampered by 3 groups of factors*:

<table>
<thead>
<tr>
<th>Healthcare personnel</th>
<th>Guideline related</th>
<th>Environmental related</th>
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<tbody>
<tr>
<td>• Knowledge: lack of guideline awareness, education and familiarity</td>
<td>• Lack of evidence-based quality and plausibility of the recommendations</td>
<td>• Organizational constraints: limited time, shortage of personnel and resources and work pressure</td>
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<tr>
<td>• Attitudes: lack of perceived importance, agreement, skills (e.g. counselling), and motivation</td>
<td>• Complexity, layout, accessibility and applicability of (multiple?) guidelines</td>
<td>• Limited support from co-workers or superiors</td>
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<td></td>
<td>• Guidelines not adjusted to the level of all stakeholders</td>
<td>• Lack of structured long-term follow-up</td>
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* These barriers are not all specifically linked to the ESC prevention guidelines 2016
Examples other implementation barriers:

- Lack of **patient** adherence and disease/risk perception
- Too many players involved (EU, national/local governments, national (cardiac) societies, industry, ...)
- Guideline beneficiaries are a very large group; vast majority are healthy
- Many healthcare professions/organisations involved: WHO IS THE “OWNER”? 
- Unhelpful **government health policies** (e.g. no preventive culture, cardiac rehab)
ÖSTERREICH

Parlament kippt Rauchverbot in Gastronomie

AKTUALISIERT AM 22.03.2018 - 15:58

Die schwarz-rote Vorgängerregierung hatte ein Rauchverbot in Österreichs Kneipen und Restaurants beschlossen. Noch bevor es in Kraft treten konnte, hat die neue Koalition aus ÖVP und FPÖ das Verbot nun gekippt.
Guideline implementation barriers in Poland

- Major **patient-level barriers**: population ageing; lack of benefits awareness; low socio-economic status, and *fake news in (social) media*

- Major **staff-level barriers**: no financial incentives; lack of automatic referral system; too time consuming; no long-term follow-up

- Major **healthcare-level barriers**: lack of specialized locations, lack of funding for prevention and rehabilitation
The countries coloured on this map represent the 8 countries with the highest prevalence for each risk factor (hypertension, smoking, dyslipidaemia, physical activity and obesity).

Some countries have among the highest prevalence for multiple risk factors.
Blood pressure at target level
Risk factor management of high CHD risk patients in Poland

Blood pressure at target value: 53% (Range across Europe: 37%-68%)

Smoking prevalence: 18% (Range across Europe: 10%-42%)

LDL at target value: 36% (Range across Europe: 10%-55%)

Obesity prevalence: 31% (Range across Europe: 16%-47%)

Insufficient physical activity: 66% (Range across Europe: 27%-85%)

Green: Among best performers in Europe
Orange: European average
Red: Risk factors that need more attention

Data sources: EuroAspire 5 (hospital arm), Surf 1 & other surveys
# Implementation strategies

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<tr>
<td>Publication in high quality journals</td>
<td>• Define a clear dissemination strategy</td>
<td>• Active learning through experts</td>
<td>• Ensure equal access to healthcare structures and improve reimbursement</td>
<td>• Evaluate and audit outcome of guideline implementation</td>
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<td>Reduce guideline complexity (short and user friendly)</td>
<td>• At international conferences</td>
<td>• Continuing education</td>
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<td>Include co- and multimorbidity</td>
<td>• Raise awareness among national (cardiac) societies &amp; healthcare professionals</td>
<td>• Use of guideline implementation tools</td>
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## Implementation strategies

### National strategies

<table>
<thead>
<tr>
<th>1. Development</th>
<th>2. Dissemination</th>
<th>3. Education &amp; tools</th>
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<tr>
<td>• Adapt guidelines to fit local culture/context</td>
<td>• At interactive national conferences</td>
<td>• Educational tools, resources and programmes for HCP and patients (especially in behavioural and lifestyle factors)</td>
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<tr>
<td>• Provide enough time to learn, implement and utilize guidelines in practice</td>
<td>• Trough implementation groups</td>
<td>• Automated decision systems &amp; standing orders</td>
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<td>• Increase availability of CR programmes</td>
<td>• Multi-faceted communication strategy (target all stakeholders, including schools)</td>
<td>• Train educators in communication skills and coaching</td>
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<tr>
<td>• Invest in infrastructure and improve coordination of preventive services</td>
<td>• Multi-professionals collaboration with other healthcare professionals</td>
<td>• Motivate adherence</td>
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1. Development
2. Dissemination
3. Education & tools
### Implementation strategies

#### National strategies

- **4. Advocacy**
  - Improve visibility, reimbursement & budget for CVD prevention in health care and insurance systems.
  - Collaboration between all parties interested in CVD prevention in clinical practice

- **5. Evaluation**
  - Improve evidence-based practice through local opinion leaders, to form the bridge between guideline developers and key local staff (through educational meetings, outreach visits, workshops, audit and feedback, etc).
  - Evaluate/audit outcome performance (e.g. by national joint task forces) through surveillance of risk factors, total CV risk, quality of life, CVD incidence and mortality data.
  - Directly influence attitudes towards guidelines via individualized audit and feedback.
  - Evaluate risk factor management with the Cardiovascular Health Index Score (CHIS).
  - Improve structured long-term follow-up of patients (post-MI).
Implementation strategies

Strategies to overcome the barriers can be divided in local/national strategies and European strategies.

ESC support

1. Development

- Task force for professional and qualitative guideline development with prevention experts
- Publication in EHJ
- Support local endorsement, translation and implementation through national CVD prevention coordinators (NCPC) and the ESC national guideline coordinators

2. Dissemination

- ESC congresses (+ ESC 365) & participating societies congresses
- Printed materials
- Multidisciplinary implementation groups (see further)
- EAPC prevention implementation committee
- Improve awareness among patients and HCP

3. Education & tools

- Tools: Guideline implementation toolkit, guidelines learning tool, CVD prevention toolbox, HeartScore, The Expert tool, risk management app (under development)
- Derivative products: pocket guidelines, guideline summary cards, ESC (pocket) guidelines app, guidelines into practise tracks, essential messages
- www.healthy-heart.org/
- Webinars, ESC organised and endorsed courses
- ESC e-learning platform (masterclasses,, etc)
- Engage general practitioners and other primary care providers in the ESC and in educational activities: ACNAP and primary care section of the EAPC
Implementation strategies

Strategies to overcome the barriers can be divided into local/national strategies and European strategies.

ESC support

4. Advocacy

- ESC Advocacy and Regulatory Affairs Committee
- European Heart Agency
- ESC cardiovascular realities 2019
- European Heart Health Charter
- Collaboration EHN, WHO, EAS, ...

5. Evaluation

- SURF risk factor audit
- EuroAspire
- EURObservational Research Programme
- ESC Atlas of Cardiology
- Country of the month report
- EAPC centre accreditation system
Multidisciplinary implementation groups

Forming of multidisciplinary implementation groups on a national level

• Consists of: professionals bodies, medical and other health professionals, scientists, educators, business people, politicians, etcetera
  o Coordination: 2 national co-ordinators; cardiologist and health service executive?

• Process: ESC asks Cardiac Societies to nominate national co-ordinator(s) to develop:
  o national guidelines
  o partnerships between politicians, health professionals, educators and business
  o defined communication strategy
  o evaluation strategy

• Requires high level political representation

• Cardiovascular prevention: OWNERSHIP?
Best practice? North Karelia project

North Karelia Project – An unrepeatable success story in public health

A few decades ago in eastern Finland, a dramatic reduction in the cardiovascular disease mortality rate was achieved through special circumstances: the same would not have worked elsewhere, nor would such a project gain similar success in contemporary Finland.

In the 1970s, cardiovascular diseases were more prevalent in Finland – particularly in eastern Finland – than in other countries. Public officials came to the conclusion that too many citizens were dying of heart attacks and decided to fight the risk factors. An experiment named after the eastern province of North Karelia was launched.

“The North Karelia Project, carried out from 1972 to 1995, was an immense health policy intervention,” summarises Johannes Kananen, a university lecturer in social work at the University of Helsinki.

The North Karelia Project is often presented as an international success story that progressed linearly from its commencement to the analysis of results. The further the project progressed, the lower the mortality rate related to cardiovascular diseases fell.