



## Seminar

# *‘Vocational Rehabilitation and Treatment of Depression and Anxiety in the Dutch guideline for Cardiac Rehabilitation’*

By Angelique de Rijk (chair and projectleader)  
and Twan van Stipdonk (project-researcher)

**PAAHR**

*Innovatie Psychische en  
Arbeidsgerelateerde Aspecten  
van HartRevalidatie*

# Why guidelines?

## Evidence-based

- Systematic search
- Evidence from literature
- Reported transparently
- Insufficient scientific proof → expert-opinions.

*'Evidence Based Richtlijnontwikkeling': handleiding voor werkgroepleden, CBO 2007*

# What does a guideline mean?

Users' issues

Not: 'Cookbook medicine'

Legal significance: not-binding

De patiënt geeft de hulpverlener naar beste weten de instructies en de medewerking die deze redelijkerwijs voor het uitvoeren van de overeenkomst behoeft.

## Artikel 453

De hulpverlener moet bij zijn werkzaamheden de zorg van een goed hulpverlener in acht nemen en handelt daarbij in overeenstemming met de op hem rustende verantwoordelijkheid, voortvloeiende uit de voor hulpverleners geldende professionele standaard.

## Artikel 454

1. De hulpverlener richt een dossier in met betrekking tot de behandeling van de patiënt. Hij houdt in het

à Caregiver can and even sometimes has to (with good argumentation and documentation) deviate from guideline recommendations

## But guidelines

- Make scientific information accessible
- Decrease variation in medicine
- Science-based medicine
- Make medicine more transparent

# Guideline development in the Netherlands

- ZonMW: Evidence-based  
National  
Multi-disciplinary  
Patient perspective  
Cost-benefit analysis  
Innovation guideline development (faster, cyclical)
- Promoted and (financially) supported by CBO and ZonMW
- Already tradition for general practitioners ('NHG-standards')
- Within different disciplines move to guidelines
- Re-inforced by changes in financing health care (e.g. declaration by DBCs, chaincare)

# Previous guideline cardiac rehabilitation '04

Earlier: 1995 and 2004  
by Dutch Heart Foundation (NHS)

## Four pillars

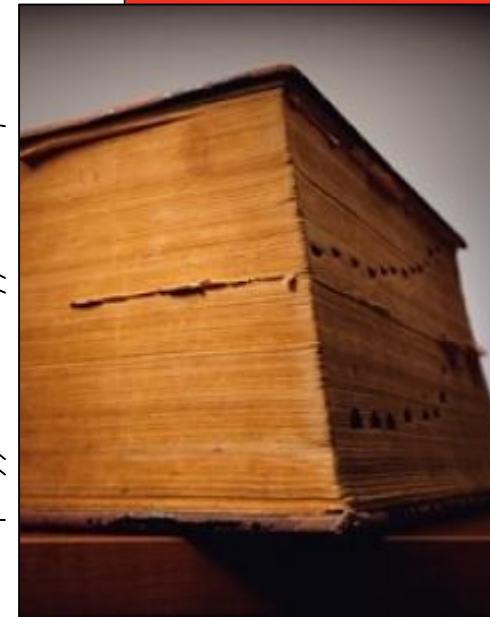
1. Physical rehabilitation
2. Lifestyle improvement
3. Psychological rehabilitation
  - Depression and anxiety
4. Social rehabilitation
  - Partner
  - Work



Hartrevalidatie is veelzijdiger geworden. De doelen en interventiemogelijkheden zijn uitgebreid. Vroeger stonden vooral werkherwinning en fysieke reconditionering centraal. Nu vormen ook secundaire preventie en psychosociaal herstel belangrijke doelen en aanrijpingspunten. Hartrevalidatie is multidisciplinair geworden. Een multidisciplinaire inzet is onmisbaar voor vraaggerichte zorg 'op maat' die rekening houdt met de aandoening, omstandigheden en behoeften van de patiënt.

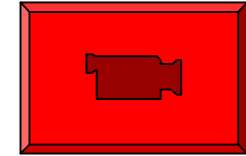
### Richtlijn Hartrevalidatie 2004

Revalidatiecommissie  
Nederlandse Vereniging Voor Cardiologie / Nederlandse Hartstichting



# Why a revised guideline?

- jan 08 to jul 08 -



## In practice noticed lack of

- Treatment of psychological and psychiatric conditions (depression and anxiety)
- Vocational rehabilitation

## Guideline 2004

- Not concrete, practical enough
- Should emphasize working multidisciplinary more
- New vocational rehabilitation guidelines from occupational physicians and insurance physicians
- New scientific evidence

## Project proposal initiated by Dutch Society for Cardiology (NVVC):

- “Multidisciplinary broadening cardiac rehabilitation guideline: cardiopsychiatric, - social and vocationalre-integration aspects” by NVVC,

by dr. Petra Kuijpers (Cardio-psychiatrist, MUMC+) and Angelique de Rijk

à Grant from ZonMW Kennisbeleid Kwaliteit Curatieve Zorg (KCZ)

# Putting practice into numbers: Rationale/Motivation

- Clinical depression and anxiety in 20% of patients after cardiac event (3-4 times more than general population)

*Prevalence of depression in survivors of acute myocardial infarction, Thombs et al., J Gen Intern Med 2006*

- Incidence of clinical depression up to 1 year after cardiac event remains 20%

Depression and coronary heart disease: recommendations for screening, referral, and treatment: a science advisory from the American Heart Association Prevention Committee of the Council on Cardiovascular Nursing, Council on Clinical Cardiology, Council on Epidemiology and Prevention, and Interdisciplinary Council on Quality of Care and Outcomes Research: endorsed by the American Psychiatric Association, Lichtman et al., *Circulation* 2008

- Risk of heart attack 2.69 times higher (comparable to smoking) in persons who suffer from clinical depression

*Depression as a predictor for coronary heart disease. a review and meta-analysis, Rugulies, Am J Prev Med 2002*

- 25% of patients with moderate-severe symptoms of depression after myocardial infarction are recognized as being depressed

*The prevalence of unrecognized depression in patients with acute coronary syndrome, Amin et al., Am Heart J. 2006*

- 75% successful vocational rehabilitation 1 year after heart attack

*Verzekeringsgeneeskundig protocol hartinfarct 2006*

- 80% unsuccessful social rehabilitation 1 year after heart attack

*Tiedtke, 2007*

# Objectives for this guideline revision

- 1) Psychological and psychiatric rehabilitation
- 2) Social rehabilitation; esp. vocational re-integration
- 3) Improvement of organisation of care
- 4) Representation in supportive software

‘PAAHR is born’

**PAAHR**  
*Innovatie Psychische en  
Arbeidsgerelateerde Aspecten  
van HartRevalidatie*



# What's in a guideline?

*'Evidence Based Richtlijnontwikkeling': handleiding voor werkgroepleden, CBO 2007*

## Guideline

- Bottleneck analysis of current guideline
- Summary of scientific evidence
- Gaps and recommendations for scientific evidence

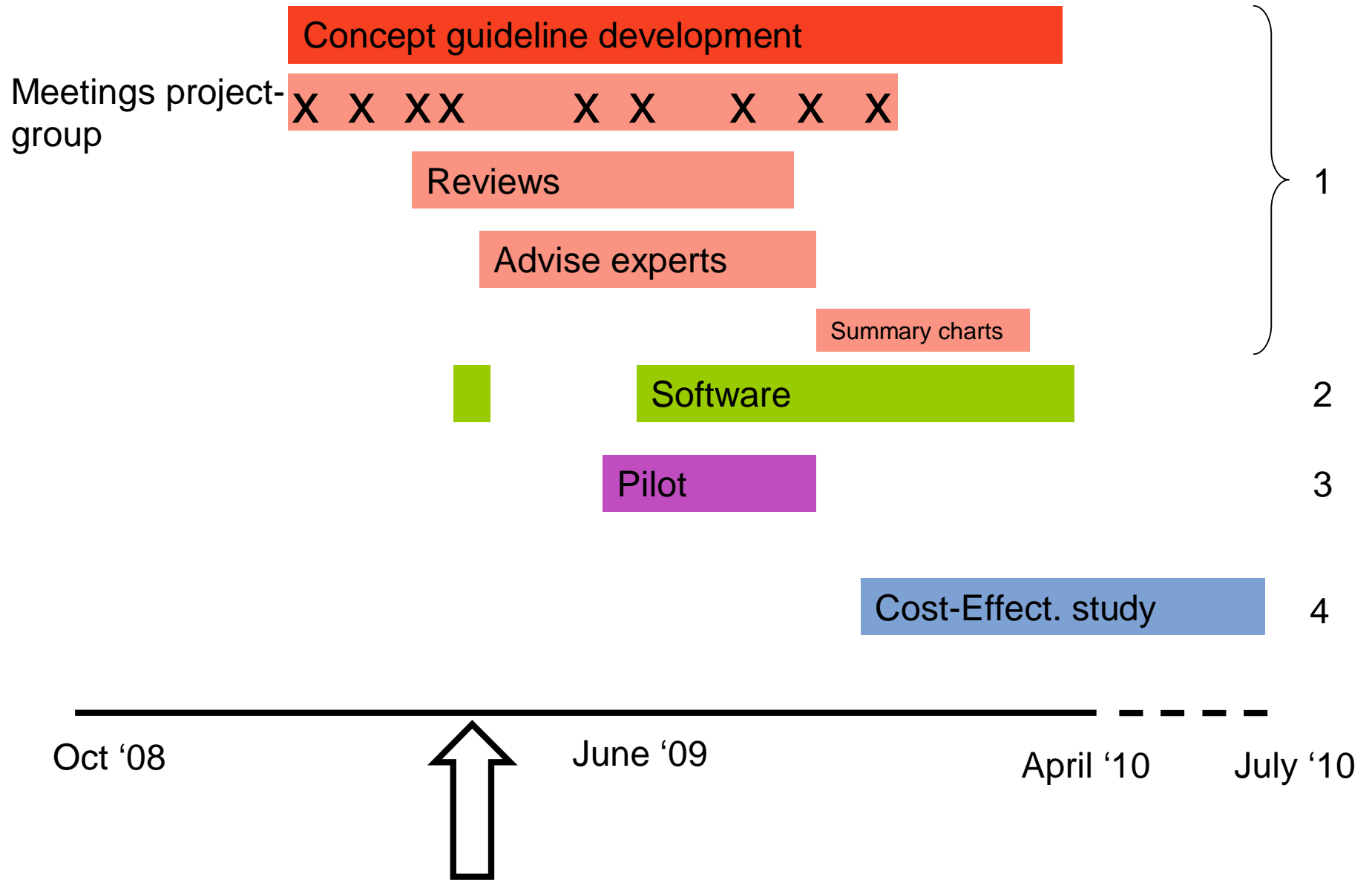
## Additional products

- Indicators of quality care
- Cost effectiveness study
- Patient product
- Summary- and implementation plan
- Implementation plan

### **Products PAAHR**

- *Autorised revision of the guideline '04 based on bottleneck analysis, other guidelines, summary of scientific evidence, recommendations, pilot study to assess practical use of the guideline*
- *Summary charts for every professional association*
- *Patientbrochure*
- *Recommendations for future research*
- *Indicators of quality care*
- *Cost-effectiveness study for innovations*
- *Implementation plan*
- *Representation in software (flowchart)*

# Time-table



# How to get started

- okt 2008 to dec 2008 -

## 1. Formation of **project group**

- Invite involved caregivers/medical professionals' associations to select representative
- Patient organisations

## 2. **Experts (scientific)**

## 3. Get informed about **parallel projects**

# Project group PAAHR

- Patientsrepresentatives:
  - Huis voor de zorg
  - Hart&Vaatgroep
- Medical:
  - NVVC (cardiologen)
  - NVRA (revalidatie-artsen)
  - NVAB (bedrijfsartsen)
  - NVVG (verzekeringsgeneeskundigen)\*
  - NVVP (psychiaters)
  - NHG (huisartsen)\*
- Para-medical and caregivers:
  - NIP (psychologen)
  - Ergotherapie Nederland
  - NVVHV (hartvaatverpleegkundigen)
- LOMWH (maatschappelijk werkers Hartrevalidatie)
- Ned. Ver. Fysiotherapie bij Hart- en Vaatziekten

<b>Experts/adviseurs</b>	<b>Afspraken</b>
- Dr. S. Klosse (Juridisch adviseur)	eind mrt (afstemming oplossingen organisatie) begin jun (voorleggen concept richtlijn) begin jan '10 (consultatie)
-Prof A. Schene (Psychiatrisch adviseur)	meedoen knelpunt inventarisatie/ uitgangsvragen opsturen / advies tav organisatie mbt psycholoog vs psychiater
- Prof. S. Maes (Psychologisch adviseur)	geen concrete afspraken
- Dr. S. Evers (Kosten-Effectiviteit)	geen concrete afspraken

<b>B. de Kort</b> (student GW-A&O) Psycho interventies bij HVZ + depressie	<b>Afspraken/producten</b> - va 16 feb 2 wkn op kamer Angelique + overleg scriptie
---	---

<b>Afspraken/producten</b> -	<b>LEVV (deskundigheidsbevordering VPK)</b>
---------------------------------	---

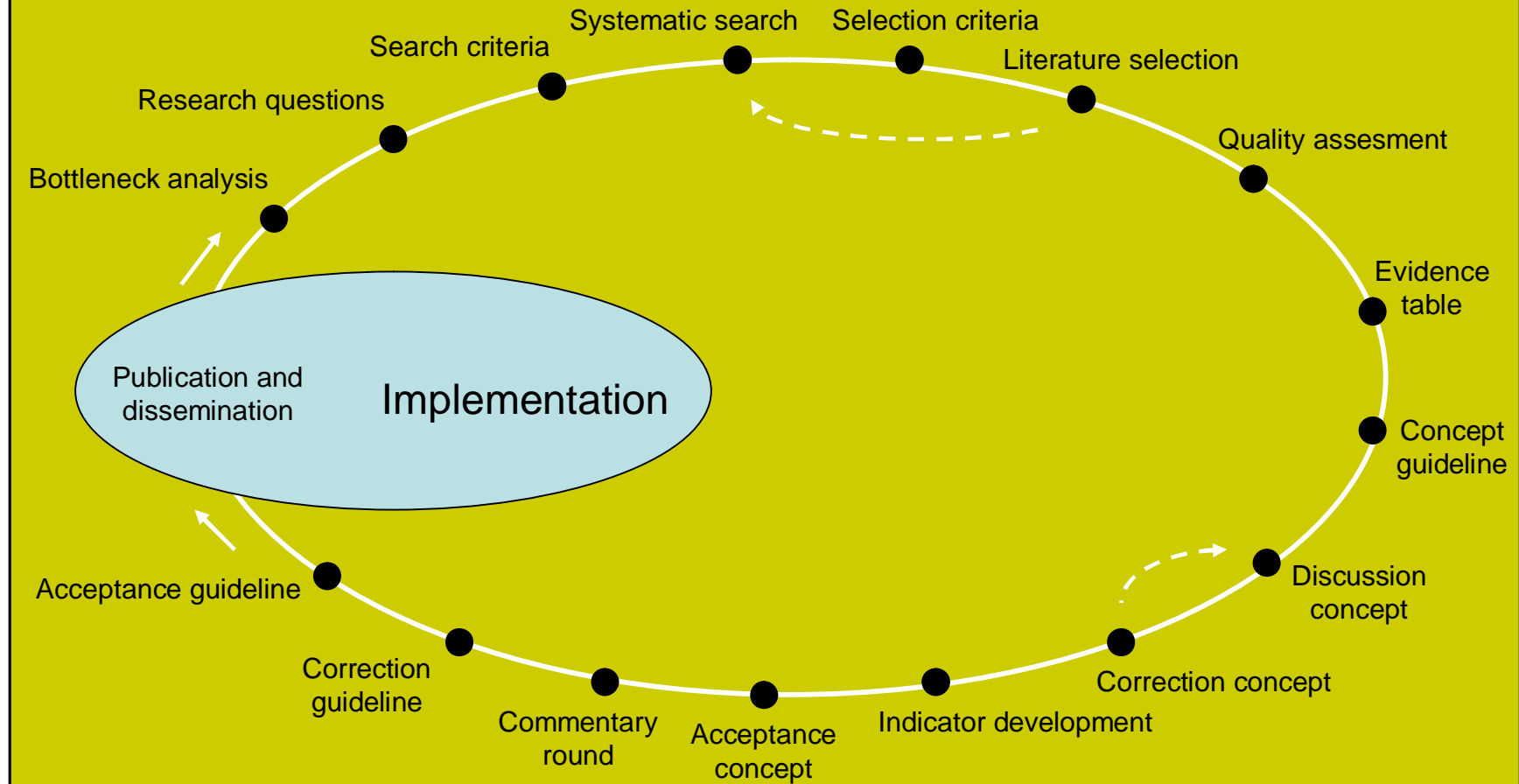
<b>A. Huisink</b> (DBC HA regio ZL/contact 1 <sup>e</sup> lijn)	<b>Afspraken/producten</b> -
---	---------------------------------

<b>Afspraken/producten</b> - Raadpleging indien nodig -Evt contact congres depression Parijs	<b>Prof P. Arean</b> (med. Psycholoog) - 'Elderly and Depression' - 'Collaborative Care Model' (HA/praktijk ondersteuning en screening-behandeling psychische problematiek)
--	---

<b>CARDSS (AMC)</b> Dr. N. Peek Dr. I. Hellemans	<b>Afspraken/producten</b> Nog geen concreet contact - 12 feb aanvulling beslisboom 2009 reviewed
--	---

<b>Afspraken/producten</b> -23 april symposium 'hart in de zorg': verzorgen ppt PAAHR voorafgaande aan K. Idema (patienten onderzoek) - Overleg visie organisatie/ model hartrevalidatie/nazorg omstreeks 20-27 april.	<b>NHS</b> J. van Erp (Psycholoog/programma coordinator 'hart voor mensen') R. Wimmers (Teamleider implementatie)
--	---

# Evidence-based guideline-development



Hartrevalidatie

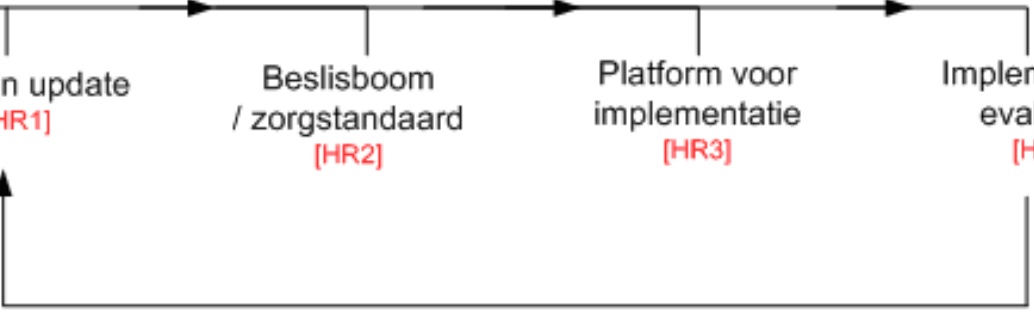
Richtlijn update  
[HR1]

Beslisboom  
/ zorgstandaard  
[HR2]

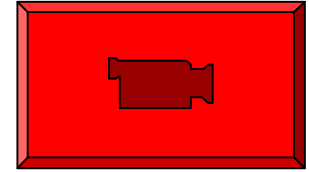
Platform voor  
implementatie  
[HR3]

Implementatie  
evaluatie  
[HR4]

- HR 1+4: PAAHR project
- HR 2: CARRDS project
- HR 3: LMOH-R
- HR 4: Kwaliteitsgelden project  
Landelijke dataregistratie



# 'Getting your priorities straight'



- dec 2008 to feb 2009 -

- 2 meetings and 1 mailing: practical problems in the field of cardiac rehabilitation within the view of the project (psychic-, social- and work-associated goals)
- Prioritisation survey to projectgroup members to be distributed amongst professionals in cardiac rehabilitation
  - à Weighted averages for eventual prioritisation

- Patient-survey/focusgroup patientsorganisations

à Destillation 'bottlenecks' b

*Main practical 'bottlenecks':*

- *Interventions in psy problems*
- *Organisation of vocational rehabilitation*
- *Problems for partners of patients*
- *Care after the actual rehabilitation*



# Evidence-based = Literature reviewing

subject guideline  
practical 'bottlenecks'  
'bottleneck' priorities  
research questions



Search

# 'Don't re-invent the wheel'

## Sources scientific evidence:

[1] Existing guidelines (quality control AGREE)

[2] Systematical reviews (quality control Cochrane)

**[1] International guidelines:**

National Clearinghouse, NICE, G-I-N, SIGN, NZGG, NHMRC, ESC, AHA, ACC, CBO

**[2] Guidelines representing professionals:**

NHS, NVVC, NHG, NVAB, Nederlands centrum voor beroepsziekten, NVVG, Koninklijk Nederlands Genootschap voor Fysiotherapie/Fysionet, Vereniging voor Hart-, Vaat en Longfysiotherapie, NVVP, NIP, Ergotherapie Nederland, Nederlandse Vereniging voor Hart en Vaat Verpleegkundigen, Nederlandse Vereniging van Maatschappelijk Werkers

[3] search for original publications (quality control Cochrane)

Acronym	Definition	Description
P	Patient or problem	Can be only the patient, a group of patients with a particular condition or a health problem
I	Intervention	Represents the intervention of interest, which can be medical (e.g. several kinds of dressings), preventive (e.g. vaccination), diagnostic (e.g. blood pressure measure), prognostic, administrative or related to economic issues
C	Control or comparison	Defined as a standard intervention, the most used intervention or no intervention
O	Outcome	Expected result

- Search criteria (language, time, sort of publication)
- Search
- Selection criteria (sort of publication, relevance, n=)
  1. Selection by title and abstract
  2. Selection by full article

[3] **Databases reviews and original publications:**  
 COCHRANE, annual reviews, MEDLINE, EMBASE,  
 CINAHL, PsycINFO, PsychLit Current Contents, ISI,  
 SCOPUS



# Evidence-based = Literature reviewing

Quality assesment: Cochrane/ CBO

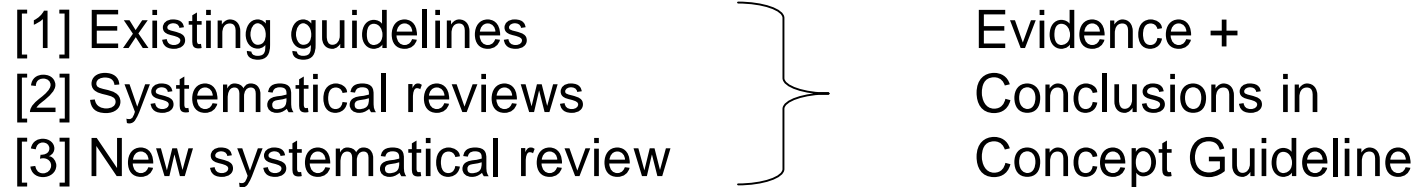
## **Internal validity**

- Randomisation
- Blinding
- Baseline characteristics
- Intention-to-treat analysis
- Confounding
- Inclusive/exclusive
- Selection bias
- Description exposure
- Description outcome
- Description measurement
- Follow-up
- Selective loss-to-follow-up

## **External validity**

- Population
- Generalisation
- Setting
- Facilities
- Care system
- Legal system

# From knowledge to better practice



## Recommendations

- Scientific proof of good quality (RCT's / meta-analysis/syst review)  
*expl. 'It's proven that...'* (level A)
- Scientific proof of lesser quality (randomised, small n=; no randomisation; cohort, patiënt controle onderzoek)  
*expl. 'It's plausible to assume that...'* (level B)
- Expert opinions (in absence or co...)  
*expl. 'The projectgroup advises...'*

### **'Recommendations'**

- Answer to research-question
- Without further explanation readable
- Not multi-interpretable

# Medicine prescription in depression after cardiac event

## Conclusions

- It is proven that TCAs in patients after a cardiac event increase cardiac morbidity and mortality (Level A evidence)
- It is proven that SSRIs improve depression and quality of life in patients after a cardiac event but not decrease morbidity or mortality (Level A evidence)

## Recommendations

- Only SSRIs are recommended for treatment of depression after a cardiac event (Level A evidence)

# Psychological / psychiatric risk factors

## Conclusion

- It is proven that psychological/psychiatric risk factors (depression, anxiety, hostility, stress and social exclusions) contribute as much as biological risk factors to the risk for a cardiac event. (Level A evidence)

## Recommendations

- .... To be discussed .....

## Conclusion

- It is plausible to assume that depressive disorders in patients after a cardiac event differ from depressive disorders in general population. These patients experience less symptoms of gloominess and more irritability and physical symptoms (fatigue).

## Recommendation

- .... To be discussed .....



# Vocational rehabilitation

Conclusion (from existing guidelines)

- If vocational rehabilitation starts early, then the chance of successful return to work is higher (Evidence level B)
- If vocational rehabilitation starts during cardiac rehabilitation, there are better prerequisites for multidisciplinary collaboration and this will improve the chance of successful return to work (Evidence level C (expert knowledge))

Recommendation

- Vocational rehabilitation should start during cardiac rehabilitation

# Are we there yet?

- **Commentary rounds**

- 'bottlenecks'
- research questions
- literature selection
- concept guideline
- indicators

**Important: Research-politics!!!!**

- Parallel projects
- Workinggroup members and experts
- ZonMW requirements
- Time and Money

- **Authorisation rounds**

- concept guideline (projectgroup)
- guideline (projectgroup)
- guideline (initiating association & professional associations)

# Useful references

- Implementatie. Effectieve verbetering van de patiëntenzorg. R. Grol en M. Wensing, ELSEVIER 2006
- Evidence-based richtlijnontwikkeling. Een leidraad voor de praktijk. J. van Everdingen, Bohn Stafleu Van Loghum 2004
- Evidence-based richtlijnontwikkeling. Handleiding voor werkgroepleden. Update nov 2007. Kwaliteitsinstituut voor de Gezondheidszorg CBO 2007
- Serie: De praktijk van systematische reviews I – VII. Ned Tijdschr Geneesk 1999
- Cochrane quality assesment tools <http://www.cochrane.nl/nl/newPage1.html>
- AGREE-collaboration quality assesment tool for guidelines <http://www.agreecollaboration.org/instrument/>