



**Magic**

Middleware for collaborative Applications  
and Global virtual Communities

**MAGIC Project Calls for Presentations in e-Health Grand Rounds**

# **Evidence-based Guidelines in Cardiology: Brazilian experience**

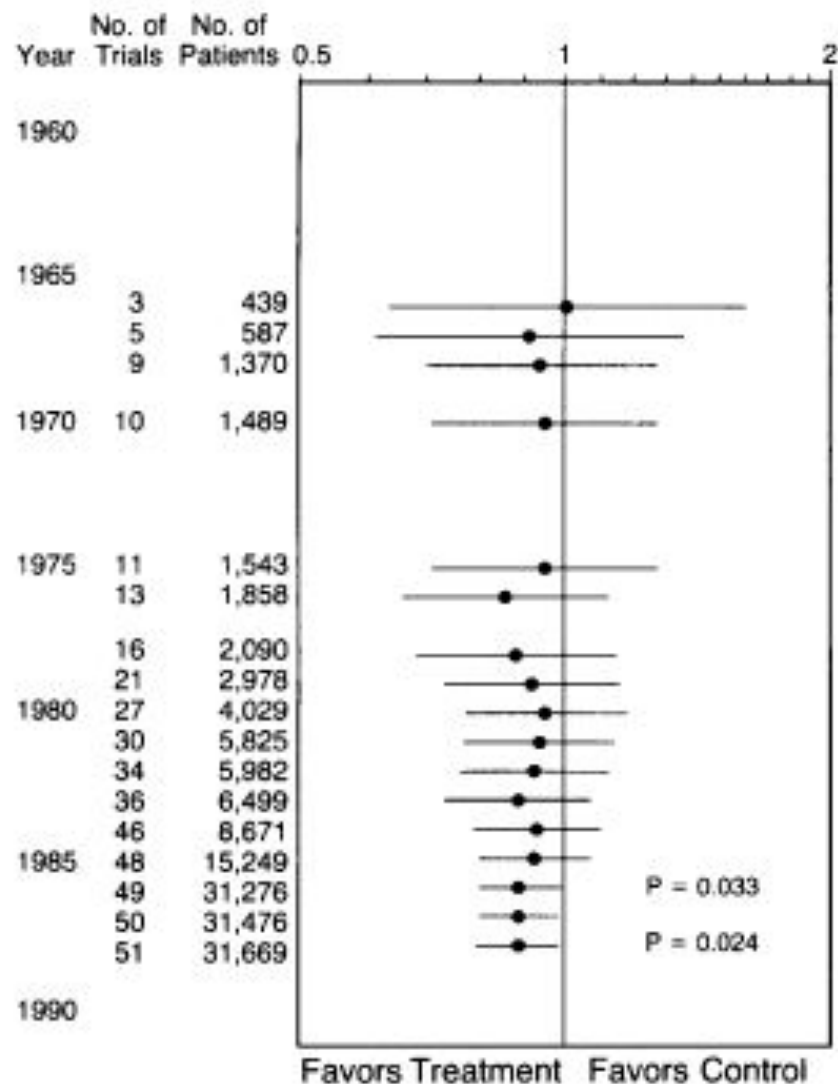
**Instituto Nacional de Cardiologia  
MoH- Brasil**

**Marisa Santos, MD, PhD**

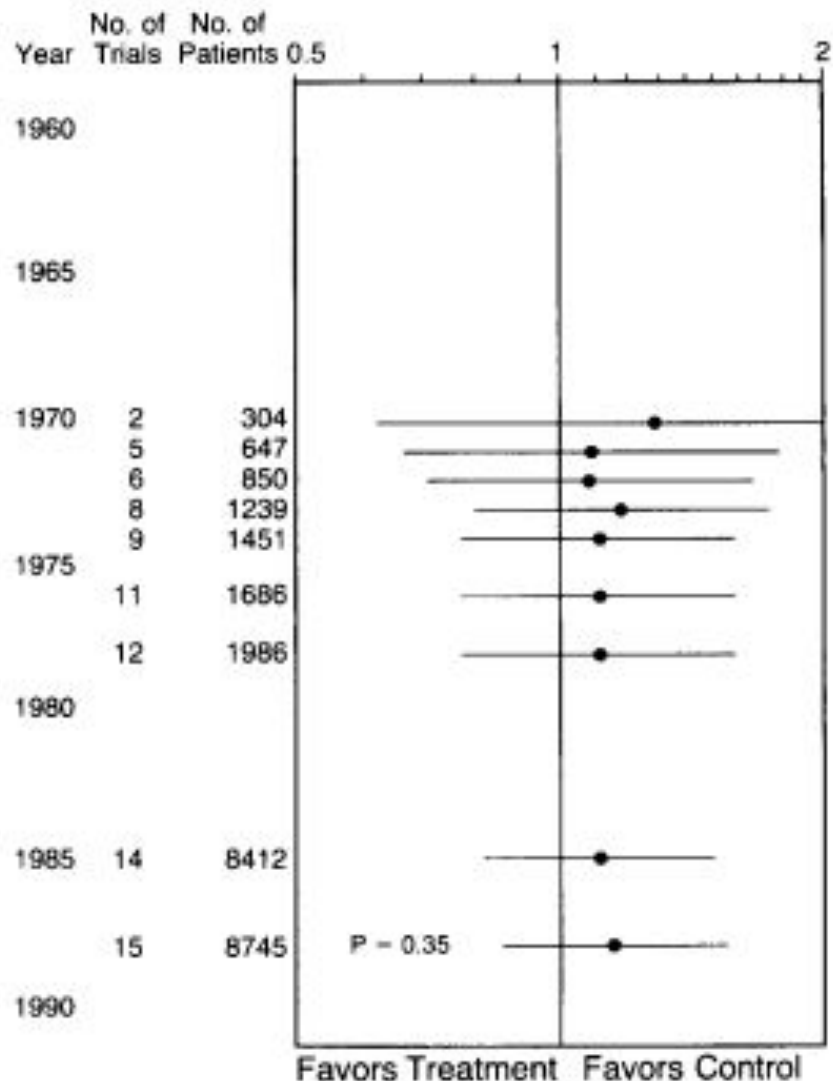
**NATS-INC**

**Sept2016**

### Beta-Blockers (odds ratio)



### Prophylactic Lidocaine (odds ratio)

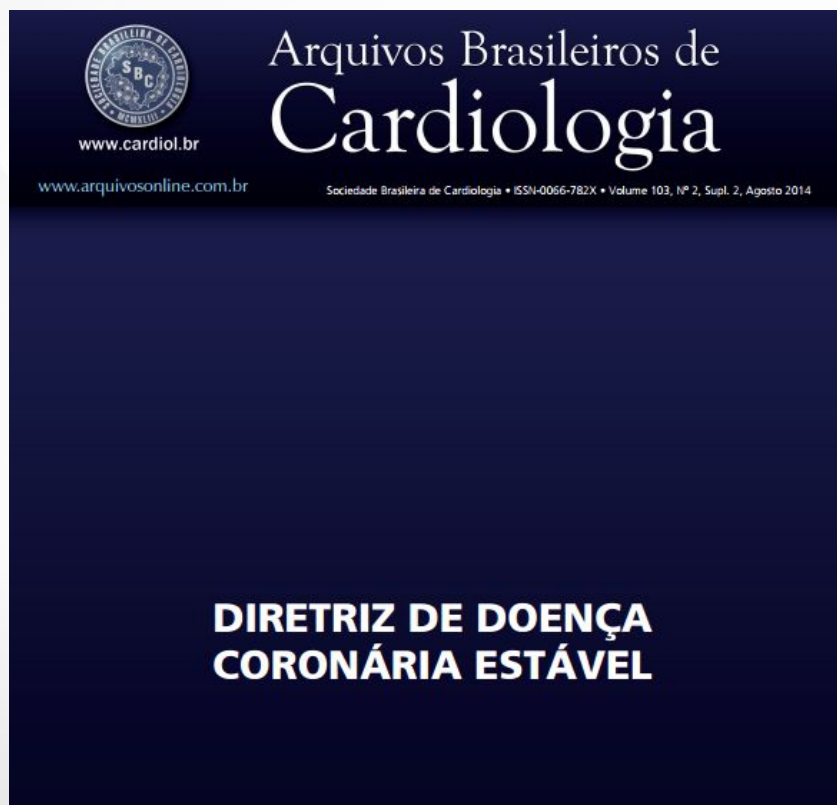


# Brazilian Cardiology Society Guideline



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- Search filter not shown
- Search results not shown
- No critical quality of evidence
- No meta analysis
- Specialist opinion
- No cost analysis
- No cost utility analysis
- Conflict of interest
- No patient participation

# Objectives of Brazilian MoH Guidelines

- Technical support
- Regulatory framework.



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**CHAMADA DE CONSULTA PÚBLICA**  
rivastigmina adesivo transdérmico para  
o tratamento da doença de Alzheimer  
**27 de outubro a 16 de novembro**

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PESQUISAR TECNOLOGIAS EM AVALIAÇÃO



DIREITO E SAÚDE



RELATÓRIOS DE  
RECOMENDAÇÃO  
DA CONITEC



PROTOCOLOS  
CLÍNICOS E  
DIRETRIZES  
TERAPÊUTICAS

## ÚLTIMAS NOTÍCIAS

Novas portarias de decisão



PORTARIAS

Modelo de Avaliação de

[www.conitec.gov.br](http://www.conitec.gov.br)



# Public consultation



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## Consultas Públicas

Publicado: Sexta, 27 de Fevereiro de 2015, 09h57 | Última atualização em Quinta, 25 de Agosto de 2016, 11h50 | Acessos: 132359

- [O que é consulta pública?](#)
- [Como as recomendações da conitec são disponibilizadas?](#)
- [Como contribuir?](#)
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# CONITEC connectivity



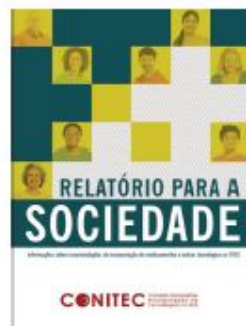
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## Brazilian Context

### Public Consultations (PC)

Since 2015: production of summary versions of  
technical reports in a simplified language (English & Spanish)



# CONITEC connectivity

- Social networks
- Website
- E-mail
- App
- SIG-RUTE



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VIDEOCONFERÊNCIAS  
**CONITEC**  
*em evidência*

**FUNCIONAMENTO E FINANCIAMENTO DO SUS**

apresentação **Dra. Maria Inez Gadelha**

**12 de setembro das 16 às 17 horas**





# “Guideline – How to write a Guideline”



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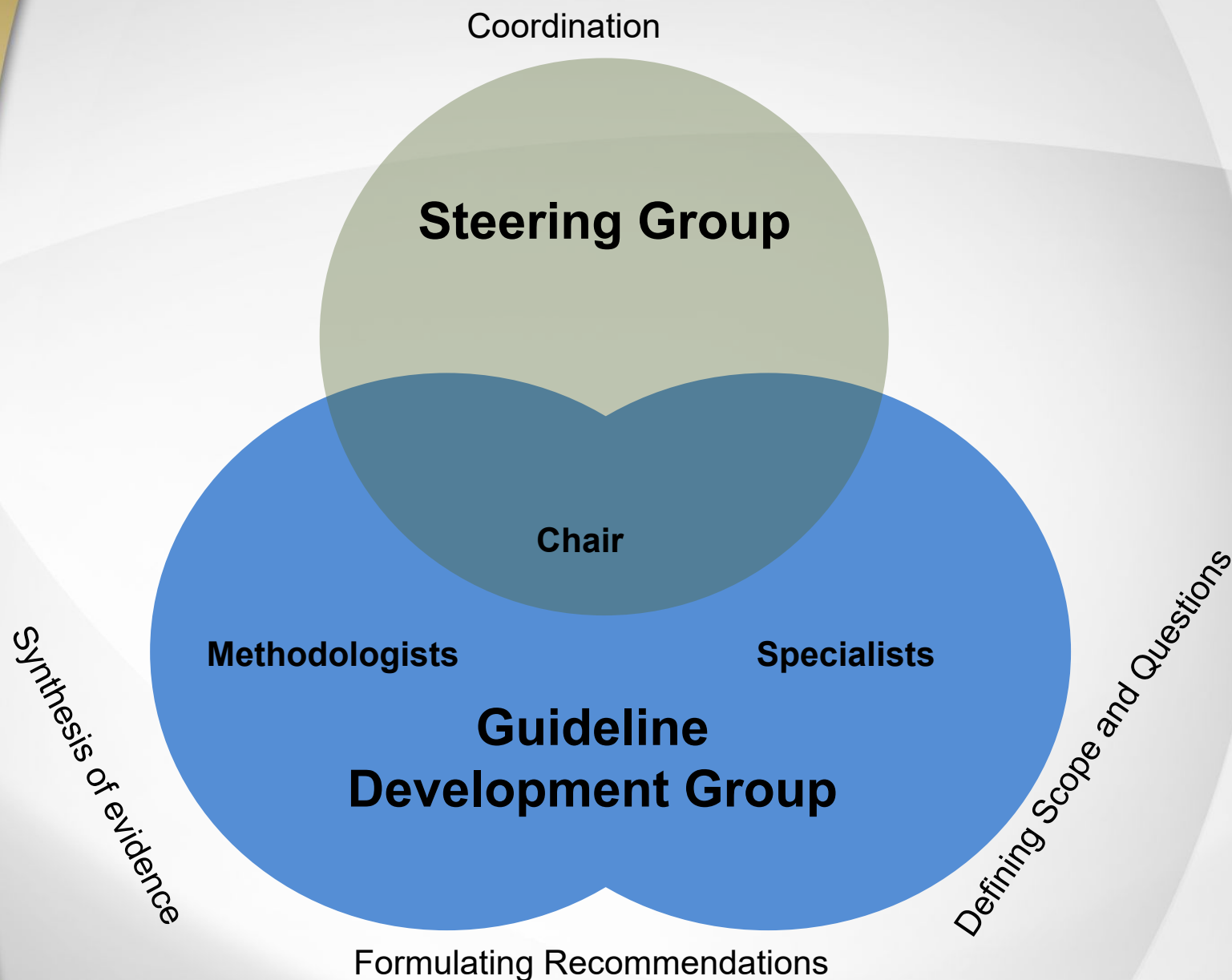
# Guideline for Guidelines

- Scope
- PICOS
- Search strategy
- Study Selection
- Quality assessment
- Formulation of recommendations ( GRADE)
- External evaluation
- Diffusion , dissemination and implementation
- Monitoring
- Update



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Fonte: Apresentação GIN 2015-Arn Migowski



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# Scope

- clinical problem
- Objectives, tasks, responsible
- Population - subgroups?
- **Questions (PICOS format)**
- **Outcomes**
- Perspective
- Time horizon
- Role of expert / patient





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## Scope -What can not miss

- The uncertainty or disagreement about the best practices
- Potential to improve important health outcomes
- Potential to make better use of resources
- Probability that the policy could contribute to real changes
- Politics and national priorities .
- The existence of " new technologies "



# QUESTION - PICOS



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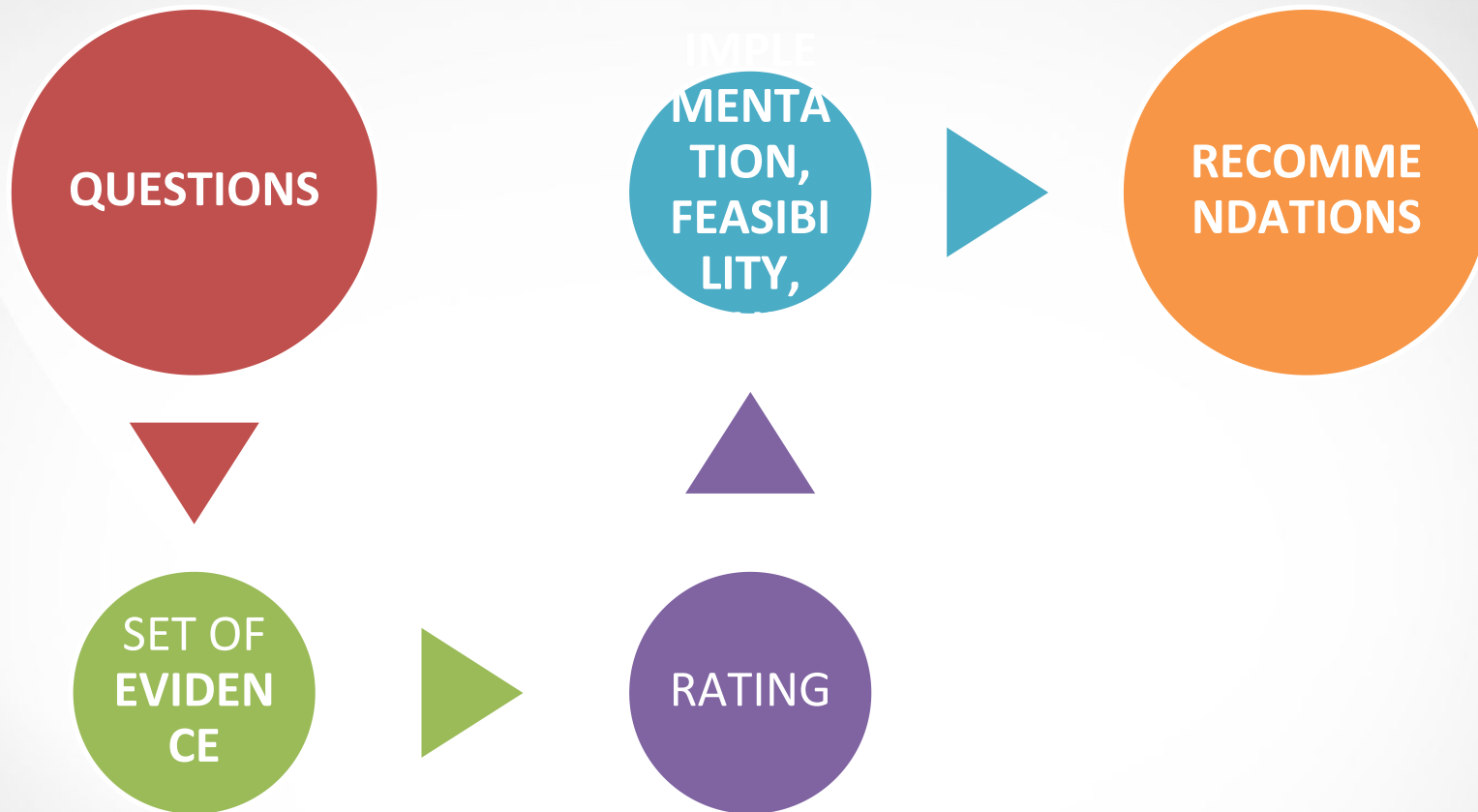
P	I	C	O	S
<b>Population</b>	Intervention	Comparator	Outcome	Study
Patients? Disease?	Drugs? Dose? Length?	Standard of care – Brazilian Health System	Real objectives Avoid surrogate outcome	Best design Admissible (rare diseases, devices)

# GRADE Process



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<http://www.gradeworkinggroup.org/publications/index.htm>

[http://conitec.gov.br/images/Artigos\\_Publicacoes/Diretrizes/GRADE.pdf](http://conitec.gov.br/images/Artigos_Publicacoes/Diretrizes/GRADE.pdf)

# GRADE



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- Evidence Level
  - High, moderate, low, very low
- Recommendation Grade
  - Favour or against
  - Strong or weak



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# Quality of Evidence

- **RCTs** ⊕⊕⊕⊕
- **observational studies** ⊕⊕○○
- **5 factors that can lower quality**
  1. Study design and execution (*risk of bias*)
  2. *Heterogeneity*
  3. Indirectness
  4. Imprecision
  5. Publication bias

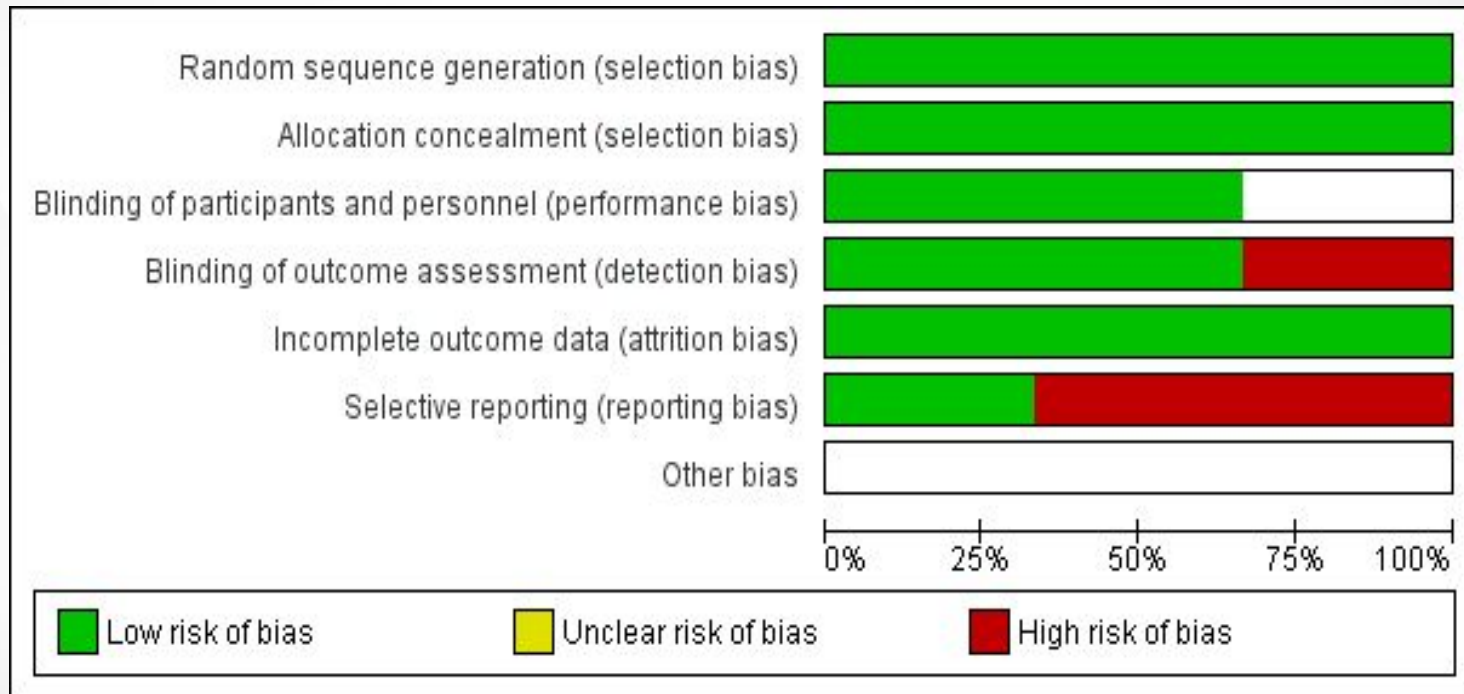




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# Risk of Bias



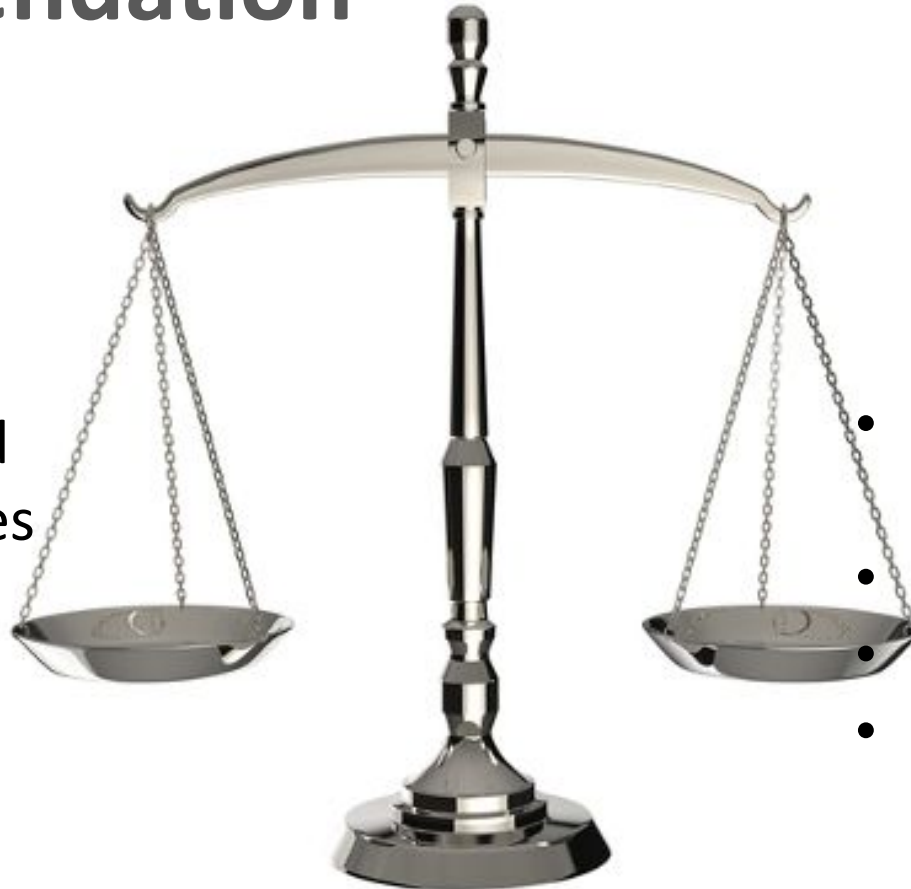
<http://tech.cochrane.org/revman>



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# Recommendation



- Benefits
- Equity
- Values and preferences

- Incremental costs
- Cost-Opportunity
- Risks
- Uncertainties

# Summary of Findings (SOF)

- Translation of evidence for experts
- Includes:
  - Quality of evidence
  - Magnitude of Effect
  - Justification for recommendation

**Self management for patients with chronic obstructive pulmonary disease**

Patient or population: patients with chronic obstructive pulmonary disease  
 Settings: primary care, community, outpatient  
 Intervention: self management  
 Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI)	Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
Quality of Life St George's Respiratory Questionnaire Scale from: 0 to 100 (follow-up: 3 to 12 months)	The mean quality of life ranged across control groups from 38 to 60 points The mean quality of life in the intervention groups was 2.58 lower (5.14 to 0.02 lower)		658 (7)	85% moderate <sup>2</sup>	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.
Dyspnoea Borg Scale Scale from: 0 to 10 (follow-up: 3 to 6 months)	The mean dyspnoea ranged across control groups from 1.2 to 4.1 points See comment	The mean dyspnoea in the intervention groups was 0.53 lower (0.96 to 0.1 lower) See comment	144 (2)	85% low <sup>4</sup>	Lower score indicates improvement
Number and severity of exacerbations <sup>†</sup>	Low risk population <sup>‡</sup> 10 per 100		591 (3)	85% moderate <sup>2</sup>	Effect is uncertain
Respiratory-related hospital admissions (follow-up: 3 to 12 months)	High risk population <sup>‡</sup> 50 per 100		966 (6)	85% moderate <sup>2</sup>	
Emergency department visits for lung diseases (follow-up: 6 to 12 months)	The mean emergency department visits for lung diseases ranged across control groups from 0.2 to 0.7 visits per person per year See comment	The mean emergency department visits for lung diseases in the intervention groups was 0.1 higher (0.2 lower to 0.3 higher) See comment	328 (4)	85% moderate <sup>4</sup>	
Doctor and nurse visits (follow-up: 6 to 12 months)	The mean doctor and nurse visits ranged across control groups from 1 to 5 visits per person per year See comment	The mean doctor and nurse visits in the intervention groups was 0.02 higher (1 lower to 1 higher) See comment	629 (8)	85% moderate <sup>4</sup>	

\*The basis for the assumed risk (e.g. the median control group risk across studies) is the corresponding risk (and its 95% confidence interval) is based on the assumed risk in the relative effect of the intervention (and its 95% CI).

Confidence interval: OR: Odds ratio;

# Example Stents for Coronary Disease

- 1 Stable angina
- 2 Unstable angina
- 3 Myocardial infarction
- 4 Silent ischemia



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# Stable angina PICO

- 1 Diabetes
- 2 Left main coronary disease
- 3 Multivessel
- 4 Reintervention
- 5 Angioplasty complications
- 6 Conventional versus DES stents



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# Conclusions

- Evidence based guidelines may contribute for a better health resource spending
- Rational use technologies
- Public consultation has the potential to improve society engagement in the development and utilization of National Guidelines



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## You can contribute for Brazilian Guidelines

**CHAMADA DE ENQUETE PÚBLICA**  
ESCOPO DIRETRIZ BRASILEIRA PARA UTILIZAÇÃO  
DA ANGIOPLASTIA CORONARIANA COM STENT  
29 de agosto a 17 de setembro



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**Available at <http://conitec.gov.br/>**

**Contact with NATS – INC:**  
**[www.natsinc.org](http://www.natsinc.org)**