



A Review of Economic Evaluation Studies in Thailand :

Are the data good enough to be used in decision making?

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Overview of presentation

- Introduction
- Objectives
- Methods
- Results & Discussions
- Conclusions
- Policy recommendations

Introduction (1)

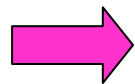


- ❖ Resources allocation and priority-setting in healthcare
- ❖ Decision criteria
- ❖ Economic evaluation of healthcare interventions



Introduction (2)

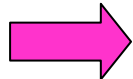
- Teerawattananon Y, et al. : Systematic review of economic evaluation literature in Thailand published in international journals between 1982 and 2005
Pharmacoeconomics (in Press)



In recent years, trends of publications



but poor quality & poor distribution in major health problems in Thailand



Limitation : English literature search by PubMed, EMBASE (Ovid) & Academic Search Elite (EbscoH) only

Objectives

- To analyse and compare the quality, quantity and target health problems of economic evaluation published in between international and domestic literature

Method of Review (1)

Literature survey



Literature screening



Literature review

Method of Review (2)

Literature survey

- It was carried out in February 2006
- The domestic publications were searched by using the following keywords and databases:
 - 'economic evaluation' or
'cost – minimization' or
'cost – effectiveness' or
'cost – utility' or
'cost – benefit' } Both in English and Thai
 - Thai Index Medicus, Thai Journal Online Website &
Thai Research Database

Thai Index Medicus

Thai Index Medicus
Chulalongkorn University Medical Library
Powered by WEBSIS30

Thai Index Medicus is a collection of documents published in Thai medical journals from 1918 to current year. It is a bilingual (Thai / English) database and maintained by the Medical Library, Faculty of Medicine, Chulalongkorn University, Bangkok Thailand.

Search Term/รูปแบบคำค้น

- Author : จรัส\$ or จรัส สุวรรณเวลา or charn suwanwela
- Journal : chula med j
- Year : 2005 or 2548
- Operator and, or , not : cancer and

'economic evaluation' or
'cost-minimization' or
'cost-effectiveness' or
'cost-utility' or
'cost-benefit'

Journal Online

Thai Journal - Microsoft Internet Explorer

Address: http://161.200.96.194/e-jnal/thaij.htm

Medical Library Chulalongkorn University

http://161.200.96.194/e-jnal/thaij.htm , http://www.library.chula.ac.th/

Thai Theses Search Form == English Version - Microsoft Internet Explorer

Address: http://server2.tu.ac.th/theses/form.htm

Search guide

1. Type word(s) in blanks *English Only.
2. Select institute and year.
3. Then submit.
4. Register here (free) to display abstracts.
5. Help
6. CD-Rom subscription

Last Update: 10/01/2005
Thesis Total: 63,840 Records

Institute: All
Major: *
Author: *
Title: *
Advisor: *
keyword: *
Year: All

Click here for Thai Version

ความถี่ในการประชุมเชิงปฏิบัติการ เรื่อง "ยุทธศาสตร์การพัฒนาระบบสุขภาพและชนบท" เมื่อวันที่ 8-9 มิถุนายน 2544 ณ ศูนย์ประชุมแห่งชาติสิริกิติ์ กรุงเทพมหานคร

ความถี่ในการประชุมเชิงปฏิบัติการ เรื่อง "ยุทธศาสตร์การพัฒนาระบบสุขภาพและชนบท" เมื่อวันที่ 8-9 มิถุนายน 2544 ณ ศูนย์ประชุมแห่งชาติสิริกิติ์ กรุงเทพมหานคร

วัตถุประสงค์การประชุมเชิงปฏิบัติการครั้งนี้มีวัตถุประสงค์เพื่อพัฒนาระบบสุขภาพและชนบทในประเทศไทย โดยเน้นการพัฒนาสุขภาพและชนบทในภาคเหนือ ภาคตะวันออกเฉียงเหนือ และภาคใต้ ซึ่งมีความสำคัญอย่างยิ่งต่อการพัฒนาประเทศไทยให้มีความเจริญก้าวหน้าและมีความเป็นอยู่ที่ดีขึ้น

การประชุมเชิงปฏิบัติการครั้งนี้มีวัตถุประสงค์เพื่อพัฒนาระบบสุขภาพและชนบทในประเทศไทย โดยเน้นการพัฒนาสุขภาพและชนบทในภาคเหนือ ภาคตะวันออกเฉียงเหนือ และภาคใต้ ซึ่งมีความสำคัญอย่างยิ่งต่อการพัฒนาประเทศไทยให้มีความเจริญก้าวหน้าและมีความเป็นอยู่ที่ดีขึ้น

Method of Review (3)

Literature screening

- All publications were excluded if:
 - Editorial or methodological article
 - Presented either the costs or the outcomes
 - Not applied to Thai context
 - No full-text formats available

Method of Review (4)

Literature review

- Two reviewers evaluated the same publications
- The quality of studies were identified in 2 ways
 - (1) Published recommendation guideline
 - (2) Quality of data sources


Method of Review (5)

(1) Published recommendation guideline

- Study perspective
- Description of comparator(s)
- Discounting methods (if the period of study > 1 year)
- Incremental cost-effectiveness ratio (ICER)
- Uncertainty analysis
- Funding sources

Method of Review (6)

(2) Quality for data sources

Rank	Clinical effect sizes	Costs
1 (highest)  6 (lowest) 9	Meta-analysis of RCTs, direct comparison, final outcomes	Cost calculation conducted for specific study : same jurisdiction
	Single RCT, direct comparison, final outcomes	
	Meta-analysis of RCTs, direct comparison, surrogate outcomes	Recently published cost calculations : same jurisdiction
	Single RCT, direct comparison, surrogate outcomes	
	Meta-analysis of placebo-controlled RCTs, surrogate outcomes	Un sourced data from previous economic evaluation : same jurisdiction
	Single placebo-controlled RCTs, surrogate outcomes	
	Case control / cohort studies	Using charge rather than cost
	Non-analytical studies (e.g. case reports, case series)	Recently published cost : different jurisdiction
	Expert opinion	Un sourced data : different jurisdiction
	Not clearly stated	Not clearly stated

Method of Review (7)

- The burden of disease and injuries in Thailand* were used as a proxy to quantify areas that were major health problems

**Bundharnchareon K, Teerawattananon Y, Theo V, et al. Burden of disease and injuries in Thailand: priority setting for policy. The Thai Working Group on Burden of Disease and Injuries. Bangkok: Printing House of the War Veterans Organization of Thailand, 2002.*

Results (1)

Domestic Publications review

93 abstracts were identified through the search

40 abstracts excluded

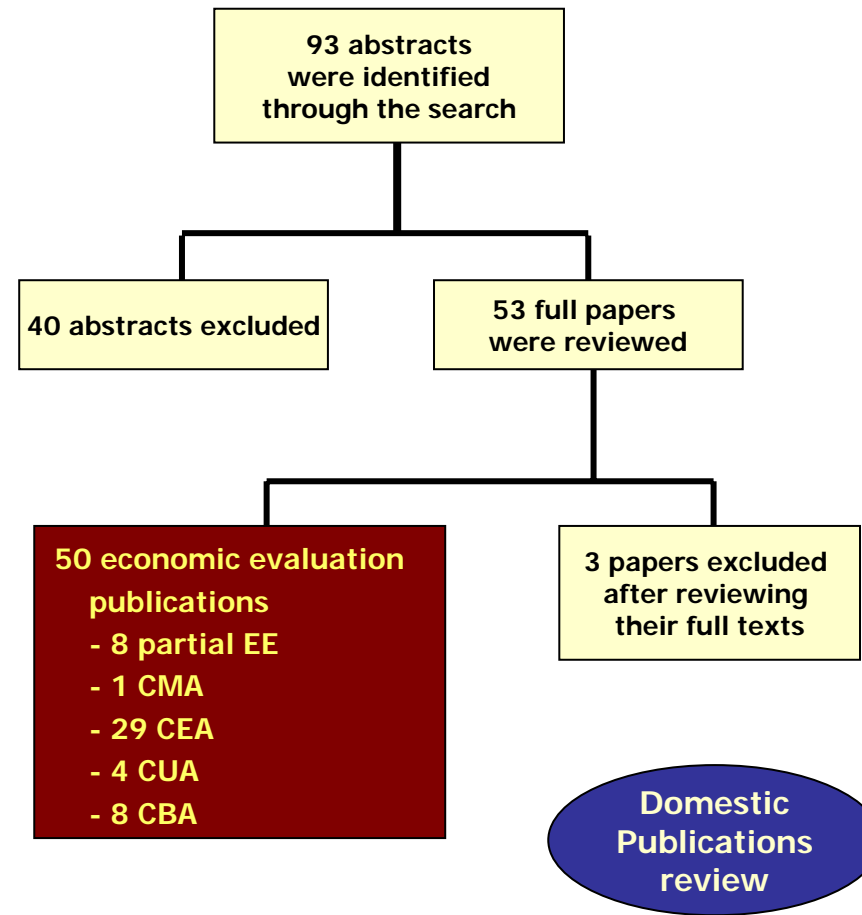
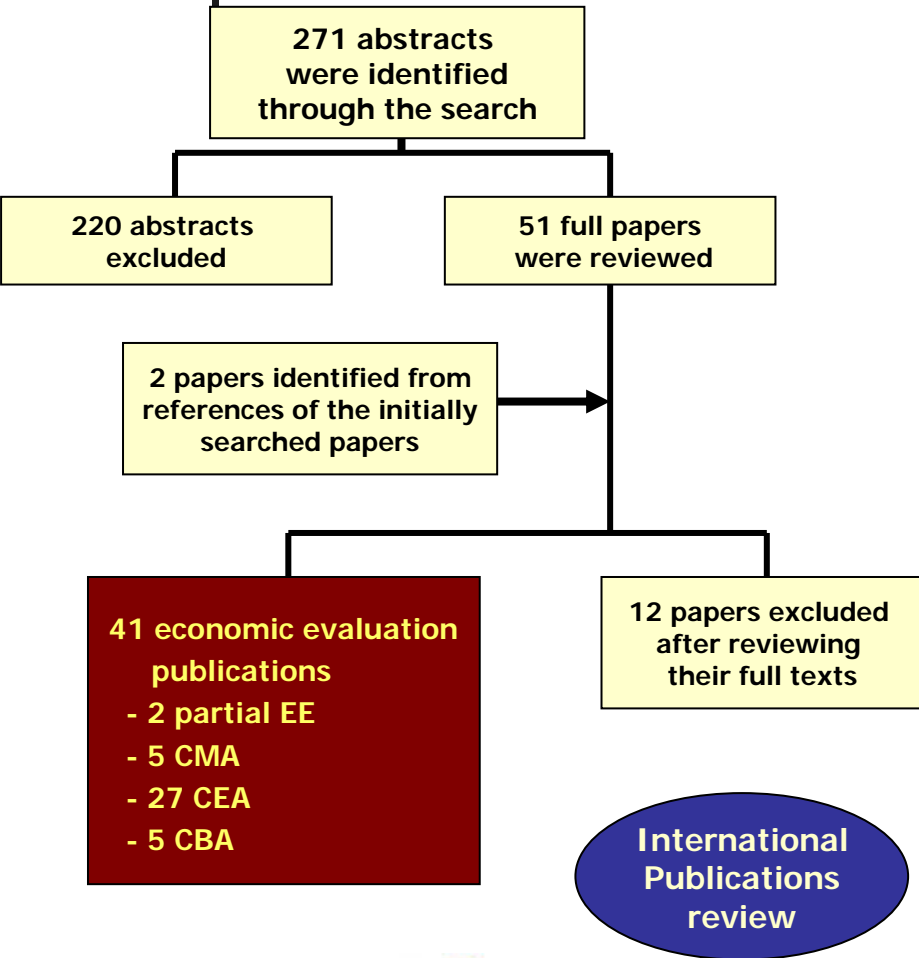
53 full papers were reviewed

3 papers excluded after reviewing their full texts

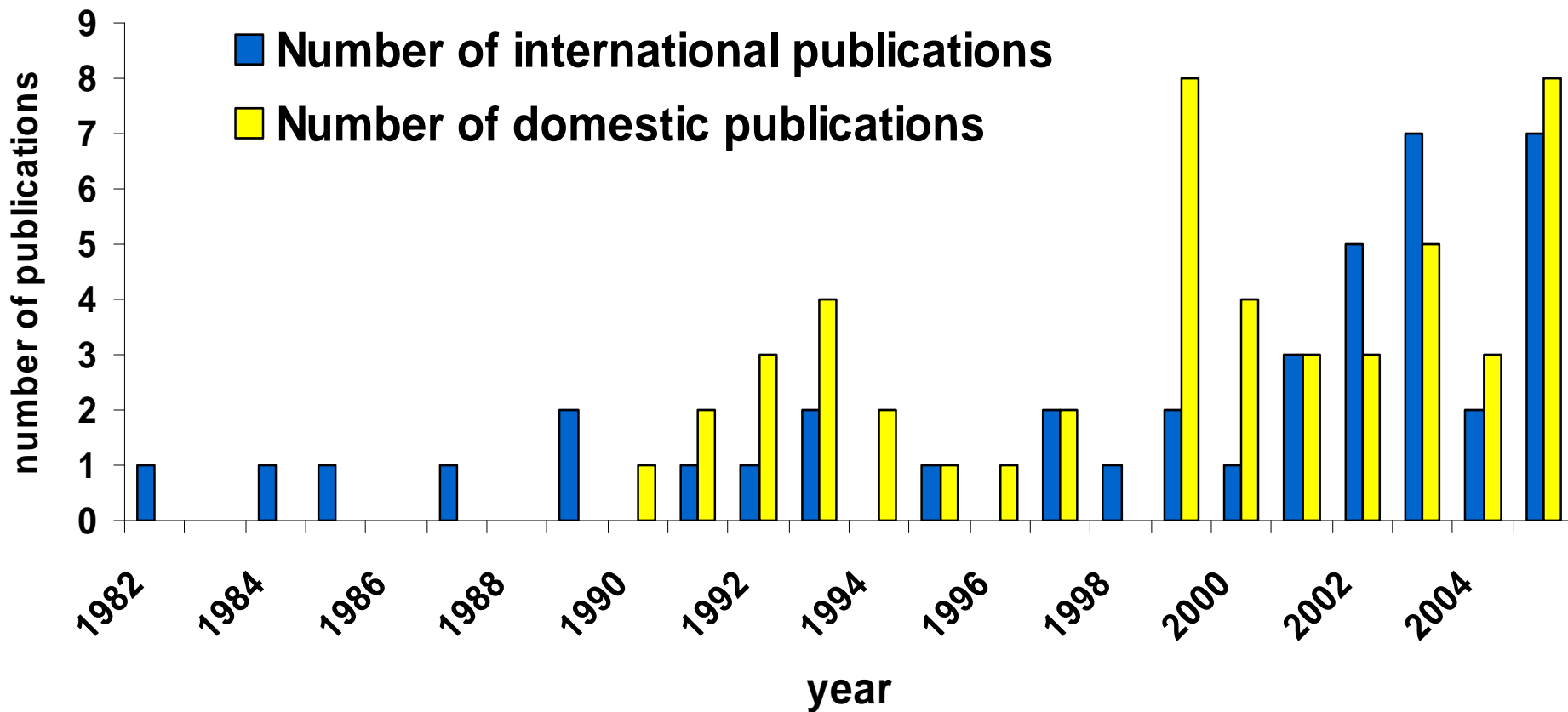
50 economic evaluation publications

- 8 partial EE
- 1 CMA
- 29 CEA
- 4 CUA
- 8 CBA

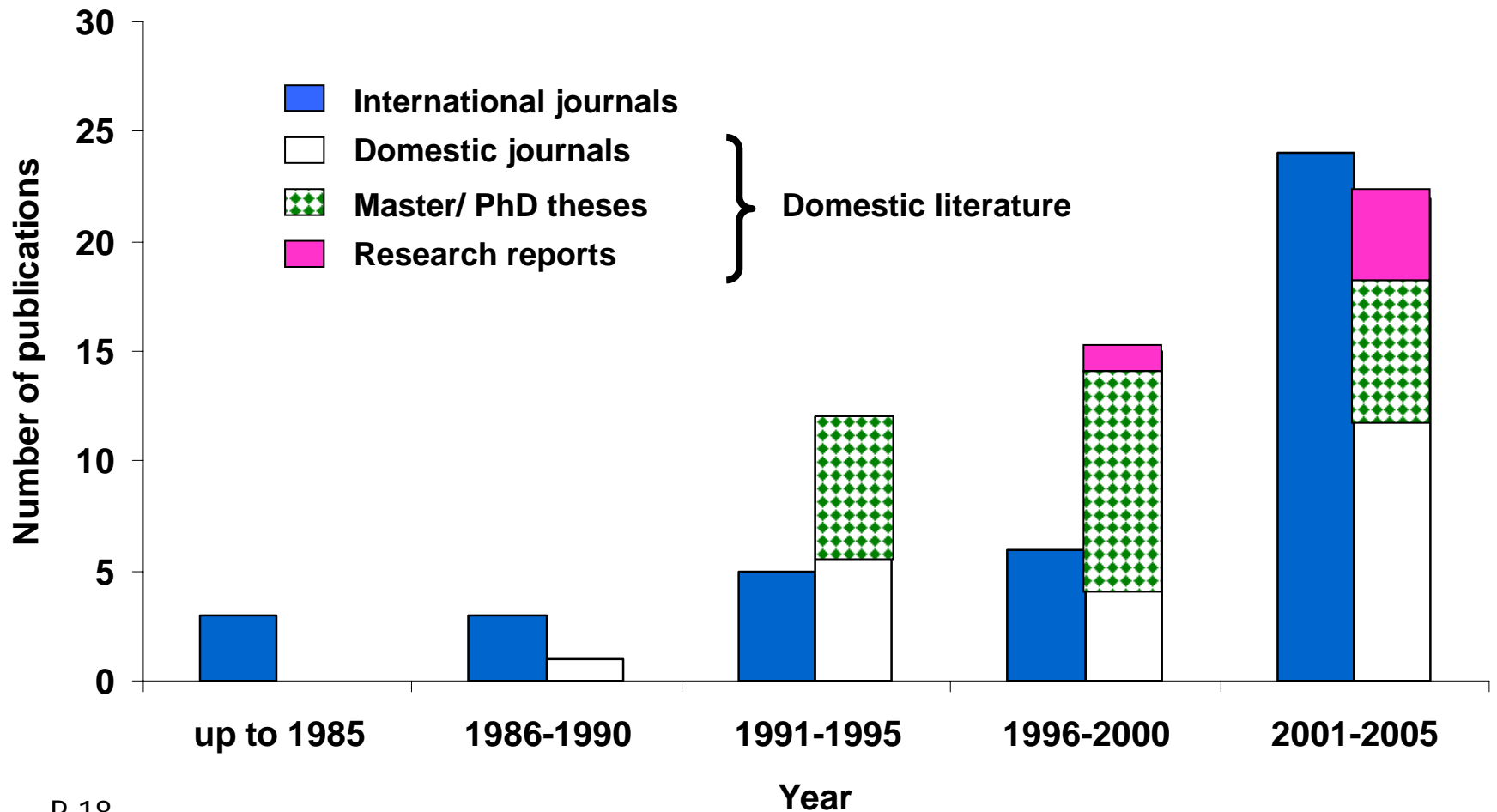
Results (2)



Result : Thai economic evaluation publications (3)

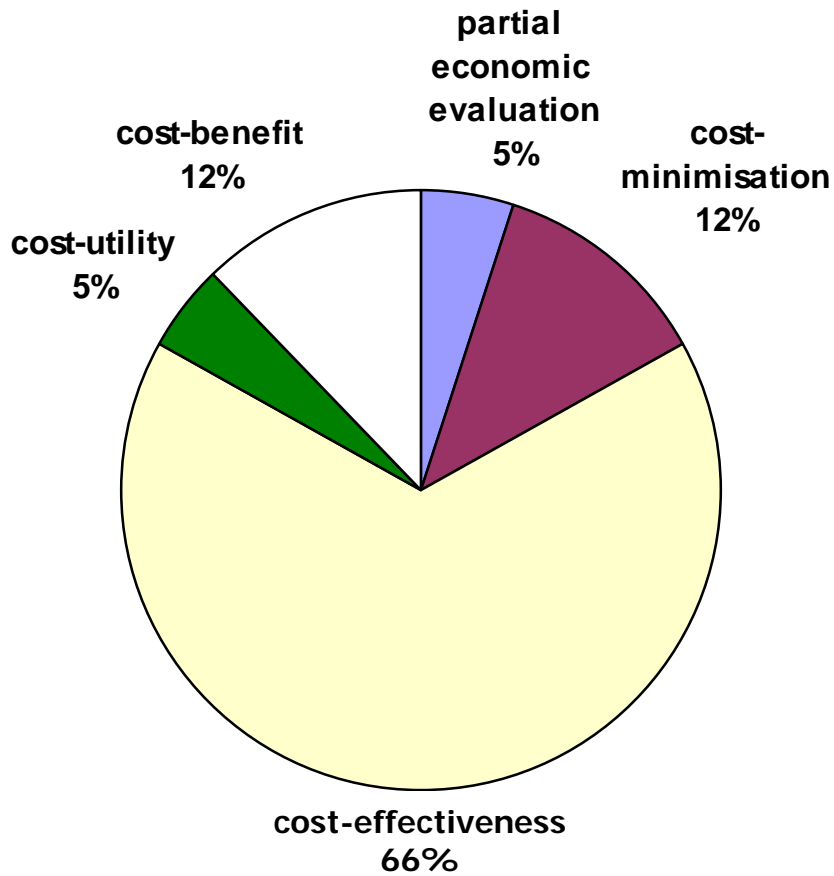


Result : Type of publications (4)

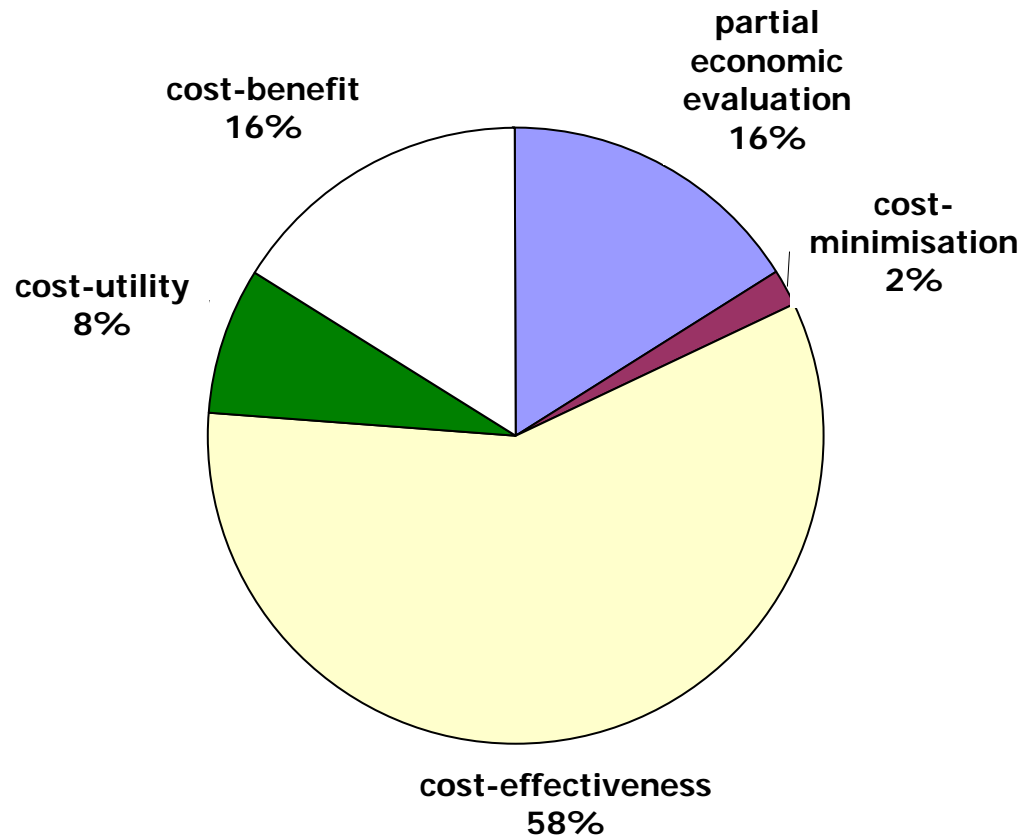


Result : Type of economic evaluation (5)

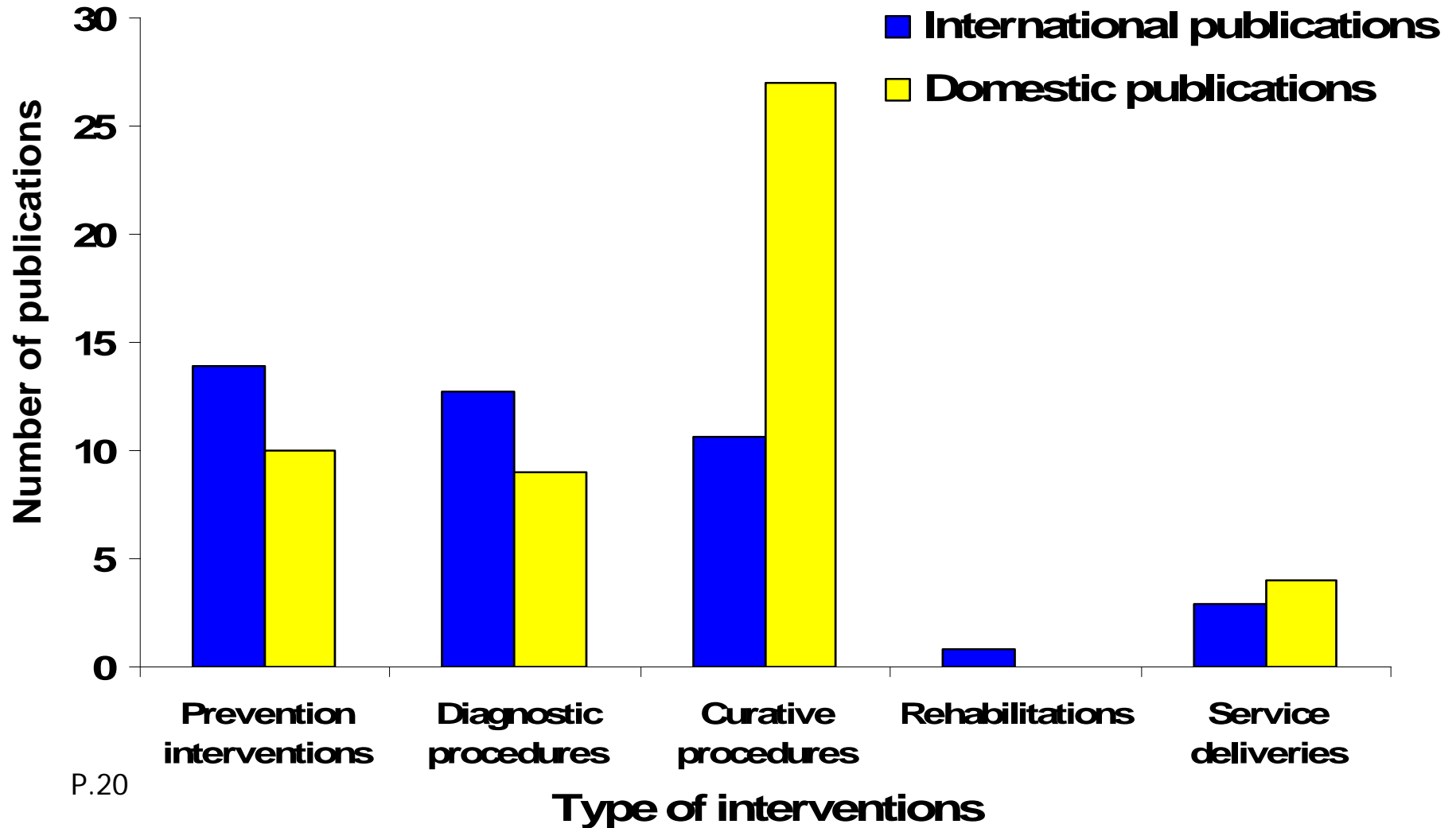
International publications



Domestic publications



Result : Type of intervention (6)

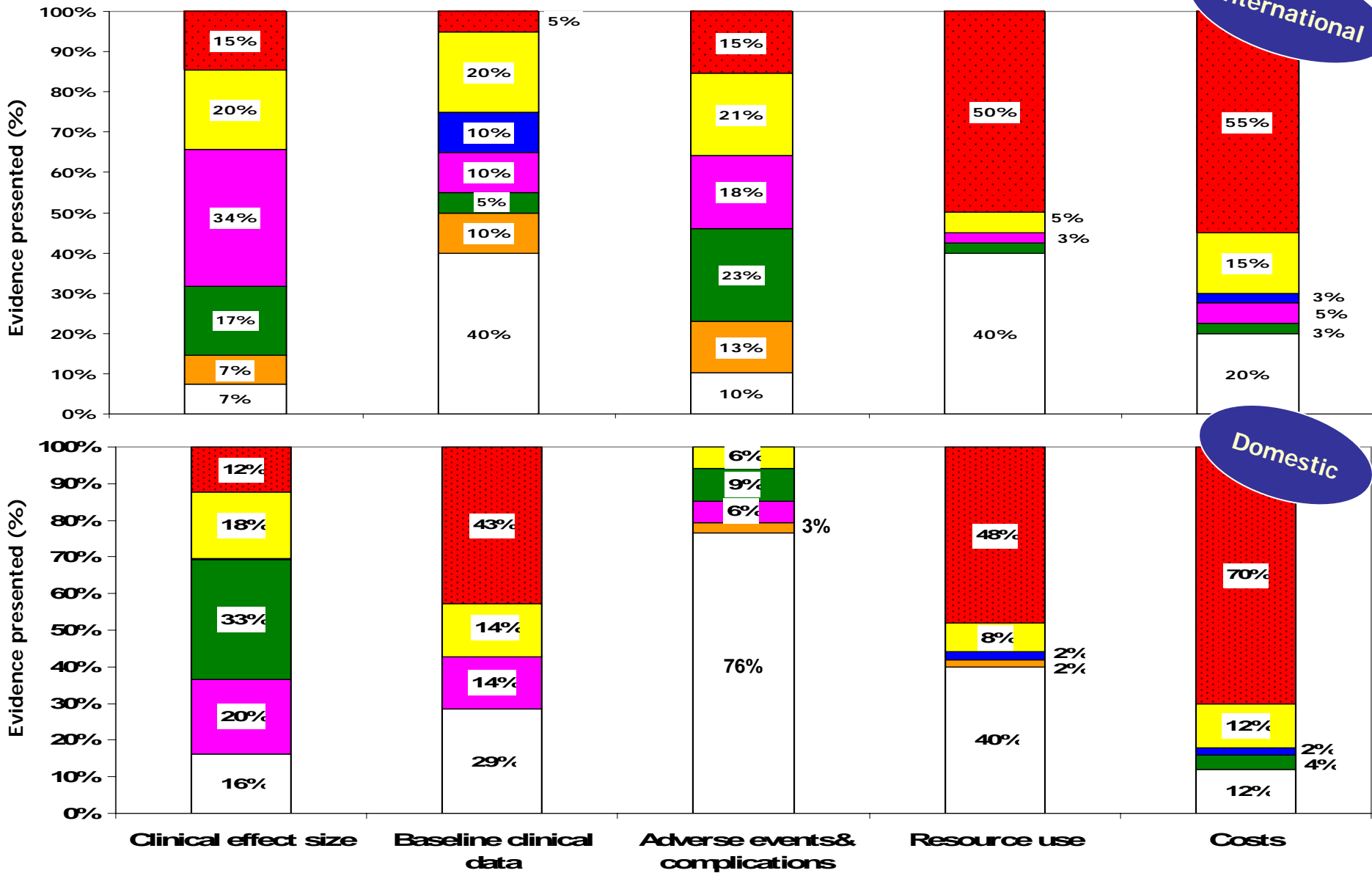


Result : Quality of studies (7)

Recommendations	International publications		Domestic publications	
	Number of studies fulfilling recommendation	%	Number of studies fulfilling recommendation	%
Perspective specified	22/41	54	30/50	60
Description of comparator (s)	33/39	85	40/50	80
Used discounting for costs or/and outcomes	5/16	31	15/24	63
Calculated and reported ICER	16/39	41	15/50	30
Performed uncertainty analysis	13/41	32	28/50	56
Disclosed funding sources	28/41	68	16/50	32

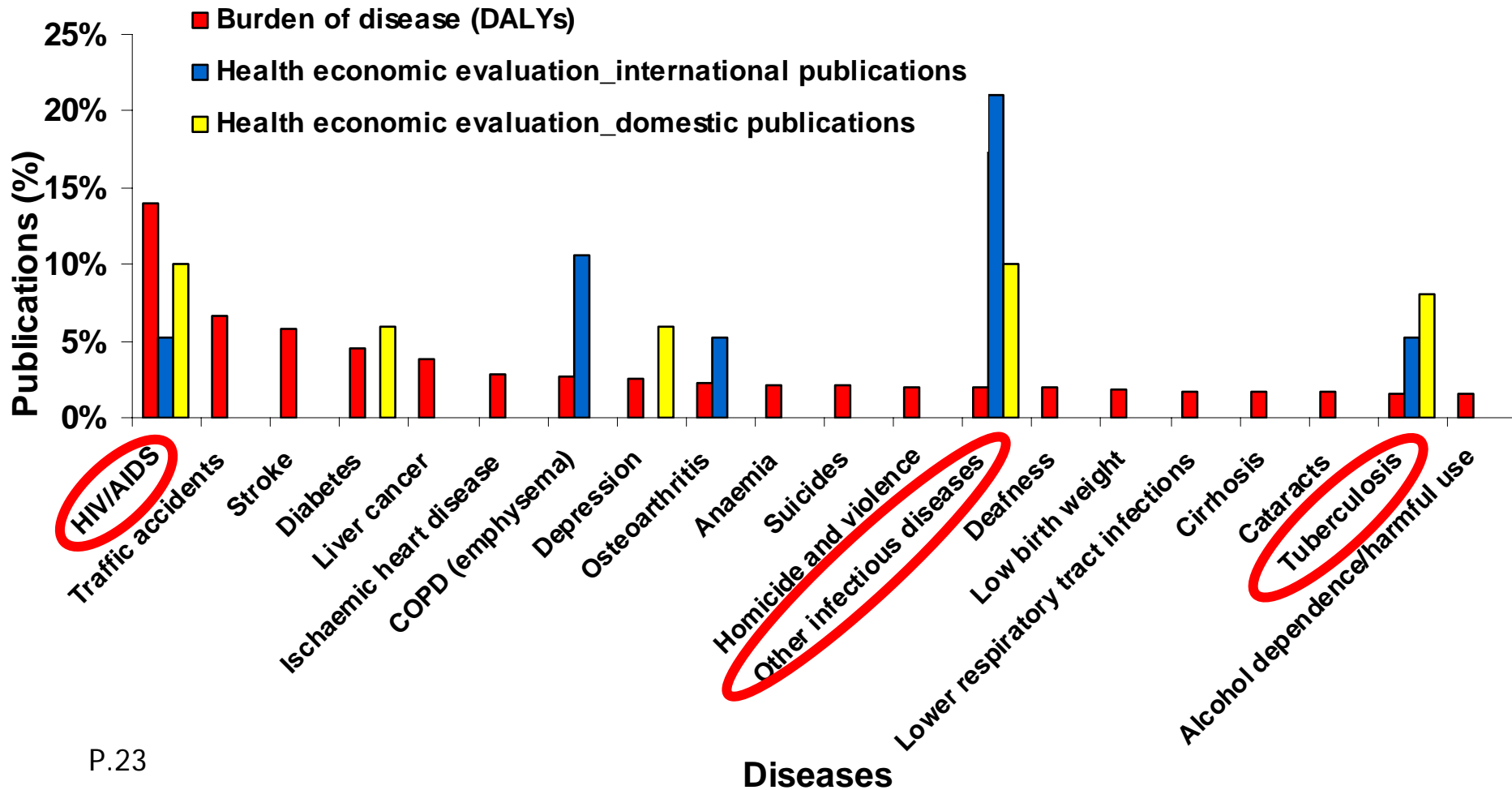
ICER = Incremental cost-effectiveness ratio

Result : Quality of studies (8)

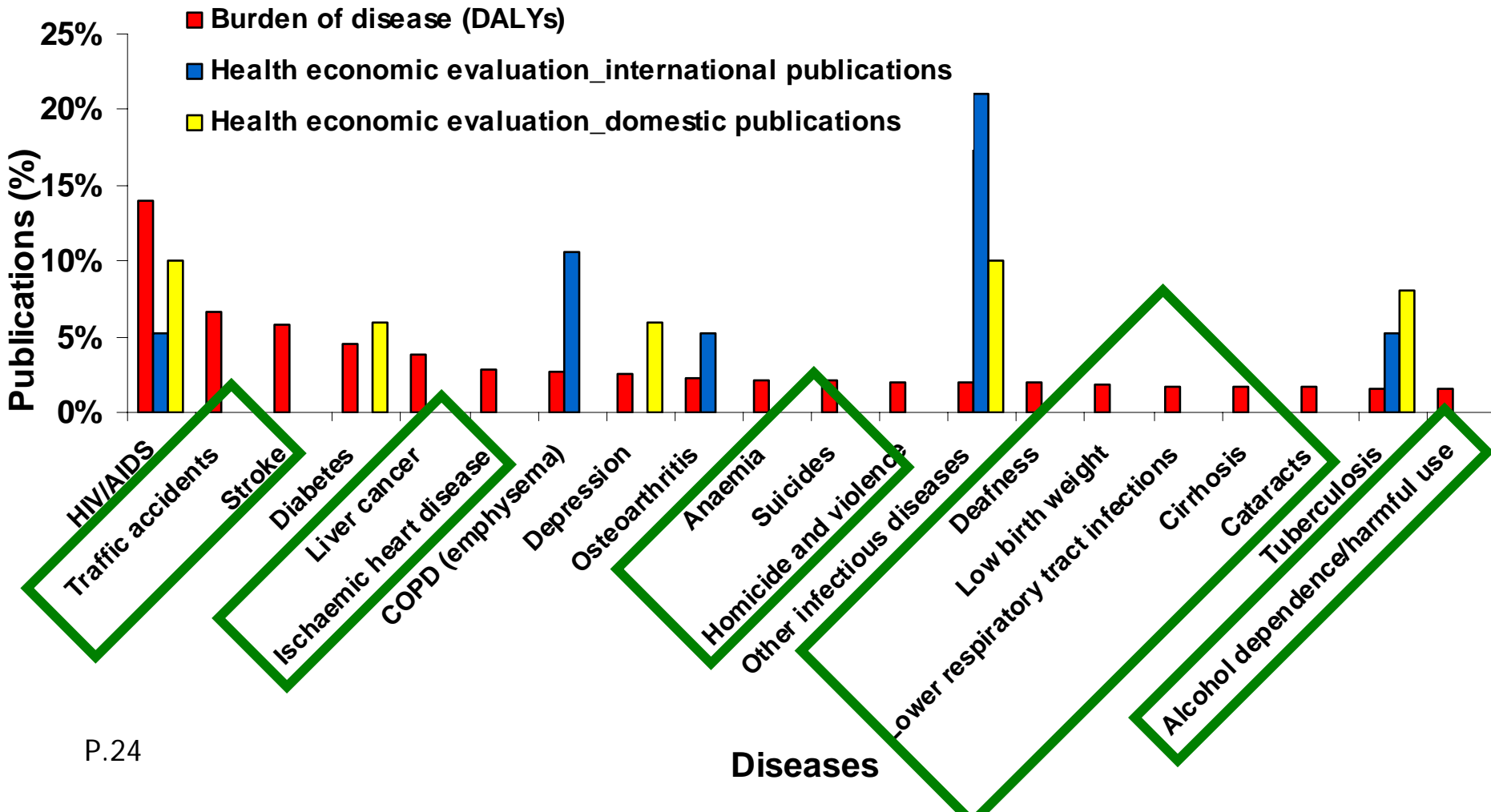


■ Rank 1
 ■ Rank 2
 ■ Rank 3
 ■ Rank 4
 ■ Rank 5
 ■ Rank 6
 ■ Not specified

Result : Target Health Problems (9)



Result : Target Health Problems (10)



Conclusions

- No significant difference in terms of quantity and quality
- The methodological pitfalls :
 - The lack of calculation of an ICER
 - Limited use of discount and uncertainty analyses
- Poor distribution of research resources to the determination of cost-effective interventions for major health problems in Thailand

Policy recommendations

- An urgent need for development of national methodological guideline for conducting and reporting economic evaluation in Thailand
- Should develop a comprehensive and systematic methods for prioritising topics in order to conduct future economic assessment in Thailand

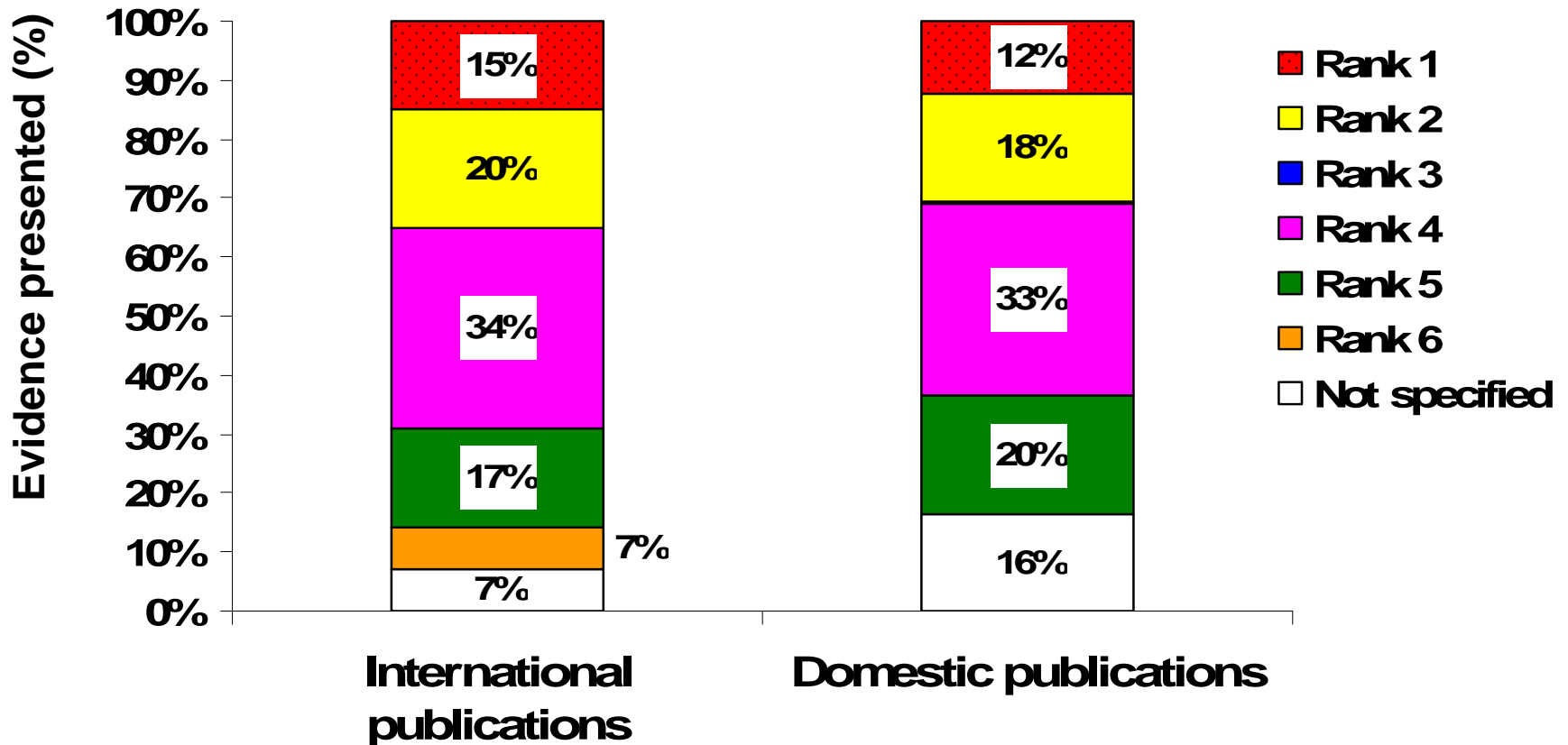
THANK YOU

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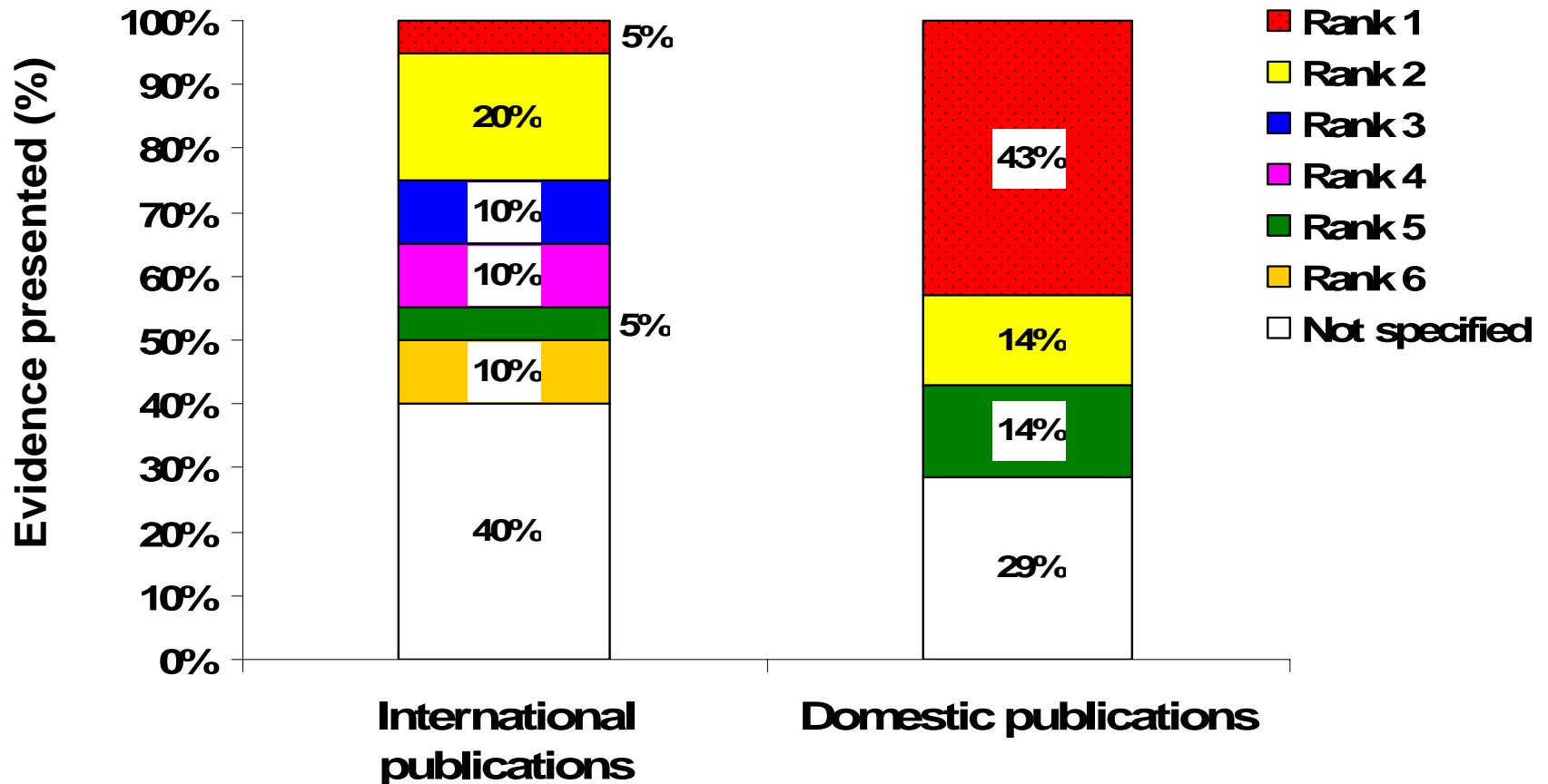
Result : Quality of studies (11)

Clinical effect size



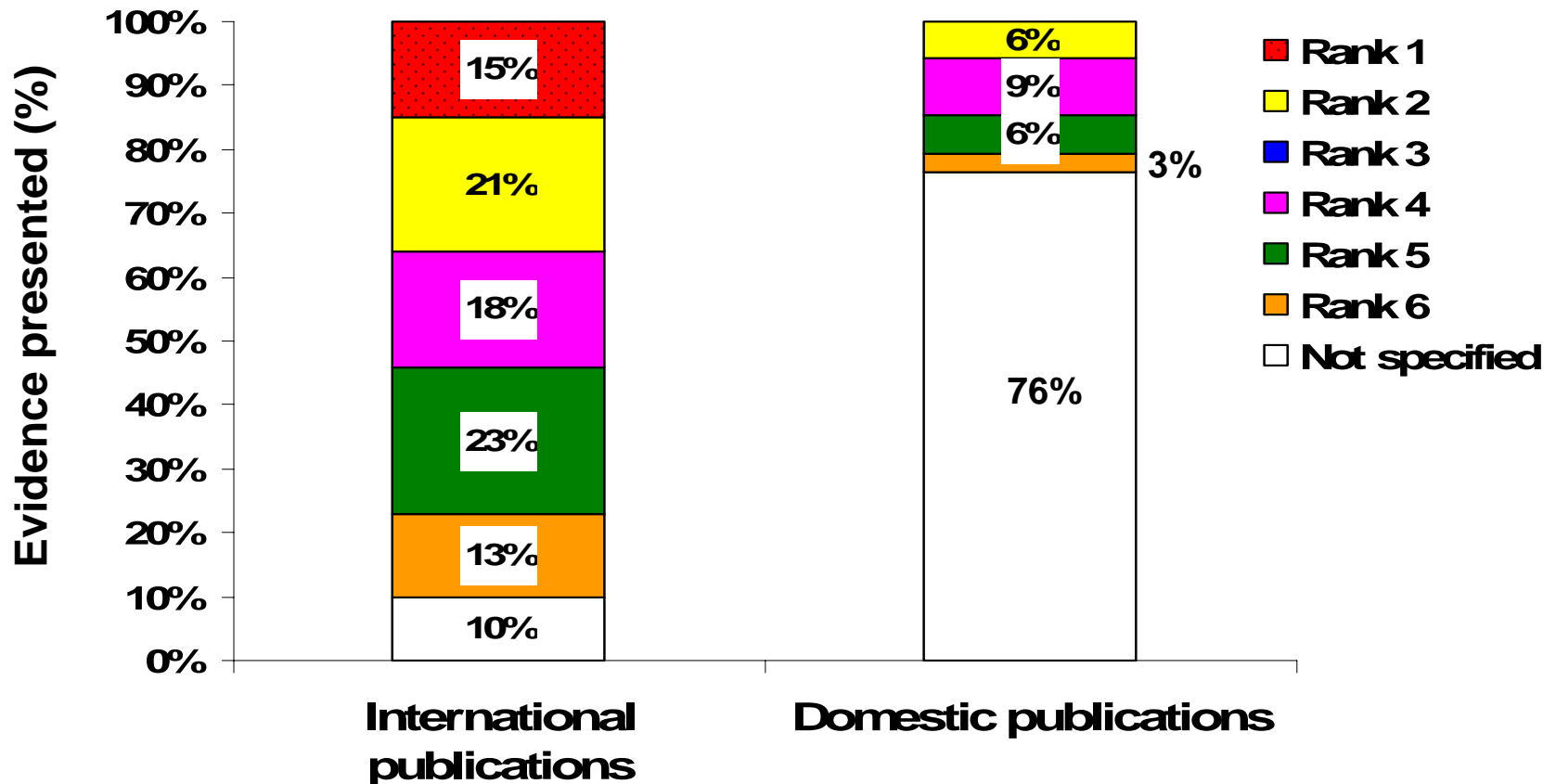
Result : Quality of studies (12)

Baseline clinical data



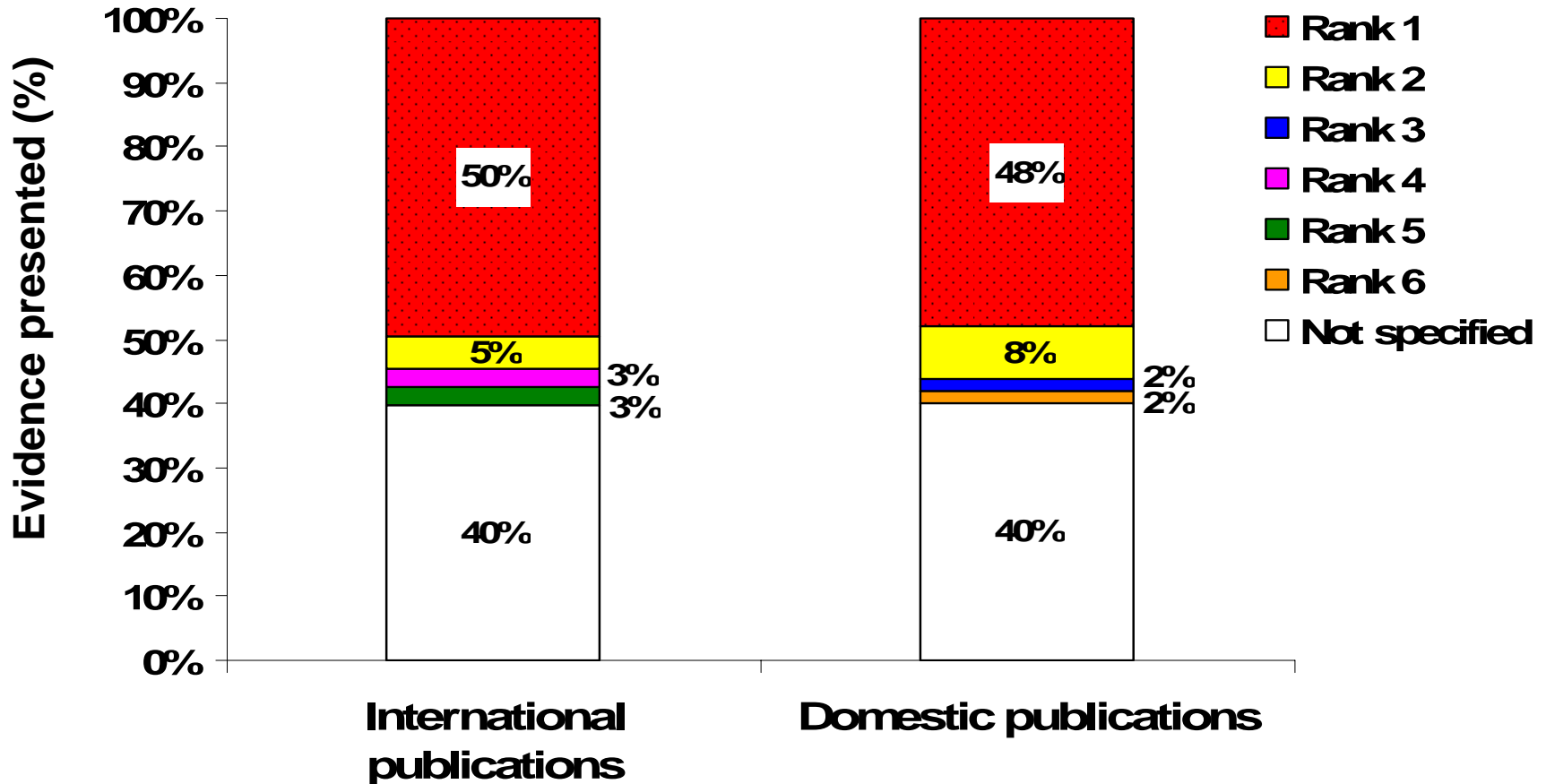
Result : Quality of studies (13)

Adverse events & Complications



Result : Quality of studies (14)

Resource use



Result : Quality of studies (15)

Costs

