Federaal Kenniscentrum voor de Gezondheidszorg
Centre Fédéral d'Expertise des Soins de Santé
KCE

Impact of academic detailing on primary care physicians - Supplement

KCE reports 125S

Federaal Kenniscentrum voor de Gezondheidszorg
Centre fédéral d'expertise des soins de santé
Belgian Health Care Knowledge Centre
2010

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Federaal Kenniscentrum voor de Gezondheidszorg
Centre fédéral d'expertise des soins de santé
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Title : Impact of academic detailing on primary care physicians - Supplement

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1 APPENDICES LITERATURE REVIEW

1.1 DEFINITION OF TERMS

PICO	Search terms
POPULATION: PHYSICIANS	***Mesh*** Physicians; Physicians, Family; Specialism ***Emtree*** Physician; Medical specialist; Thesaurus psychinfo; Physicians (to explode) ***Thesaurus Eric*** Physicians; Medicine ***Key words*** Physicians; General practitioner; Specialist
INTERVENTION: ORAL INDIVIDUAL ACADEMIC DETAILING	*Intervention: oral individual academic detailing* ***Mesh*** Education, Medical, Continuing ***Emtree*** Medical education; Academic advisement; Continuing education; Lifelong learning; In service training; Learning environment ***Thesaurus psychinfo*** Medical education; professional development; continuing education ***Thesaurus Eric*** Academic advising; Allied health occupations education; Medical education; Professional continuing education; Outreach programmes; Intervention ***Key words*** Academic detail*; Educational outreach visit; Face-to-face visit; Educational visit*; Education method; Educational intervention; Information method; Oral; Individual; Face-to-face
COMPARISON: OTHER INDEPENDENT EDUCATIONAL TECHNIQUES	***Mesh*** Education, Medical, Continuing ***Emtree*** Medical education; Academic advisement; Continuing education; Lifelong learning; In service training; Learning environment ***Thesaurus psychinfo*** Medical education; professional development; continuing education ***Thesaurus Eric*** Academic advising; Allied health occupations education; Medical education; Professional continuing education; Outreach programmes; Intervention ***Key words*** Academic detail*; Educational outreach visit; Face-to-face visit; Educational visit*; Education method; Educational intervention; Information method; Oral; Individual; Face-to-face
OUTCOME: PHYSICIAN'S MEDICAL PRACTICE	***Mesh*** Education, Medical, Continuing ***Emtree*** Educational model; Continuing education provider ***Thesaurus psychinfo*** Medical education; professional development; continuing education ***Thesaurus Eric*** Teaching methods; Educational strategies ***Key words*** Audit; Feedback; Written information; Social marketing; Collective/group outreach visit; Education method; Educational intervention; Information method
	Mesh Drug prescription; Drug utilisation; Decision making; Outcome assessment (healthcare); Physicians practice patterns; Professional practice; Treatment outcome ***Emtree*** General practice; Family practice; Medical practice; Medical decision making; Clinical practice; Clinical decision making; Social marketing; Prescription ***Thesaurus psychinfo*** Prescribing (drugs); Prescription drugs; Clinical Practice; Evidence Based Practice; Therapeutic Processes/ ***Thesaurus Eric*** Drug therapy; Medical services; Medical care evaluation ***Key words*** Prevention; Prescrib* practice; Prescrib* behavio(u)r; Physician's level of knowledge; Clinical practice

The search strategies are available upon request

1.2 QUALITY APPRAISAL OF THE REVIEWS OF REVIEWS AND SYSTEMATIC REVIEWS

1.2.1 REVIEWS OF SYSTEMATIC REVIEWS

1. BLOOM, 2005 Bloom BS. Effects of continuing medical education on improving physician clinical care and patient health: a review of systematic reviews. International Journal of Technology Assessment in Health Care. 2005;21(3):380-5.	
TITLE:	
Mentions review of systematic reviews	
ABSTRACT (structured summary)	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	NO
Review methods	NO
Limitations	NO
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: NO
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	

Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES (but no flow diagram)
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: NO
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: YES
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Gives results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): NO
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a substantial number of limitations when assessing the items of the PRISMA statement checklist.

2. GRINDROD, 2006 Grindrod KA, Patel P, Martin JE. What interventions should pharmacists employ to impact health practitioners' prescribing practices? Ann Pharmacother. 2006;40(9):1546-57.	
TITLE:	
Does not mention a review of systematic reviews	
ABSTRACT: YES	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	NO
Review methods	NO
Limitations	NO
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES, but not presented as PICO	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale:

	YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO META-ANALYSIS
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, with flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NO
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a substantial number of limitations when assessing the items of the PRISMA statement checklist. - A non quantitative summary of the reported results was performed using a vote-counting method

3. LANDRY, 2002 Landry MD, Sibbald WJ. Changing physician behavior: a review of patient safety in critical care medicine. J Crit Care. 2002;17(2):138-45.	
TITEL:	
Does not mention review of systematic reviews	
ABSTRACT: YES	
Background	YES
Objectives	YES
Data sources	NO
Study elegibility criteria	NO
Participants	NO
Interventions	YES
Study appraisal and synthesis methods	NO
Review methods	NO
Limitations	NO
Results	NO
Conclusion	NO
Implications of key findings	NO
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): NO	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: NO
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: NO
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): NO
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: NO
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: NO
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: NO
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO

Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NO
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): NO
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a substantial number of limitations when assessing the items of the PRISMA statement checklist.

4. SATTERLEE, 2008 Satterlee WG, Eggers RG, Grimes DA. Effective medical education: Insights from the cochrane library. Obstetrical and Gynecological Survey. 2008;63(5):329-33.	
TITEL:	
Mentions a systematic review	
ABSTRACT: YES	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	YES
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS):	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review,

	and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: NO
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NO
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): NO
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: NO
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a limited limitations when assessing the items of the PRISMA statement checklist. - Only Cochrane database consulted

5. SOHN, 2004 Sohn W, Ismail AI, Tellez M. Efficacy of educational interventions targeting primary care providers' practice behaviors: an overview of published systematic reviews. Journal of Public Health Dentistry. 2004;64(3):164-72.	
TITEL:	
Title mentions a review of systematic review	
ABSTRACT: YES	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	NO
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: YES
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, but no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO

Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NO
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a moderate number of limitations when assessing the items of the PRISMA statement checklist

1.2.2 SYSTEMATIC REVIEWS

1. Arnold, 2005 Arnold SR, Straus SE. Interventions to improve antibiotic prescribing practices in ambulatory care. Cochrane Database of Systematic Reviews. 2005;4(4):CD003539.	
TITEL:	
Does mention a systematic review	
ABSTRACT: YES	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	YES
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number: YES
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES

Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: YES
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): YES
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: YES
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: YES
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: YES
APPRAISAL	
	- With the exception of a limited number of items, all items are represented as required by the PRISMA statement checklist.

2. CHAILLET, 2006 Chaillet N, Dube E, Dugas M, Audibert F, Tourigny C, Fraser WD, et al. Evidence-based strategies for implementing guidelines in obstetrics: a systematic review. Obstet Gynecol. 2006;108(5):1234-45.	
TITEL:	
Does mention a systematic review	
ABSTRACT: YES	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	NO
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: YES
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, but no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within	Present data on risk of bias of each study and, if available, any outcome level assessment: YES

studies	
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NA
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NA
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents some limitations when assessing the items of the PRISMA statement checklist since e.g. a profile summarising trail flow is not presented.

3. FISH, 2002 Fish A, Watson MC, Bond CM. Practice-based pharmaceutical services: A systematic review. Int. J. Pharm. Pract. 2002;10(4):225-33.	
TITEL:	
Does mention a systematic review	
ABSTRACT: YES	
Background	
Objectives	
Data sources	
Study elegibility criteria	
Participants	
Interventions	
Study appraisal and synthesis methods	
Review methods	
Limitations	
Results	
Conclusion	
Implications of key findings	
Systematic review registration number	
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS):	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number:
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale:
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched:
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated:

Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis):
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators:
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made:
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis:
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means):
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis:
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies):
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified:
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram:
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations:
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment:
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot:
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency:
Risk of bias across studies	Presents results of any assessment of risk of bias across studies:
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression:
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers):
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias):
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research:
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review:
APPRAISAL	
	- The SR presents some limitations when assessing the items of the PRISMA statement checklist

4. GRIMSHAW, 2001 Grimshaw JM, Shirran L, Thomas R, Mowatt G, Fraser C, Bero L, et al. Changing provider behavior: an overview of systematic reviews of interventions. Med Care. 2001;39(8 Suppl 2):II2-45.	
TITEL:	
Does mention systematic review	
ABSTRACT: YES	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: NO
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: NO
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: YES

Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a moderate number of limitations when assessing the items of the PRISMA statement checklist

5. Grimshaw, 2004 Grimshaw JM, Thomas RE, MacLennan G, Fraser C, Ramsay CR, Vale L, et al. Effectiveness and efficiency of guideline dissemination and implementation strategies. Health Technol Assess. 2004;8(6):iii-iv, 1-72.	
TITEL:	
Does not mention systematic review	
ABSTRACT: YES	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow□up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES

Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta□analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta□analysis: NA
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NA
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre□specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: NO, no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a moderate number of limitations when assessing the items of the PRISMA statement checklist

6. KROENKE, 2000 Kroenke, K, Taylor-Vaisey A, Dietrich A, Oxman T. Interventions to improve provider diagnosis and treatment of mental disorders in primary care. Psychosomatics 41:1, 39-52.	
TITEL:	
Does not mention systematic review	
ABSTRACT	
Background	NO
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	NO
Review methods	NO
Limitations	NO
Results	YES
Conclusion	YES
Implications of key findings	NO
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies):NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NA
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, but no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO

Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): NO
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a moderate number limitations when assessing the items of the PRISMA statement checklist

7. LU, 2008 Lu CY, Ross-Degnan D, Soumerai SB, Pearson S-A. Interventions designed to improve the quality and efficiency of medication use in managed care: a critical review of the literature - 2001-2007. BMC Health Services Research. 2008;8(75).	
TITEL:	
Does not mention systematic review	
ABSTRACT	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES

Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: NO
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: YES
APPRAISAL	
	- The SR presents a limited limitations when assessing the items of the PRISMA statement checklist

8. MORRISON, 2000 Morrison A, Wertheimer AI, Berger ML. Interventions to improve antihypertensive drug adherence: A quantitative review of trials. Formulary. 2000;35(3):234-45.	
TITEL:	
Mentions systematic review	
ABSTRACT	
Background	NO
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	NO
Review methods	NO
Limitations	NO
Results	YES
Conclusion	YES
Implications of key findings	NO
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, No flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: NO
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO

Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a moderate number of limitations when assessing the items of the PRISMA statement checklist

9. O'BRIEN, 2007 O'Brien MA, Rogers S, Jamtvedt G, Oxman AD, Odgaard-Jensen J, Kristoffersen DT, et al. Educational outreach visits: Effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews. 2007;-(4).	
TITEL:	
Mentions systematic review	
ABSTRACT	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	YES
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number:
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review,

	and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: YES
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: YES
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): YES
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: YES
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: YES
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: YES
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: YES
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: YES
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: YES
APPRAISAL	
	- The SR presents very few limitations when assessing the items of the PRISMA statement checklist

10. OSTINI, 2009 Ostini R, Hegney D, Jackson C, Williamson M, Mackson JM, Gurman K, et al. Systematic review of interventions to improve prescribing. Ann.Pharmacother. 2009;43(3):502-13.	
TITEL:	
Mentions systematic review	
ABSTRACT	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES

Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NO
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	

	- The SR presents a moderate number of limitations when assessing the items of the PRISMA statement checklist.

11. PEARSON, 2003 Pearson SA, Ross-Degnan D, Payson A, Soumerai SB. Changing medication use in managed care: a critical review of the available evidence. Am J Manag Care. 2003;9(11):715-31.	
TITEL:	
Mentions a critical review of the literature	
ABSTRACT	
Background	NO
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: YES
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: YES
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES

Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NO
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: YES
APPRAISAL	
	- The SR presents a limited number of limitations when assessing the items of the PRISMA statement checklist

12. SKETRIS, 2009 Sketris IS, Langille Ingram EM, Lummis HL. Strategic opportunities for effective optimal prescribing and medication management. Canadian Journal of Clinical Pharmacology/Journal Canadien de Pharmacologie Clinique. 2009;16(1):e103-25.	
TITEL:	
Does not mention systematic review	
ABSTRACT	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES

Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, but no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: YES
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: YES
APPRAISAL	
	- The SR presents a limited number of limitations when assessing the items of the PRISMA statement checklist

13. TU, 2002 Tu K, Davis D. Can we alter physician behavior by educational methods? Lessons learned from studies of the management and follow-up of hypertension. Journal of Continuing Education in the Health Professions. 2002;22(1):11-22.	
TITEL:	
Does not mention systematic review	
ABSTRACT	
Background	YES
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES

Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	YES
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides a registration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: Yes, with flow diagram.
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: NO
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NO
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and

	implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: YES
APPRAISAL	
	- The SR presents some limitations when assessing the items of the PRISMA statement checklist

14. WEINMANN, 2007 Weinmann S, Koesters M, Becker T. Effects of implementation of psychiatric guidelines on provider performance and patient outcome: systematic review. Acta Psychiat Scnad 2007: 115, 420-433.	
TITEL:	
Mentions systematic review	
ABSTRACT	
Background	NO
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	NO
Review methods	NO
Limitations	NO
Results	YES
Conclusion	YES
Implications of key findings	NO
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: Yes
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NA

RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NO
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: YES
APPRAISAL	
	- The SR presents a moderate number of limitations when assessing the items of the PRISMA statement checklist

15. WILTON, 2002 Wilton P, Smith R, Coast J, Millar M. Strategies to contain the emergence of antimicrobial resistance: a systematic review of effectiveness and cost-effectiveness. J Health Serv Res Policy. 2002;7(2):111-7.	
TITEL:	
Mentions systematic review	
ABSTRACT	
Background	NO
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	NO
Results	YES
Conclusion	YES
Implications of key findings	NO
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number: NO

Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: YES
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: YES
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): YES
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: YES
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): YES
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NA
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: YES
Results of individual studies	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: YES
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NA
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: NO
APPRAISAL	
	- The SR presents a limited number of limitations when assessing the items of the PRISMA statement checklist

16. YEN, 2006 Yen BM. Engaging physicians to change practice. Journal of Clinical Outcomes Management. 2006;13(2):103-10.	
TITEL:	
Does not mention systematic review	
ABSTRACT	
Background	NO
Objectives	YES
Data sources	YES
Study elegibility criteria	YES
Participants	YES
Interventions	YES
Study appraisal and synthesis methods	YES
Review methods	YES
Limitations	YES
Results	YES
Conclusion	YES
Implications of key findings	NO
Systematic review registration number	NO
INTRODUCTION	
The explicit rationale for the interventions and rationale for the review is provided: YES	
Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS): YES	
METHODS	
Protocol and registration	Indicates if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provides aregistration information including registration number: NO
Eligibility criteria	Specifies study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale: YES
Information sources	Describes all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched: YES
Search	Presents full electronic search strategy for at least one database, including any limits used, such that it could be repeated: NO
Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis): YES
Data collection process	Describes method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators: YES
Data items	Lists and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made: YES
Risk of bias in individual studies	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis: NO
Summary measures	States the principal summary measures (e.g., risk ratio, difference in means): NO
Synthesis of results	Describes the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis: NO
Risk of bias across studies	Specifies any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies): NO
Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified: NO
RESULTS	
Study selection	Gives numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram: YES, but no flow diagram
Study characteristics	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations: YES
Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment: NO
Results of individual	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary

studies	data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot: YES
Synthesis of results	Presents results of each meta-analysis done, including confidence intervals and measures of consistency: NA
Risk of bias across studies	Presents results of any assessment of risk of bias across studies: NO
Additional analysis	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression: NO
DISCUSSION	
Summary of evidence	Summarizes the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers): YES
Limitations	Discusses limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias): YES
Conclusions	Provides a general interpretation of the results in the context of other evidence, and implications for future research: YES
Funding	Describes sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review: YES
	Summarise key findings, interpret the results in light of totality of available evidence: describe potential biases in the review process and suggest a future research agenda: YES
APPRAISAL	
	- The SR presents a moderate number of limitations when assessing the items of the PRISMA statement checklist

1.3 PRIMARY STUDIES: EXCLUSION -QUALITY APPRAISAL

1.3.1 Studies excluded on the basis of full text: reason for exclusion

Number	Author	Reasons for rejection
1.	**Bernal-delgado, 2002**	This study focuses on group academic detailing only, and not on one-to-one academic detailing.
2.	**Blanc, 2008**	This study provides no description of outcomes, and has a retrospective study design that does not allow any conclusions on the effectiveness of academic detailing.
3.	**Cockburn, 1992**	Quality appraisal score of 5/14
4.	**Dolovich, 1999**	This study focuses on commercially sponsored evidence-based academic detailing, and is out of scope.
5.	**Font, 1991**	Out of scope
6.	**Freemantle, 1999**	This study provides no outcome data since it is a paper that documents the rationale and design of the study
7.	**Grimshaw, 2001**	*Overview of systematic reviews--replaced to systematic reviews*
8.	**Grimshaw, 2004**	*Duplicate –in list of systematic reviews*
9.	**Grindrod, 2006**	*Duplicate –in list of reviews of systematic reviews*
10.	**Horowitz, 1996**	This study provides no outcome data since it describes the project design and process of implementing an AD intervention.
11.	**Joseph, 2004**	This study targets hospitals only
12.	**Magrini, 2007**	This study provides no outcome data since it describes the study protocol
13.	**May, 2009**	This study provides no outcome data since it describes experiences with AD only
14.	**Miller, 2004**	This study targets hospitals only
15.	**Morrison, 2000**	*Review, newly added in listing of reviews*
16.	**Pearson, 2003**	*Duplicate –put in list of systematic reviews*
17.	**Polinski, 2005**	This study provides no outcome data since it describes the implementation of an AD program only
18.	**Pond, 1994**	Quality appraisal score of 6/14
19.	**Richens, 2004**	No reference available
20.	**Rosich, 2005**	Article in Spanish
21.	**Skaer, 1993**	Study not included since it is not clear if the intervention is directed at hospital physicians or general practitioners
22.	**Solomon, 2001**	This study targets a US teaching hospital only
23.	**Stevens, 2002**	This study targets patients with AD and not physicians
24.	**Yeo, 1994**	Study not included: describes intervention and process evaluation—no evaluation component

1.3.2 Quality appraisal of the 87 studies included

	Author,year	RQ	PP/SET	INTERV	COMP	OUTCOM	DESIGN	SS	STAT	GEN	CONF	RAND	BLIND	CLUST	DATAP	TOTAL
1.	**Aspy, 2008**	1	1	1	1	1	1	1	1	1	1	1	-1	1	1	**13/14**
2.	**Avorn, 1983**	1	-1	1	1	1	1	1	1	1	1	-1	1	0	1	**9/14**
3.	**Benincasa, 1996**	1	1	1	0	1	1	1	1	1	-1	0	0	0	1	**8/14**
4.	**Berings, 1994**	1	1	1	1	-	1	1	1	1	1	1	-1	0	1	**9/14**
5.	**Bonds, 2009**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
6.	**Braybrook, 1996**	1	-1	1	1	1	1	1	1	1	1	1	-1	0	1	**9/14**
7.	**Broadhurst, 2007**	1	1	1	0	1	1	1	1	1	0	0	0	0	1	**9/14**
8.	**Brown, 2000**	1	1	1	1	1	1	1	1	1	-1	1	1	-1	1	**12/14**
9.	**Browner, 1994**	1	1	1	1	1	1	1	1	1	-1	1	0	-1	1	**11/14**
10.	**Coenen, 2004**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**11/14**
11.	**Cranney, 1999**	1	1	1	1	1	1	1	1	1	0	1	-1	0	0	**9/14**
12.	**De Burgh, 1995**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**11/14**
13.	**Dey, 2004**	1	1	1	1	1	1	1	1	1	1	1	-1	1	1	**12/14**
14..	**De Santis, 1994**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**9/14**
15.	**Eccles, 2007**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**11/14**
16.	**Epstein, 2008**	1	1	1	0	1	1	-1	1	1	0	0	0	0	1	**7/14**
17.	**Etter, 2006**	1	1	1	1	1	1	1	1	1	0	1	-1	0	0	**9/14**
18.	**Feder, 1995**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**11/14**
19.	**Feldstein, 2006**	1	1	1	0	1	1	1	1	1	0	0	0	0	1	**9/14**
20.	**Figueiras, 2001**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
21.	**Figueiras, 2006**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
22.	**Franzini, 2007**	1	1	1	1	1	1	-1	1	1	-1	1	-1	0	1	**7/14**
23.	**Freemantle, 2002**	1	1	1	1	1	1	1	1	1	1	1	1	0	0	**12/14**
24.	**Fretheim, 2006**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
25.	**Fretheim, 2006**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
26.	**Frijling, 2003**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**11/14**
27.	**Gandjour, 2005**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA since cost study

28.	**Goldberg, 1998**	1	1	1	1	1	1	1	1	1	1	1	0	0	1	**12/14**
29.	**Gomel, 1998**	1	1	1	1	1	1	1	1	1	0	1	-1	0	1	**10/14**
30.	**Gonzales, 1999**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
31.	**Graham, 2008**	1	1	1	1	1	1	1	1	1	1	0	0	0	1	**11/14**
32.	**Griffiths, 2004**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**12/14**
33.	**Hall, 2001**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
34.	**Hennessy, 2006**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
35.	**Horn, 2007**	1	1	1	1	1	1	1	1	1	0	0	0	0	1	**10/14**
36.	**Hulsher, 1997**	1	1	1	1	1	1	-1	1	1	0	0	1	1	1	**11/14**
37.	**Ilett, 2000**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
38.	**Jackson, 2004**	1	1	1	1	1	1	1	1	1	-1	0	1	0	1	**11/14**
39.	**Kim, 1999**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
40.	**Lemelin, 2001**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
41.	**Lin, 1997**	1	1	1	0	1	1	1	1	1	0	0	1	0	1	**10/14**
42.	**Lin, 2001**	1	1	1	1	1	1	1	1	1	0	1	1	0	1	**12/14**
43.	**Lobo, 2002**	1	1	1	1	1	1	1	1	1	0	1	1	0	1	**12/14**
44.	**Lobo, 2002**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
45.	**Manfredi, 1998**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
46.	**Mason, 2001**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA since cost study
47.	**McDonald, 2003**	1	1	1	0	1	1	-1	1	1	0	0	0	0	1	**7/14**
48.	**Midlov, 2006**	1	1	1	1	1	1	1	1	1	-1	1	1	0	1	**11/14**
49.	**Mold, 2008**	1	1	1	1	1	1	-1	1	1	-1	1	1	0	1	**9/14**
50.	**Meyers, 2004**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
51.	**Naughton, 2007**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**14/14**
52.	**New, 2004**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**14/14**
53.	**Newton-Syms, 1992**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
54.	**Nilsson, 2001**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
55.	**Ofman, 2003**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**14/14**
56.	**Ornstein, 2004**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
57.	**Paton, 2008**	1	1	1	0	1	1	1	1	1	0	0	0	0	1	**9/14**
58.	**Peterson, 1996**	1	1	1	1	1	1	-1	1	1	-1	0	1	0	1	**8/14**
59.	**Peterson, 1997**	1	1	1	1	1	1	1	1	1	-1	0	1	0	1	**10/14**

60.	**Pit, 2007**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**14/14**
61.	**Raisch, 1990**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
62.	**Ray, 1985**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
63.	**Ray, 1986**	1	1	1	1	1	1	1	1	1	-1	-1	1	0	1	**9/14**
64.	**Ricordeau, 2003**	1	1	1	1	1	1	1	1	1	-1	0	0	0	1	**9/14**
65.	**Schuster, 2008**	1	1	1	1	1	1	1	1	1	1	0	0	0	1	**11/14**
66.	**Schaffner, 1983**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
67.	**Shanahan, 2006**	1	1	1	1	1	1	1	1	1	0	0	0	0	1	**10/14**
68.	**Siegel, 2003**	1	1	1	0	1	1	1	1	1	0	1	0	0	1	**10/14**
69.	**Simon, 2005**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**14/14**
70.	**Simon, 2007**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**14/14**
71.	**Siriwardena, 2002**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**12/14**
72.	**Sheinfeld, 2000**	1	1	1	1	1	1	1	1	1	0	0	0	0	1	**10/14**
73.	**Stone, 2005**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA since cost study
74.	**Teng, 2006**	1	1	1	1	1	1	-1	1	1	0	0	0	0	1	**8/14**
75.	**Turner, 2000**	1	1	1	1	1	1	-1	1	1	-1	1	1	0	1	**9/14**
76.	**Varonen, 2007**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
77.	**Van den Hombergh, 1999**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**12/14**
78	**Van der Wijden, 1999**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
79.	**Van Eijk, 2001**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**13/14**
80.	**Walsh, 2005**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
81.	**Watson, 2001**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
82.	**Weller, 2003**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
83.	**Williams, 1994**	1	1	1	0	1	1	0	1	1	0	0	0	0	1	**8/14**
84.	**Witt, 2004**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
85.	**Wong, 2004**	1	1	1	1	1	1	1	1	1	-1	1	1	0	1	**12/14**
86.	**Young, 2002**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	**13/14**
87.	**Zwar, 2000**	1	1	1	1	1	1	1	1	1	1	1	-1	0	1	**12/14**

1.3.3 Elements used to describe the studies on academic detailing

Item	Definition
1. Country	Place were the study was conducted including countries in Europe, U.S., Australia and Asia.
2. Initiator of the program	Is the person or organisational entity which has initiated and/or funded the programme
3. Type of research design	The research design refers to RCT, before-after study,..
4. Type of objectives	Goals of studies including academic detailing include improvements in processes and outcomes of care.
5. Setting	The setting refers to the type of health care setting (physician's office, primary care clinics,….)
6. Type and number of populations targeted	The type of population refers to patients with cancer, heart failure, diabetes, neurodegenerative diseases, respiratory diseases,…
7. Type and number of caregivers targeted	Caregivers targeted refer to individual professionals or groups of care providers.
8. Type of behaviour targeted	The behaviour targeted refers to prescription behaviour, adherence to guidelines and any other behaviour related to quality/outcomes of care.
9. Type and number of professionals responsible for providing academic detailing	Professionals responsible for academic detailing are individuals who have been trained to provide the service
10. Type, number and intensity of interventions	Interventions refer to all actions that are defined as academic detailing
11. Academic detailing part of multifaceted intervention programme	A multifaceted intervention programme consists of a least out of one additional intervention besides academic detailing.
12. Type of outcome measures/indicators	Outcome measures refer to measurable items of care which focus upon some aspects of structure, process (clinical or inter-personal) or outcome and for which there is evidence or consensus that it can be used to assess the quality of care provided, and hence change it. These include biological outcomes, process outcomes, psycho-social outcomes and economic outcomes.
13. (Cost)effectiveness	(Cost)effectiveness is defined in this review as the degree to which the financial objectives of a program, care, service or system are achieved.

1.4 OVERVIEW OF THE SELECTED PAPERS

1.4.1 Description of the reviews of reviews

Number	Author, date	Main research question	Databases (years)	Exclusion (E) / inclusion criteria (I)	Selected systematic reviews
1.	**Bloom, 2005{Bloom, 2005 #2}**	Effect of continuing medical education on physician clinical care and patient health	Medical literature analysis and retrieval system on-line, DARE, Cochrane, Cinahl, Excerpta Medica database, Psychinfo, Canadian Medical Association Infobase, National Guidelines Clearinghouse, evidence-based medicine review, American College of Physicians Journal Club, HealthSTAR (1/1/1984 – 30/10/2004)	(I) English-language peer-reviewed journals (I) Formal meta-analysis or other structured review (E) literature reviews alone	Morrison et al, 2000 Thomson O'Brien et al. 2000 Thomson O'Brien et al. 2001
2.	**Grindrod et al, 2006{Grindrod, 2006 #7}**	Interventions of pharmacists to impact health practitioners' prescribing practices	Medline, Cinahl, Embase, Cochrane (→ July 2005)	(I) English-languages SR (I) clear report of search strategy, inclusion/exclusion criteria, assessment criteria and methods for synthesizing or summarizing information and references	Grimshaw al, 2004 Harvey et al, 2002 Pearson et al. 2003 Thomson O'Brien et al. 2000 Wilton et al., 2002
3.	**Landry et al,2002{Landry, 2002 #9}**	Changing physician behaviour (critical safety care medicine)	Medline, Psychinfo, ABI/INFORM, O-INSPEC	(I) controlled observational studies, clinical trials and systematic reviews, relevant non-health care literature, gray literature	Thomson O'Brien et al. 2000
4.	**Satterlee et al, 2008{Satterlee, 2008 #15}**	Effective medical education	Cochrane database of systematic review (issue 4 for 2006)	-	Thomson O'Brien et al. 2000
5.	**Sohn et al, 2004{Sohn, 2004 #17}**	Efficacy of educational interventions targeting primary care provider's practice behaviours (dental care)	Medline, Cochrane (January 1988-March 2003)	(I) Following a list of interventions (I) Outcome measures described (I) quality of reporting (QUORUM) (I) RCT, CCT, CBA, ITS (I) English-language	Thomson O'Brien et al. 2000

1.4.2 Selected systematic reviews and source articles in these reviews

Number	Author, date	Main research question	Databases (years)	Exclusion (E) / inclusion criteria (I)	Final decision (inclusion of the review?)	Selected source articles (individual studies) on academic detailing / outreach visits
1.	Arnold et al, 2005{Arnold, 2005 #1}	Interventions to improve antibiotics prescribing practices in ambulatory care	Medline, Embase + EPOC search strategy (→ May 2000)	(I) RCT, QRCT, CBA, ITC (II) primary care in outpatients settings (III) professional intervention (IV) patient-based interventions (I) English language articles	**Included**	Avorn, 1983 De Santis 1994 Dolovich, 1999 Font, 1991 Ilett, 2000 Peterson, 1997 Shaffner 1983 Ray 1985
2.	Chaillet et al, 2006{Chaillet, 2006 #3}	Strategies for implementing clinical practice guidelines in obstetric care	Cochrane, Medline, Embase (January 1990 – June 2005)	(V) RCT, CBA, ITC (VI) quality criteria (EPOC) (E) non obstetrics, no relation to clinical guidelines implementation, opinion letters, no patient data, n patients<100 or health professional<75%, qualitative studies	**Included**	Richens, 2004
3.	Fish et al, 2002{Fish, 2002 #4}	Practice-based pharmaceutical services	Medline, Embase (2001-2007)	(I) RCTs, CCTs (II) Publication date after 1980 (III) English language Conducted in the UK, Australia, Canada, Scandinavia or the US	**Included**	Avorn, 1983 Braybrook, 1996 De Santis 1994 Ilett, 2000 Newton-Syms, 1992 Watson, 2001 Solomon, 2001
4.	Fendrick et al 2001	Effectiveness of benefit based co payment	------	------	Excluded	-----
5.	Grimshaw, 2001{Grimshaw, 2001 #5}	Effectiveness and costs of different guideline development, dissemination and implementation	Medline, Healthstar, Cochrane controlled trial register, Embase, Sigle, Cochrane EPOC specialised register		**Included**	Browner, 1994 De Burgh, 1995 De Santis, 1994 Feder, 1995 Hulsher, 1997 Manfredi, 1998

Number	Author, date	Main research question	Databases (years)	Exclusion (E) / inclusion criteria (I)	Final decision (inclusion of the review?)	Selected source articles (individual studies) on academic detailing / outreach visits
						Morrison, 1999 I Ornstein, 1991
6.	Grimshaw al, 2004{Grimshaw, 2004 #6}	Effectiveness and costs of different guideline development, dissemination and implementation	Medline, Healthstar, Cochrane controlled trial register, Embase, Sigle, Cochrane EPOC specialised register	(VII) RCT, CCT, CBA, ITC participants: medically qualified healthcare professionals outcomes: objective measures of provider behaviour and/or patient outcome	**Included**	Browner, 1994 De Burgh, 1995 De Santis, 1994 Feder, 1995 Hulsher, 1997 Manfredi, 1998 Morrison, 1999 I Ornstein, 1991 Peterson, 1996 Raisch, 1990 Ray, 1986 Ray,1987 Soumerai, 1987 Van der Weijden, 1999
7.	Harvey et al, 2002	Interventions to improve health professionals' management of obesity	Medline, psyclit, Embase, Sigle, Sociofile, dissertation Abstracts, Conference Paêrs Index, Cochrane	(I)scope (X) RCT, CCT, CBA, ITS qualified health professionals, overweight and/or obese patients interventions according to EPOC criteria (I) outcome measure: provider performance or patients outcomes	Excluded	No articles selected
8.	Kroenke et al, 2000{Kroenke, 2000 #8}	Interventions to improve provider diagnosis and treatment of mental disorders in primary care		(I)scope (XIII) RCT, CCT, CBA, ITS qualified health professionals, overweight and/or obese patients; interventions according to EPOC criteria (I) outcome measure: provider performance or patients outcomes	**Included**	Goldberg, 1998
9.	Lu et al, 2008{Lu, 2008 #10}	Interventions to improve the quality and the efficiency of medication use in managed care	Medline, Embase (2001-2007)	(I) publication between July 2001 and January 2007 (I) related to the research	**Included**	Simon, 2005 Soumerai, 1990 Stevens, 2002

Number	Author, date	Main research question	Databases (years)	Exclusion (E) / inclusion criteria (I)	Final decision (inclusion of the review?)	Selected source articles (individual studies) on academic detailing / outreach visits
				question (E) clinical effectiveness trials, cost-effectiveness studies of medications, descriptive studies, vaccination studies (I) RCT, CBA, ITS with at least 20 subjects in each comparison group		
10.	Morrison et al, 2000{Morrison, 2000 #11}	Effectiveness of interventions to improve oral antihypertensive drug adherence	Medline (1965- February 1999) + bibliographies screnes	(I) English-language (I) report of parallel-group, RCT, QRCT, (I) drug adherence= study endpoint (E) n<10	Excluded	No articles selected
11.	Thomson O'Brien et al. 2000 → **Update in Doumit, 2007**			Out of scope	Excluded	No articles selected
12.	Thomson O'Brien et al. 2000 - update in 2007{O'Brien, 2007 #124}	Effects of educational outreach visits on professional practice and health care outcomes	EPOC Medline Cinahl (March 2007)	(I) RCT (I) healthcare professionals responsible for patient care (E) students (I) outcome: performance in a healthcare setting or healthcare outcome	**Included**	Avorn, 1983 Berings, 1994 Braybrook, 1996 Cockburn, 1992 Coenen, 2004 De Burgh, 1995 Dey, 2004 Feder, 1995 Figuieras, 2001 Figuieras, 2006 Font, 1991 Freemantle, 2002 Fretheim, 2006 Frijling, 2003 Griffiths, 2004 Hall, 2001 Hennessy, 2006 Ilett, 2000 Kim, 1999 Lemelin, 2001 Myers, 2004 New, 2004 Newton-Syms, 1992 Ofman, 2003

Number	Author, date	Main research question	Databases (years)	Exclusion (E) / inclusion criteria (I)	Final decision (inclusion of the review?)	Selected source articles (individual studies) on academic detailing / outreach visits
						Ornstein, 2004 Raisch, 1990 Simon, 2005 Siriwardena, 2002 Van der Weijden, 1999 Van Eijk, 2001 Vanden Hombergh, 1999 Walsh, 2005 Watson, 2001} Weller, 2003 Witt, 2004 Young, 2002 Zwar, 2000
13.	O'Brien et al. 2001 **→ Update In Forsetlund 2009**				Excluded	No articles selected
14.	Ostini, 2009	Interventions to improve prescribing	Pubmed, EMBASE (1974-2008)	Experimental and quasi-experimental research studies	**Included**	Horn, 2007 Jackson, 2004 Naughton, 2007
15.	Pearson et al. 2003{Pearson, 2003 #14}	Effectiveness of strategies to improve quality and efficiency of medication use in managed care	Medline, Healthstar, Current content, Cochrane, Embase, ASI, IPA, International Network for Rational Use of Drugs (INRUD)	RCT, pre-post studies (with statistical test differences between groups), ITS (I) n>20	**Included**	Brown, 2000
16.	Sketris et al, 2009{Sketris, 2009 #16}	Effective optimal prescribing and medication management	PubMed, Cinahl, Embase, Ineternational pharmaceutical abstract (1995-2006) + google, google scholar, New York Academy of Medicine Library Grey literature report + Cochrane, Canadian Agency for Drugs and Technologies in Health	(E) non English language (E) behavioural and system change theory	**Included**	Coenen, 2004 Eccles, 2007 Freemantle, 1999 Freemantle, 2002 Graham, 2007 Graham, 2008 Mason,2001 Solomon, 2001
17.	Tu et al, 2002{Tu, 2002 #18}	Educational methods to manage and follow hypertension	Medline Cochrane, research and development resource	(I) RCT with >50% physician involvement, measure of physician behaviour change or patient	**Included**	Goldberg, 1998

Number	Author, date	Main research question	Databases (years)	Exclusion (E) / inclusion criteria (I)	Final decision (inclusion of the review?)	Selected source articles (individual studies) on academic detailing / outreach visits
			base in continuing education (University of Toronto) (1966-2000)	outcomes , physician or patient dropout<30%¨+follow-up of outcome > 30 days		
18.	Weinmann et al, 2007{Weinmann, 2007 #19}	Effects of implementation of psychiatric guidelines on provider performance and patient outcome			**Included**	Brown, 2000 Goldberg, 1998 Joseph, 2004 Miller, 2004
19.	Wilton et al., 2002{Wilton, 2002 #20}	Strategies to contain the emergence of antimicrobial resistance – effectiveness and cost-effectiveness	Medline (1960-2000) ISI (1981-2000) Embase (1988-2000) DARE and CRD OPAC (1975-2000) Cochrane (1990-2000)	(I) economic evaluations, cost /-effectiveness studies,	**Included**	Gonzales, 1999 Skaer, 1993
20.	Yen et al, 2006{Yen, 2006 #21}	Strategies to influence physician behaviour	Medline, Cochrane (?-?)	(I) meta-analyses, systematic reviews, RCT	**Included**	Grimshaw, 2001 Grimshaw, 2004 Pearson, 2003

RCT: Randomized Controlled Trials – QRCT: Quasi Randomized Controlled Trials – CCT: Controlled Clinical Trials - CBA: Controlled Before and After studies – ITS: Interrupted Time Series – EPOC: Effective Practice and Organisation of Care Group. B: book – D: dissertation – R: report

1.4.3 Overview of the 87 studies on academic detailing.

	Author,year	Design	Country	Population	Behavior targeted	Who does AD	Multifaceted intervention	Outcomes	Effectiveness
1.	**Aspy, 2008 {Aspy, 2008 #24}**	RCT	US	Healthy woman age > 50y	Prescribing of mammography	Detailer, not specified	YES	**Process outcomes:** rates of mammography prescription	**Positive on:** rates of mammography prescription
		RCT	US	Patients needing cerebral and peripheral vasodilators, oral cephalo-sporin and propoxy-Phene	Prescribing of three drug groups.	Pharmacist	NO	**Process outcomes:** use of three drug groups: cerebral and peripheral vasodilators, an oral cephalosporin and propoxyphene.	**Positive on:** Significant reductions in the number of target drugs in intervention group compared to control group + cost reductions
3.	**Benincasa, 1996 {Benincasa, 1996 #26}**	Before-after study	US	Patients with cancer	CBE and lump-detection skills in physicians.	Physician experts	YES	**Process outcomes:** number of lump detections	**Positive on:** the mean number of correct lump detections increased significantly, and the number of false positives decreased
4.	**Berings, 1994 {Berings, 1994 #27}**	RCT	Belgium	General population	Prescription of benzodiazepines	General practitioners	YES	**Psycho-social outcomes:** attitude of physicians about the value of oral drug information from an industry-independent source **Process outcomes:** number of benzodiazepines prescribed per 100 patient contacts	**Positive on:** average decrease of 3% in control group and of 14% in physicians who received written information, and 24% in physicians who were given oral information + positive attitude towards the value of oral drug information from an industry-independent source
5.	**Bonds, 2009 {Bonds, 2009 #28}**	RCT	US	Patients with hypertension	Blood pressure control	Detailer, not specified	YES	**Biological outcomes:** medical comorbidities, blood pressure values, recommendations of therapeutic life style changes, number of blood pressure medications. Key: mean SBP and DBP **Process outcomes:** percent of patients at or below JNC 7 blood pressure goal; percent of patients with undiagnosed hypertension, intensification of therapy in those not at goal, and appropriate	**No effect on:** no difference between 2 groups in any of the adherence measures.

								selection of initial therapy in those with newly diagnosed hypertension	
6.	**Braybrook, 1996 {Braybrook, 1996 #29}**	RCT	US	Patients who need antibiotics	Antibiotic prescribing	Pharmacist	NO	**Process outcomes:** antibiotic prescribing indicators (= medications) **Economic outcomes:** Costs	**Positive on:** changes in antibiotic prescribing indicators were greater in intervention compared to control group + reduced costs
7.	**Broadhurst, 2007 {Broadhurst, 2007 #30}**	Before after study	Australia	People with shoulder pain	Use of diagnostic imaging for shoulder complaints in general practice and their knowledge and confidence to manage shoulder pain.	Specialist	YES	**Process outcomes:** requests for ultrasound imaging, knowledge about identifying and managing shoulder problems	**Positive on:** requests for ultrasound imaging decreased significantly after six months of AD + knowledge and confidence **No effect on:** no effect on the rate of requests over time in the control groups
8.	**Brown, 2000 {Brown, 2000 #31}**	RCT	US	Patients with depression	Management of depression	Pharmacist	YES	**Biological outcomes:** HSCL-D, receipt of depression treatment, score of SF-36 **Process outcomes:** clinician knowledge, attitude and practices related to the detection and treatment of depression **Economic outcomes:** dispensing of antidepressant medication	**Positive on:** number of an Antidepressants **Negative on:** deterioration in self-reported physical functioning and vitality, more depressive cohort patients of control physicians improved compared to patients of AD-exposed patients
9.	**Browner, 1994 {Browner, 1994 #32}**	RCT	US	Patients with high serum cholesterol levels	Management of high serum cholesterol levels	Detailer, not specified	YES	**Process outcomes:** proportion of patients whose management complied to the NCEP guidelines = Screening for total cholesterol, determination of LDL-cholesterol, treatment of elevated LDL-cholesterol level, screening for hypercholesterolemia, treatment, follow-up for high serum cholesterol levels, measurements of HDL-cholesterol and triglyceride	**No effect on:** no significant differences in screening for high serum cholesterol or compliance with guidelines between the groups receiving CME and the control group. There was a trend toward a modest benefit from the CME interventions.

10.	**Coenen, 2004 {Coenen, 2004 #33}**	Before-after	Belgium	Patients (adults) who need antibiotics for acute cough	Prescribing of antibiotics for acute cough	Pharmacist	YES	**Biological outcomes:** patients' symptom resolution due to change in antibiotic prescribing **Process outcomes:** antibiotics prescribing rates + type of antibiotics prescribed Economic outcomes: medication cost per patient from a public perspective	**Positive on:** Less prescribing in intervention group + prescribed antibiotics more in line with guideline in intervention group and less expensive from public perspective **No effect on:** patients' symptom resolution
11.	**Cranney, 1999 {Cranney, 1999 #34}**	RCT	UK	Elderly with hypertension	Management of systolic hypertension in the elderly (patient aged 70 to 79 years)	Researcher	YES	**Process outcomes:** management of systolic hypertension and a specific patient scenario	**Positive on:** significant difference in the stated threshold for treating systolic hypertension between intervention and control + difference in the willingness to treat patient (case) with mild hypertension
12.	**De Burgh, 1995 {de Burgh, 1995 #35}**	RCT	Australia	Patients with anxiety	Precribing of benzodiazepine in patients with anxiety	Pharmacist and physician	NO	**Process outcomes:** benzodiazepine prescribing rate, axiety and insomnia diagnosis rates	**Positive on:** when comparing the intervention arms, benzodiazepine prescribing rate, axiety and insomnia diagnosis rates declined significantly, also initial prescription rates, differential downward trend in c per insomnia diagnosis, but not to a statistical level. No effect on: prescribing for anxiety diagnosis.
13.	**Dey, 2004 {Dey, 2004 #37}**	RCT	UK	Patients (adults) with low back pain	Management of low back pain in adults	Senior representatives, health authority	YES	**Process outcomes:** rate of referral for lumbar spine X-rays, issuing of sickness certification, referral to secondary care and prescription of muscle relaxants and opioid analgesics.	**Positive on:** significant differences between study groups for referral to physiotherapists or the back pain unit **No effect on:** no significant differences between study groups in proportion of patients who were referred for X-ray, issued with a sickness certificate, prescribed opioids or muscle relaxants, or were referred to secondary care.

14	**De Santis, 1994 {De Santis, 1994 #36}**	RCT	Australia	Patients (adults) who need antibiotics for tonsillitis	Prescribing of antibiotics for tonsillitis.	Pharmacist	YES	**Process outcomes:** the percentage of prescriptions of antibiotics for tonsillitis complying with those recommended in antibiotic guidelines	**Positive on:** when comparing the interventions groups, prescriptions consistent with recommendations in the guidelines increased
15.	**Eccles, 2007 {Eccles, 2007 #38}**	RCT	UK	Patients who need antidepressants for the treatment of depression	Prescription of cost-effective antidepressants	Pharmacist	NO	**Process outcomes:** prescribing of antidepressant drugs during intervention and 12 months after intervention.	**No effect on:** When comparing the study groups, there was no significant impact of the intervention on usage of antidepressants.
16.	**Epstein, 2008 {Epstein, 2008 #39}**	Before-after study	US	Elementary school aged children with attention-deficit/hyperactivity disorder (ADHD)	Management of ADHD	Physician	YES	**Process outcomes:** use of guidelines for the assessment and treatment of ADHD, use of parent and teacher assessment rating scales and systematic monitoring of responses to medication.	**Positive on:** After intervention, GPs showed substantial improvement in the use of guidelines for the assessment and treatment of ADHD. Use of parent and teacher assessment rating scales increased significantly. Systematic monitoring of responses to medication improved.
17.	**Etter, 2006 {Etter, 2006 #40}**	RCT	Switserland	Adults who smoke	Self-reporting of smoking cessation activities, recommending a computer-tailored smoking cessation programme and participation at a training workshop on tobacco dependency treatment	Nurse	NO	**Process outcomes:** percentage of patients the physicians counselled or treated for tobacco dependency and number of physicians who took part in a workshop.	**Positive on:** when comparing the intervention groups, the proportion of physicians who recommended to their patients the use of computer-tailored smoking cessation programme increased + the proportion of patients who received the advice to quit smoking increased
18.	**Feder, 1995 {Feder, 1995 #41}**	RCT	UK	Patients (adults) with asthma and/or diabetes	Prescribing in asthma, review of inhaler technique, review of asthma symptoms, glycaemic control, funduscopy, feet examination, weight, smoking habit, use of structured consultation 'prompts'	Nurse (specialist nurse)	YES	**Biological outcomes:** asthma—peak flow rate, prophylaxis, occupation and smoking habit/ diabetes: blood glucose concentration **Process outcomes:** prescribing in asthma, review of inhaler technique, review of asthma symptoms, glycaemic control, funduscopy, feet examination, weight,	**Positive on:** improvements in all seven diabetes variables (see above), improved recording of review of inhaler technique, smoking habit, and review of asthma symptoms, quality of prescribing in asthma. The use of structured prompts was associated with improved recording of four of seven

								smoking habit, use of structured consultation 'prompts' **Other:** size of practice disease registers	variables on diabetes and all six variables on asthma. **No effect on:** sizes of disease registers were unchanged
19.	**Feldstein, 2006 {Feldstein, 2006 #42}**	Time series	US	Patients taking WARFARIN	Prescription of Warfarin	Physician	YES	**Process outcomes:** the number of coprescriptions of warfarin-interacting medications per 10000 Warfarin users per month)	**Positive on:** reduction in the rate of Warfarin-interacting medication prescription **No effect on:** group academic detailing did not enhance alert effectiveness
20.	**Figueiras, 2001 {Figueiras, 2001 #44}**	Controlled study	Spain	Patients (adults) with osteoarthrosis with inflammation signs needing NSAIDs	Prescribing of NSAIDs	Pharmacist	NO	**Process outcomes:** number of prescribed units of NSAIDs during intervention	**Positive on:** prescribing behaviour improvement in case of one-to-one education in the 9 months after intervention. In the education group improvement was also noted, but significant more improvement in one-to-one education group. Reminder increased significantly the effectiveness of the one-to-one intervention.
21.	**Figueiras, 2006 {Figueiras, 2006 #43}**	RCT	Portugal	Not specified (not applicable)	Reporting of ADRs	Detailer, not specified	YES	**Process outcomes:** reporting of ADRs	**Positive on:** increase in ADR reporting rates attributable to intervention for total ADRs, serious ADRs, high causality ADRs and unexpected ADRs for new drugs-related ADRs with the greatest difference to occur 4 months after intervention, and differences to remain statistically significant for 12 months.
22.	**Franzini, 2007 {Franzini, 2007 #45}**	RCT	US	Children needing immunization aged 12-23 months	Immunization	Physician + team	YES	**Biological outcomes:** immunization rates of children aged 12-23 months **Process outcomes:** self-reported provider behaviours (11 items)	**Positive on:** improvements of self-reported provider behaviour **Negative on:** costs—no favourable cost-benefit

								aged 12-23 months **Economic outcomes:** cost of the intervention	ratio **No effect on:** Immunization rates
23.	**Freemantle, 2002 {Freemantle, 2002 #46}**	RCT	UK	Adults needing ACE inhibitors, raised cardiovascular risk patients needing aspirin, NSAIDs needing patients with joint pain, patients needing antidepressants.	Adherence to guidelines: prescription	Pharmacist	NO	**Process outcomes:** prescription of ACE inhibitors with loop diuretics to patients suffering from heart failure, aspirin, NSAIDs and antidepressants.	**Positive on:** AD was associated with a significant improvement in prescribing practice and an increase in the number of patients treated within the guideline recommendations.
24.	**Fretheim, 2006 {Fretheim, 2006 #47}**	RCT	Norway	Patients needing antihypertensive medication	Prescription of hypertensive drugs	Pharmacist	YES	**Process outcomes:** a) proportions of first-time prescriptions for hypertension where thiazides were prescribed + b) patients assessed for cardiovascular risk before prescribing antihypertensive or cholesterol-lowering drugs, c) patients treated for hypertension or hypercholesterolemia for 3 months or more who had achieved recommended treatment goals	**Positive on:** Significant shift in prescribing of hypertensive drugs towards the use of thiazides, No effect on: Little or no differences were found for risk assessment prior to prescribing and for achievement of treatment goal.
25.	**Fretheim, 2006**	RCT	Norway	Patients needing antihypertensive medication	Prescription of hypertensive drugs according to guidelines	Pharmacist	YES	**Economic outcomes:** cost-effectiveness of the intervention	**Positive on:** Significant shift in prescribing of hypertensive drugs towards the use of thiazides, and thus cost-lowering effects predicted over a two year period.
26.	**Frijling, 2003 {Frijling, 2003 #48}**	RCT	The Netherlands	Heart failure + hypertension, hypercholesterolemia and angina pectoris	Compliance rates for 12 evidence-based indicators for the management of patients with hypertension, hypercholesterolemia, angina pectoris or heart failure.	Non physicians, not specified	NO	**Process outcomes:** assessment of risk factors in patients with hypercholesterolemia, angina pectoris, hypertension and heart failure.	**Positive on:** significant improvement when comparing the intervention arms was found for: the assessment of risk factors in patients with hypercholesterolemia and angina pectoris, provision of information and advice to patients with hypercholesterolemia and hypertension, checking for clinical signs of deterioration in patients with heart failure.

27.	**Gandjour, 2005 {Gandjour, 2005 #49}**	Mathematical model	Germany	Patients with heart failure: coronary heart failure (hypertension)	Prescription of antihypertensive drugs	Detailer, not specified	NO	**Economic outcomes:**	**Positive on:** percentage of depressives prescribed first-generation tricyclics increased
28.	**Goldberg, 1998 {Goldberg, 1998 #50}**	RCT	US	Patients with hypertension and depression	Compliance with national guidelines for the primary care of hypertension and depression.	Physician	YES	**Process outcomes:** percentage of depressives prescribed first-generation tricyclics	**No effect on:** CQI-teams and AD in combination
29.	**Gomel, 1998 {Gomel, 1998 #51}**	RCT	Australia	Patients with hazardous alcohol consumption	Management of hazardous alcohol consumption (screening and counselling rates)	Pharmacist	YES	**Process outcomes:** screening and counselling rates. **Economic outcomes:** cost-effectiveness	**Positive on:** Update of the intervention package and recruitment rates better for AD compared to direct mail and tele-marketing. Tele-marketing was found to be more cost-effective than AD and direct mail in promoting the update of the package to improve screening and counselling for hazardous alcohol consumption.
30.	**Gonzales, 1999 {Gonzales, 1999 #52}**	Controlled study	US	Patients with uncomplicated acute bronchitis	Prescription of antibiotics	Detailer, not specified	YES	**Process outcomes:** antibiotic prescription rates, return office visits within 30 days of the incident visit	**Positive on:** substantial decline in antibiotic prescription rates in intervention group, but not at the control and limited intervention group. **No effect on:** Return office visits within 30 days of the incident visit for bronchitis or pneumonia did not change significantly for any of the sites
31.	**Graham, 2008 {Graham, 2008 #53}**	Before-after study	Canada	Patients with osteoarthritis	Prescribing of cyclooxygenase-2 (COX-2) inhibitors, as well as examine the intervention effect on the utilization rates of gastroprotective agents and medical services.	Nurse and pharmacist	NO	**Biological outcomes:** patient morbidity and mortality **Process outcomes:** change in COX-2 utilization rates from baseline, office visits rates visits/patients, use of protein pump inhibitor, mesoprostol and histamine2-receptor antagonist, GP office visits	**Positive on:** The osteoarthritis AD intervention was associated with a significant decrease in COX-2 utilization rates in the 3-month period immediately following the intervention. **No effect on:**

								per patient, specialist office visits per patient and death rates per GP due to gastrointestinal complications	measures of patient morbidity and mortality due to gastrointestinal complications
32.	**Griffiths, 2004 {Griffiths, 2004 #54}**	RCT	UK	Respiratory diseases: asthma	Unscheduled care for asthma patients	Nurse	YES	**Biological outcomes:** rates of attendance for unscheduled care, self-management behaviour, asthma symptoms **Psycho-social outcomes:** quality of life **Process outcomes:** percentage of participants attending for unscheduled asthma care and the time to first attendance for unscheduled asthma care in the year after intervention.	**Positive on:** delayed time to first attendance when comparing intervention arms and reduction in the percentage of patients with acute asthma
33.	**Hall, 2001 {Hall, 2001 #55}**	RCT	UK	Patients with helicobacter pylori	Management of helicobacter pylori	Pharmacist	YES	**Process outcomes:** prescription of three drugs	**Positive on:** significant increase in omeprazole and metronidazole use **No effect on:** non-significant change in prescribing of dose units
34.	**Hennessy, 2006 {Hennessy, 2006 #56}**	RCT	US	Patients with hypertension	Ambulatory hypertension control.	Pharmacist	YES	**Process outcomes:** proportion of patients achieving blood pressure control below 140/90 mmHg + secondary analysis in patients with diabetes or kidney disease—controlled hypertension: 130/80 mmHg	**No effect on:** no effect or moderate effect among patients with hypertension.
35.	**Horn, 2007 {Horn, 2007 #57}**	Time series	Australia	Patients with hypertension	Changes in drug utilization following a national general practice education programme aimed at improving prescribing for hypertension.	Detailer, not specified	YES	**Process outcomes:** use of thiazide or thiazide like diuretics at first line therapy for hypertension, use of low-dose formulations where thiazide diuretics were used, use of beta-blockers as first line therapy.	**Positive on:** increase in low-dose thiazide and beta-blocker prescribing.

36.	**Hulsher, 1997**	Controlled study	The Netherlands	Patients with cardiovascular disease	Prevention of cardiovascular disease	Nurse	YES	**Process outcomes:** prevention of cardiovascular disease	**Positive on:** Outreach visits were more effective than feedback in implementing guidelines to organise prevention. The increase in the number of practices adhering to the guidelines was significant for six out of 10 guidelinesNo effect on: the number of practices adhering to the guideline to make a follow up appointment did not reach significance
37.	**Ilett, 2000 {Ilett, 2000 #59}**	RCT	Australia	Patients with upper and lower respiratory tract infections, otitis media and urninary tract infections.	Antibiotic prescribing	Pharmacist	NO	**Process outcomes:** total number of prescriptions for selected individual antibiotics	**Positive on:** when comparing the interventions arms, GPs in the intervention group prescribed amoxicillin and doxycilline (complied to guidelines) + positive effect on total costs of antibiotics
38.	**Jackson, 2004 {Jackson, 2004 #60}**	Controlled study	Australia	Patients with atrial fibrillation and an elevated risk to develop stroke	Reducing the risk of stroke through the use of antithrombotics (Warfarin) in patients with atrial fibrillation	Pharmacist	NO	**Process outcomes:** prescription of Warfarin and aspirin	**Positive on:** when comparing intervention arms: increased use of Warfarin in patient at high risk of stroke.
39.	**Kim, 1999 {Kim, 1999 #61}**	RCT	US	Patients needing immunization, mammography and clinical breast examination	Provision of preventive care services	Pharmacist	YES	**Biological outcomes:** rates of reported mammography **Other:** number of patients who reported to have received preventive care services (influenza, pneumococcal, tetanus immunization, exercise counselling)	**Positive on:** positive evolution in the number of influenza, pneumococcal, and tetanus immunization in both intervention and control. Mammography and clinical breast examination worsened in the education group only. Patient satisfaction scores improved in intervention group, but no significant result
40.	**Lemelin, 2001 {Lemelin, 2001 #62}**	RCT	Canada	Patients needing preventive actions	Improved prevention: folic acid supplementation, smoking cessation and	Nurse	YES	**Process outcomes:** folic acid supplementation, smoking cessation and hypertension treatment (index of preventive performance)	**Positive on:** when comparing intervention and control: index of preventive performance significantly better in

					hypertension treatment				intervention group +proportion of patients who received recommended preventive services **No effect on:** index of preventive performance
41.	**Lin, 1997 {Lin, 1997 #63}**	Before-after study	US	Patients with depression	Management of depression	Detailer, not specified	YES	**Psycho-social outcomes:** patient satisfaction and depression outcomes **Process outcomes:** physician selection of antidepressant medication, adequacy of pharmacotherapy, intensity and follow-up visits during the acute phase of depression treatment.	**No effect on:** no improvement in any of the outcomes measured.
42.	**Lin, 2001 {Lin, 2001 #64}**	Before-after study	US	Patients with depression	Management of depression	Detailer, not specified	YES	**Psycho-social outcomes:** patient satisfaction and depression outcomes **Process outcomes:** new diagnoses per 100 primary care visits, new antidepressant medications per 100 visits, rate of new diagnosis accompanied by a new prescription per 100 visits, duration of pharmacotherapy	**No effect on:** no difference between intervention and control in the rate of new depression diagnosis, new prescription of antidepressant medicines,
43.	**Lobo, 2002 {Lobo, 2002 #65}**	RCT	The Netherlands	Patients needing cardiovascular preventive care	Cardiovascular preventive care.	Project team member	YES	**Other:** deficiency score (the difference between ideal and actual practice)	**Positive on:** the duration of exposure was positively related to the change in availability of separate clinics and in the amount of teamwork. The improvement in instruments and materials was positively related to the GP's opnion about the given feedback. **No effect on:** No relations were found between key characteristics and changes in record-keeping or follow-up

									routines.
44.	**Lobo, 2002 {Lobo, 2002 #66}**	RCT	The Netherlands	Patients needing cardiovascular preventive care	Cardiovascular preventive care.	Project team member	YES	**Process outcomes:** preventive tasks performed by the practice assistant (measurements taken, history questions asked, advice given on), follow-up including making an appointment immediately after the visit, making an identifiable note, providing an appointment car for patients. **Other:** availability of instruments and materials (e.g. blood pressure meter, glucose meter,...), leaflets, adequate ancillary staff present, separate room for practice assistant, teamwork in the practice, record keeping.	**Positive on:** when comparing the intervention arms, the difference in change was statistically significant for each aspect of organizing preventive care. The largest absolute improvement was found for the number of preventive tasks performed by the practice assistant.
45.	**Manfredi, 1998 {Manfredi, 1998 #67}**	RCT	US	Cancer (breast, cervical and colorectal cancers)	Screening of cancer (breast, cervical and colorectal cancers)	Detailer, not specified	YES	**Process outcomes:** the proportions of patients with a chart-documented mammogram, clinical breast examination, Papanicolauo smear and occult blood slide test in 2 years before preintervention and postintervention chart abstractions.	**Positive on:** between baseline and postinterventions, there was a net increase in the proportion of HMO members in the intervention, compared to control practices for Papanicolauo smear and fecal occult blood slide test. There was a net increase in the proportion of non-HMO patients in the intervention compared with the control practices who received clinical breast examination and a fecal blood slide test.
46.	**Mason, 2001 {Mason, 2001 #68}**	RCT	UK	Heart failure and depression	Prescribing of medications of ACE inhibitors and SSRIs (selective serotonin reuptake inhibitor)	Pharmacist	YES	**Economic outcomes:** cost-effectiveness	**Positive on:** AD is cost-effective for implementation of ACE inhibitors + AD is cost-effective for a reduction in use of SSRIs in favour of triclyclic antidepressants in small practices
47.	**McDonald, 2003 {McDonald,**	Before-after study	Australia	Elderly patients with heart failure and chronic pain associated with	Prescribing for heart failure and chronic pain associated with	Pharmacist	NO	**Psycho-social outcomes:** satisfaction in physicians and pharmacists	**Positive on:** prescription of NSAID and triclyclic antidepressants

	2003 #69}			osteoarthritisµ	osteoarthritis in an elderly population.			**Process outcomes:** Prescribing of NSAID, angiotensine converting enzyme inhibitor and triclyclic antidepressants	**No effect on:** prescription of angiotensine converting enzyme inhibitor
48.	**Midlov, 2006 {Midlov, 2006 #70}**	RCT	Sweden	Elderly patients needing: benzodiazepines and antipsychotic drugs	Prescribing of benzodiazepines and antipsychotic drugs	Pharmacist and physician	YES	**Process outcomes:** prescribing of medium-and long-acting benzodiazepines and total benzodiazepines	**Positive on:** significant decreases in prescribing of medium-andlong-acting benzodiazepines and total benzodiazepines **No effect on:** decreases in prescribing of antipsychotic drugs
49.	**Mold, 2008{Mold, 2008 #71}**	RCT	US	Patients needing selected immunizations and preventive services	Preventive services.	Principal investigator	YES	**Process outcomes:** number of practices who implemented one or more of the evidence-based processes (selected immunizations and preventive services) + the number of total processes implemented	**Positive on:** Intervention practices implemented more of the processes than control practices overall, for adults and for children. Intervention practices were also more likely to implement at least one of the processes for children and to implement standing orders. Mammography rates increased significantly
50.	**Meyers, 2004**	RCT	US	Patients with an abnormal screening result for fecal occult blood > 50 years	Management of complete diagnostic evaluation (CDE) for persons with an abnormal screening result for fecal occult blood.	Nurse	YES	**Process outcomes:** CDE rates for FOBT	**Positive on:** CDE (complete diagnostic evaluation) recommendation and performance rates were both significantly higher in the intervention practices compared to the control practices
51.	**Naughton, 2007 {Naughton, 2007 #73}**	RCT	Ireland	Patients with CVD or diabetes	Prescribing of CVD preventive therapies (cardiovascular) in patients with CVD or diabetes at 3 and 6 months post intervention	Researcher	YES	**Psycho-social outcomes:** satisfaction in GPs **Process outcomes:** level of antiplatelet prescribing in patients with coronary heart disease, statin prescribing in patients with CVD and, antiplatelet and statin prescribing	**Positive on:** High level of satisfaction in GPs **No effect on:** there was a 3% increase in statin prescribing in CVD patients at 6 months post-intervention for both groups, but not statistically

								in patients with diabetes	significant. Same for: statin and antiplatelet/warfarin prescribing in diabetic patients
52.	**New, 2004 {New, 2004 #74}**	RCT	UK	Patients with diabetes	Control of hypertension and hyperlipidemia in patients with diabetes.	Nurse	YES	**Biological outcomes:** percentage of patients that received adequate control= targets for blood pressure and lipid management **Process outcomes:** cholesterol control, blood pressure control,	**No effect on:** no improvement in the number of patients achieving target after 1 year; same for hyperlipidemia and hypertension.
53.	**Newton-Syms, 1992 {Newton-Syms, 1992 #75}**	RCT	UK	Patients who need NSAI medications	Prescribing to reduce costs	Pharmacist	NO	**Economic outcomes:** prescribing costs	**Positive on:** there was a decrease in the average prescribing cost per month in the intervention group compared with the reference group.
54.	**Nilsson, 2001 {Nilsson, 2001 #76}**	RCT	Sweden	Patients with hypertension, peptic ulcer/dyspepsia and depression	Prescribing rates of medications for hypertension, peptic ulcer/dyspepsia and depression.	Physician and pharmacist	YES	**Process outcomes:** prescribing rates and DDDs per prescription in the year before and after the intervention	**Positive on:** significant effect on prescriptions for agents acting on the renin-angiotensin system. **No effect on:** prescribing rates of proton-pump inhibitors and medications for depression.
55.	**Ofman, 2003 {Ofman, 2003 #77}**	RCT	US	Patients with new dyspepsia and chronic users of antisecretory drugs.	Management of patients with acid-related disorders.	Pharmacist	YES	**Biological outcomes:** symptoms (epigastric pain, heartburn,..) **Psycho-social outcomes:** satisfaction with care, health-related quality of life	**Positive on:** improvements in helicobacter pylori testing, use of recommended helicobacter pylori treatment regimens, and discontinuation rates of proton pump therapy after treatment. **No effect on:** Few differences in patient quality of life and symptoms.
56.	**Ornstein, 2004{Ornstei**	RCT	US	Patients with (risk for) cardiovascular disease and	Prevention of cardiovascular disease	Physician, pharmacist	YES	**Biological outcomes:** 7 outcome measures which reflected	**Positive on:** positive trends for the percentage

	n, 2004 #78}			(risk for) stroke	and stroke.	and person with experience in quality improvemen t		whether patients achieved recommended treatment goals. **Process outcomes:** 14 process measures reflecting if recommended tests were done, appropriate diagnoses made or appropriate medication prescribed. Percentage of performance targets achieved.	of quality indicators at or above target, Positive results for diagnoses of hypertension and blood pressure control in patients with hypertension, but no differences between intervention and control.
57.	**Paton, 2008 {Paton, 2008 #79}**	RCT	UK	Patients with schizophrenia	Prescribing of risperidone long-acting injection (RLAI)	Detailer, not specified	NO	**Process outcomes:** prescribing of risperidone long-acting injection (RLAI) **Other:** Prescribers ' knowledge of the evidence base and why RLAI is used	**Positive on:** AD was effective in changing prescribing practice (Rational Prescribing of risperidone long-acting injection (RLAI)
58.	**Peterson, 1996 {Peterson, 1996 #80}**	Controlled study	Australia	Patients with rheumatic disorders	Prescribing of NSAIDs	Pharmacist	NO	**Process outcomes:** (DDD) Daily Dosed Dispensed for NSAID compared to paracetamol **Economic outcomes:** hospital admissions due to gastric ulcers	**Positive on:** Changes in prescribing of NSAIDs were evident in both study regions, but were significantly greater in the intervention area compared to the control area. A decline in public hospital admissions was noted too.
59.	**Peterson, 1997 {Peterson, 1997 #81}**	Controlled study	Australia	Patients with urinary tract infections	Prescribing for antibiotics	Pharmacist	NO	**Process outcomes:** the total DDDs dispensed for the recommended first-line agents (amoxicillin-potassium clavulanate, cephalexin and trimethoprim)	**Positive on:** total DDDs in intervention group
60.	**Pit, 2007 {Pit, 2007 #82}**	RCT	Australia	Elderly people taking benzodiazepines, NSAIDs/COX-2 inhibitors and antihypertensives.	Prescribing of NSAIDs and antihypertensives.	Pharmacist	YES	**Biological outcomes:** occurrence of falls **Psycho-social outcomes:** quality of life assessed by SF-12 and EQ-5D Scores **Process outcomes:** Use of benzodiazepines, NSAIDs and thiazide	**Positive on:** in intervention group; improved medication use composite score at 4-month follow-up (but not after 12 months), reduction in use of NSAIDs, benzodiazepines (not significant) and thiazide diuretics, lower number of falls and injury requiring medical attention.

								diuretics **Other:** use of medication reviews	**No effect on:** Quality of life scores
61.	**Raisch, 1990 {Raisch, 1990 #83}**	Controlled study	US	Patients needing anti-ulcer agents	Prescribing of antiulcer agents	Pharmacist	NO	**Process outcomes:** prescribing of anti-ulcer agents (cimetidine, ranitidine and sucralfate)	**Positive on:** no differences in appropriateness were found between the two intervention groups, but in the first postintervention month the mean rate of inappropriate prescribing per control practitioner was 80% versus > 32% for the intervention groups. Positive effect on mean cost per control practitioner and per patient due to appropriate prescribing.
62.	**Ray, 1985 {Ray, 1985 #85}**	Time series	US	Patients needing antibiotics	Prescription of contra-indicated antibiotics and cephalosporins.	Physician and pharmacist	NO	**Process outcomes:** average change index of contra-indicated antibiotics (chloramphenicol, clindamycin, tetracycline for children younger than 8 years) and cephalosporins.	**Positive on:** the beneficial effect of the physician-counselors persisted throughout year 2 with reductions in prescribing for both classes of drugs and cost savings. No effect on: reductions in prescribing in the group of pharmacist-counselors
63.	**Ray, 1986{Ray, 1986 #84}**	RCT	US	Patients needing benzodiazepine anxiolytic drug	Prescribing of Diazepam	Physician	NO	**Process outcomes:** prescribing of diazepam Other: Receptivity of doctors to educational programme	**Positive on:** Lower prescribing of diazepam in intervention group and positive receptivity of doctors to educational programme
64.	**Ricordeau, 2003 {Ricordeau, 2003 #86}**	Time series	France	Patients with diabetes	Management of type 2 diabetes	Physician	NO	**Process outcomes:** monthly proportion of the number of HbA1c measurements to the total of laboratory tests	**Positive on:** the number of HbA1c tests (increase) and blood glucose measurements and urine microalbumin
65.	**Schuster, 2008 {Schuster, 2008 #87}**	Controlled study	US	Patients with obesity	Management of obesity	Detailer, not specified	YES	**Biological outcomes:** cardiovascular disease risk factors: lipid levels, blood pressure and blood glucose	**Positive on:** the number of physicians that discussed obesity with their patients, reference to obesity

								Process outcomes: documentation of physician obesity management: BMI, weight, record height to allow BMI calculation Other: Physician knowledge of obesity as a CVD factor	management increased, BMI and cardio-vascular co-morbidities improved.
66.	**Schaffner, 1983 {Schaffner, 1983 #109}**	RCT	US	Children needing antibiotics	Prescription of antibiotics	Physican and pharmacist	NO	**Process outcomes:** Prescription of contraindicated antibiotics for use in office practice: chloramphenicol, clindamycin and tetracycline for children younger than 8 years and oral cephalosporins.	**Positive on:** when physician educators were used, strong attributable reductions in prescribing of both drug classes were obtained. The drug educator had only a modest effect. **No effect on:** The mailed brochure had no detectable effect.
67.	**Shanahan, 2006 {Shanahan, 2006 #88}**	Modelling approach	Australia	People abusing alcohol	Screening of alcohol abuse	Detailer, not specified	NO	**Process outcomes:** screening for alcohol abuse in adults	**Positive on:** achieving a decrease in the number of standards drinks consumed by risky drinkers.
68.	**Siegel, 2003 {Siegel, 2003 #89}**	Before-after study	US	Patients with hypertension, diabetes mellitus and heart failure	Management of hypertension	Detailer, not specified	YES	**Process outcomes:** prescription of thiazide diuretics, beta-blockers and calcium antagonists, angiotensine converting enzyme inhibitor, angiotensine receptor blocker	**Positive on:** prescribing of number of calcium antagonists, beta-blockers, thiazide diuretics for patients with hypertension. For hypertensive subjects with diabetes mellitus or congestive heart failure, the proportion receiving an angiotensine converting enzyme inhibitor or angiotensin receptor blocker increased. Among hypertensive subjects with coronary artery disease and increase in beta-blocker use was noted.
69.	**Simon, 2005 {Simon, 2005 #90}**	RCT	US	Patients with newly diagnosed hypertension	Prescription of diuretic or beta-blocker use in hypertension	Detailer, not specified	NO	**Process outcomes:** rates of diuretic or beta-blocker use increased in both individual and group	Positive on: rates of diuretic or beta-blocker use increased in both individual and group AD practices

								AD practices	No effect on: neither intervention affected blood pressure control
70.	**Simon, 2007 {Simon, 2007 #91}**	Retrospective study	US	Patients with hypertension	Prescription of diuretic or beta-blocker use in hypertension	Detailer, not specified	NO	**Economic outcomes:** average daily drug cost	**Positive on:** the individual AD resulted in an estimated net decrease in average daily drug cost per person beyond the reductions in the mail group, although this finding did not reach statistical significance. The estimated net reduction corresponded to savings.
71.	**Siriwardena, 2002 {Siriwardena, 2002 #93}**	RCT	UK	High risk patients (age > 65 years, coronary heart disease, diabetes and a history of splenectomy) needing influenza and pneumoccocal vaccinations.	Influenza and pneumoccocal vaccinations	Physician	YES	**Process outcomes:** rates of influenza and pneumoccocal vaccination for patients age > 65 years, coronary heart disease, diabetes and a history of splenectomy	**Positive on:** Improvements in pneumoccocal vaccination rates in the intervention practices were significantly greater compared to controls in patients with CHD and diabetes but not splenectomy. Improvements for influenza vaccination were also greater in intervention practices but did not reach statistical significance.
72.	**Sheinfeld, 2000 {Sheinfeld Gorin, 2000 #92}**	Before-after	US	Patients with cancer (colon, rectum, cervix, prostate, breast and lung)	Cancer prevention and screening practices	Bachelors, masters and public health professionals	YES	**Process outcomes:** self-reported cancer prevention and screening practices **Other:** knowledge of ACS screening guidelines for the colon, rectum, cervix, prostate, breast and lung	**Positive on:** Identified barriers to practice **No effect on:** no significant differences in knowledge of cancer prevention or screening.
73.	**Stone, 2005 {Stone, 2005 #94}**	Modelling approach	Australia	Patients with cancer (prostate cancer)	PSA screening	Pharmacist	NO	**Economic outcomes:**	**Positive on:** A national programme would reduce the burden of disease by 4.7% of total DALYs due to prostate cancer in those aged 70 and over, with no loss of life and an incremental cost effectiveness ratio of 16.000/DALY (gross) and 8.500/DALY (net).
74.	**Teng, 2006**	Time series	Malaysia	Patients with respiratory	Prescription of antibiotics	Physician	YES	**Process outcomes:**	**Positive on:**

	{Teng, 2006 #95}			diseases (Upper respiratory Tract Infections)				prescription of antibiotics	reductions in the prescription of antibiotics for URTI
75.	**Turner, 2000 {Turner, 2000 #96}**	RCT	US	Patients with congestive heart failure	Prescription of ACE inhibitors and angiotensin 2 receptor antagonists for the prevention and management of CHF.	Pharmacist	NO	**Process outcomes:** self-reported use of prescription of ACE inhibitors and angiotensin 2 receptor antagonists for the prevention and management of CHF.	**No effect on:** no significant difference in ACE-inhibitor prescribing between intervention and control group
76.	**Varonen, 2007 {Varonen, 2007 #100}**	RCT	Finland	Patients with respiratory diseases: acute maxillary sinusitis	Prescribing of antibiotics for maxillary sinusitis	Physician	NO	**Process outcomes:** prescribing of antibiotics for acute maxillary sinusitis (Amoxicillin), proportion of courses of antibiotics with recommended duration	**Positive on:** Use of first line drugs (amoxicillin): increased **No effect on:** there were no significant changes between AD and problem-based learning methods.
77.	**Van den Hombergh, 1999 {van den Hombergh, 1999 #97}**	RCT	The Netherlands	Not applicable	Global Practice functioning	Physician	NO	**Psycho-social outcomes:** job-stress in physicians Process outcomes: delegation and collaboration **Other:** Premises and equipment, service and organization, record keeping, organisation of quality improvement, workload	**Positive on:** both programmes resulted into improvements on many aspects of practice management. Practice visits by peers resulted into better performance for equipment, collaboration with colleagues, accessibility of patient information than after a visit of a non physician observer. Visits by non physician observers resulted in a higher score on extent of use of records, outcome assessment and year report.
78.	**Van der Wijden, 1999 {van der Weijden, 1999 #98}**	RCT	The Netherlands	Patients with abnormal cholesterol levels	Management of cholesterol	Scientific collaborator	YES	**Process outcomes:** quality of selective case finding (= targeting cholesterol testing to patients with at least one of the six risk factors mentioned in the guideline), and quality of diagnostic procedures (= properly diagnosed hypercholesterolemia requires that average of 3 measurements to be higher than 6.5 mmol/l)	**Positive on:** quantity of cholesterol testing Negative on: performance of the procedure necessary to diagnose hypercholesterolemia even deteriorated **No effect on:** quality of selective case finding or quality of diagnostic procedures

79.	**Van Eijk, 2001 {van Eijk, 2001 #99}**	RCT	The Netherlands	Elderly patients (> 60) needing anticholinergic antidepressants	Prescribing of highly anticholinergic antidepressants in elderly people.	Researcher	YES	**Process outcomes:** numbers of elderly people with new prescriptions of highly anticholinergic antidepressants and less anticholinergic antidepressants	**Positive on:** in both the intervention arms the use of highly anticholinergic antidepressants decreased + the use of less anticholinergic antidepressants increased.
80.	**Walsh, 2005 {Walsh, 2005 #101}**	RCT	US	Patients at risk for development of colorectal cancer	Colorectal cancer screening (patients aged 50-79)	Physician	YES	**Process outcomes:** FOBT in the last 2 years, flexible sigmoidoscopy and colonoscopy in the previous 5 years, CRC screening	**Positive on:** patient rates of screening SIG (flexible sigmoidoscopy) **No effect on:** rates of CRC screening.
81.	**Watson, 2001 {Watson, 2001 #102}**	RCT	UK	Patients needing non-steroidal anti-inflammatory drugs (NSAIDs).	Prescribing for non-steroidal anti-inflammatory drugs (NSAIDs).	Pharmacist	YES	**Process outcomes:** change in the volume prescription (DDD) of ibuprofen, diclofenac and naproxen (= recommended NSAIDs) as a percentage of total NSAID prescribing **Economic outcomes:** cost-benefit analysis	**Positive on:** the proportion of prescribing of the five most frequently used drugs. Negative on: a net increase in costs with both interventions **No effect on:** prescription of ibuprofen, diclofenac and naproxen
82.	**Weller, 2003 {Weller, 2003 #103}**	RCT	Australia	Patients with prostate cancer	Prostate-specific antigen testing (PSA)	Pharmacist	YES	**Process outcomes:** PSA testing rates **Other:** GP knowledge	**Positive on:** correct responses to questions about prostate cancer treatment effectiveness and endorsement of PSA testing for prostate cancer by professional bodies. **No effect on:** PSA testing rate lower in AD group compared to mail group and control group.
83.	**Williams, 1994 {Williams, 1994 #104}**	Before-after	US	Patients with breast, colon-rectum and prostate cancer	Screening and preventive actions on breast, colon-rectum and prostate cancer.	Physician and nurse	YES	**Process outcomes:** activities in compliance with cancer prevention guidelines	**Positive on:** compliance rates + increased awareness of resources of ACS and in prompting physicians to adopt cancer prevention and screening procedures, but least

									effective in making office changes.
84.	**Witt, 2004 {Witt, 2004 #105}**	RCT	Denmark	Patients with respiratory diseases: asthma (children < 16 years of age)	Prescription of asthma medication (to change medication in children to more inhaled steroids and less B2-aginists, and to increase the GPs use of peak-flow meters and spirometry).	Researchers	YES	**Process outcomes:** number of asthma medication prescribed (DDD of steroids and B2-agonists expressed as sales of asthma medication by pharmacies).	**No effect on:** prescription of asthma medication
85.	**Wong, 2004 {Wong, 2004 #106}**	RCT	Canada	Elderly patients	Management of geriatric patients: geriatric knowledge on cognitive impairment, competency, urinary incontinence, malnutrition, and stroke.	Specialist in geriatric medicine	YES	**Other:** Knowledge score on geriatric knowledge	**Positive on:** improvements in geriatric knowledge scores
86.	**Young, 2002 {Young, 2002 #107}**	RCT	Australia	Patients who smoke (age 18-70 years)	Smoking cassation advice	Detailer, not specified	YES	**Process outcomes:** recall of GPs advice about nicotine replacement patches and gum, patient recall of assessment of smoking status and GP use of 'quit dates', behavioural advice and provision of written materials	**Positive on:** recall of GPs advice about nicotine replacement patches and gum. **No effect on:** Positive increases but not significant for: patient recall of assessment of smoking status and GP use of 'quit dates', behavioural advice and provision of written materials
87.	**Zwar, 2000 {Zwar, 2000 #108}**	RCT	Australia	Patients (long term users of) benzodiazepines	Prescription of benzodiazepines	Physician	YES	**Process outcomes:** rate of benzodiazepine prescribing for all indications, for anxiety and sleep disorders	**Positive on:** Overall benzodiazepine prescribing (in continuing rather than initial prescriptions), but no difference between groups

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1.5 DESCRIPTION OF THE 87 STUDIES SELECTED

Study number **1.**	**Study included**
Aspy, 2008	Aspy CB, Enright M, Halstead L, Mold JW. Improving mammography screening using best practices and practice enhancement assistants: An Oklahoma Physicians Resource/Research Network (OKPRN) study. Journal of the American Board of Family Medicine. 2008;21(4):326-33.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To apply a multi-component implementation intervention to the problem of breast cancer screening within community practices that are members of a research based network, with the goal to improve mammography rates.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Healthy woman age > 50y**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing of mammography**
Who does academic detailing	☐ Nurse ☐ Physician

	☐ Pharmacist ☐ Other ☑ **Not specified**
Interventions	☑ **INTERVENTION: 1) audit results and a comparison with a with a network benchmark, 2) academic detailing of exemplar principles and information from the medical literature, 3) services from a practice facilitator for 9 months, 4) information technology support if requested.** ☑ **CONTROL: no feedback or practice change facilitation**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: rates of mammography prescription** ☐ Economic outcomes ☐ Other: ☑ **Positive on: rates of mammography prescription** ☐ Negative on: ☐ No effect on: <u>Conclusion:</u> AD is effective on mammography prescription.

Study number **2.**	**Study included**
Avorn, 1983	Avorn J, Soumerai SB. Improving drug-therapy decisions through educational outreach. A randomized controlled trial of academically based "detailing". N Engl J Med. 1983;308(24):1457-63.
Quality appraisal score	☑ **9/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of academic detailing in the reduction of the excessive use of three drug groups: cerebral and peripheral vasodilators, an oral cephalosporin and propoxyphene.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing cerebral and peripheral vasodilators, an oral cephalosporin and propoxyphene.**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Reducing the excessive use of three drug groups: cerebral and peripheral vasodilators, an oral cephalosporin and propoxyphene.**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: face-to-face AD + educational materials** ☑ **INTERVENTION: printed-materials only** ☑ **CONTROL: no intervention**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: use of three drug groups: cerebral and peripheral vasodilators, an oral cephalosporin and propoxyphene.** ☑ **Economic outcomes: costs** ☐ Other: ☑ **Positive on: Significant reductions in the number of target drugs in intervention group compared to control group + cost reductions** ☐ Negative on: ☐ No effect on: **Conclusion:** AD is useful and cost-effective to improve the quality of drug-therapy decisions and reduce costs.

Study number **3.**	**Study included**
Benincasa, 1996	Benincasa TA, King ES, Rimer BK, Bloom HS, Balshem A, James J, et al. Results of an office-based training program in clinical breast examination for primary care physicians. Journal of Cancer Education. 1996;11(1):25-31.
Quality appraisal score	☑ **8/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after: one group pretest/posttest design** ☐ Time series:
Objectives	To implement an office-based training program in clinical breast examination (CBE) to improve lump-detection skills of primary care physicians.
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☑ **Cancer** ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **CBE and lump-detection skills in physicians.**
Who does academic detailing	☐ Nurse ☐ Physician

	☐ Pharmacist ☑ **Other: non physician experts in CBE**
Interventions	☐ INTERVENTION: ☐ CONTROL: ☑ **CBE skill training, and didactic discussion + educational package on breast cancer screening that included recent journal articles, breast cancer screening guidelines, and a complementary silicone breast model + credits for continuing medical education**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: number of lump detections** ☐ Economic outcomes ☐ Other: ☑ **Positive on: the mean number of correct lump detections increased significantly, and the number of false positives decreased** ☐ Negative on: ☐ No effect on: **Conclusion:** The academic detailing model improved the physicians abilities to correctly detect lumps in a silicone breast model

Study number **4.**	**Study included**
Berings, 1994	Berings D, Blondeel L, Habraken H. The effect of industry-independent drug information on the prescribing of benzodiazepines in general practice. Eur J Clin Pharmacol. 1994;46(6):501-5.
Quality appraisal score	☑ **9/14**
Country	☑ **Europe: Belgium!** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To measure the effect of industry-independent information on the prescribing of benzodiazepines in general practice**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Other: general population**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescription behaviour of benzodiazepines**
Who does academic detailing	☐ Nurse

	☑ **Physician: GENERAL PRACTITIONER** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION I: oral and written information about the indications and limitations of benzodiazepines** ☑ **INTERVENTION II: written information** ☑ **CONTROL: No information at all**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☑ **Psycho-social outcomes: attitude of physicians about the value of oral drug information from an industry-independent source** ☑ **Process outcomes: number of benzodiazepines prescribed per 100 patient contacts** ☐ Economic outcomes ☐ Other: ☑ **Positive on: average decrease of 3% in control group and of 14% in physicians who received written information, and 24% in physicians who were given oral information + positive attitude towards the value of oral drug information from an industry-independent source** ☐ Negative on: ☐ No effect on:

Study number **5.**	Study included
Bonds, 2009	Bonds DE, Hogan PE, Bertoni AG, Chen H, Clinch CR, Hiott AE, et al. A multifaceted intervention to improve blood pressure control: The Guideline Adherence for Heart Health (GLAD) study. American Heart Journal. 2009;157(2):278-84.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective) ☐ Before-after: ☐ Time series:
Objectives	☑ **To improve blood pressure control through a multifactorial intervention**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with hypertension**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Blood pressure control**
Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist

	☐ Other ☑ **Not specified**
Interventions	☑ **INTERVENTION: initial educational session, paper copy of guidelines, four 1 hour academic detailing sessions <u>every 6 months,</u> educational material for patients + provider material (e.g. automatic blood pressure machines), feedback on the preintervention hypertension diagnosis and control levels for the practice** ☑ **CONTROL: intervention to improve compliance to cholesterol, 4 academic detailing sessions <u>every 6 months</u>, feedback, educational material for both patients and providers about cholesterol management**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes:** medical co-morbidities, blood pressure values, recommendations of therapeutic life style changes, number of blood pressure medications. Key: mean SBP and DBP, ☐ Psycho-social outcomes ☑ **Process outcomes:** percent of patients at or below JNC 7 blood pressure goal; percent of patients with undiagnosed hypertension, intensification of therapy in those not at goal, and appropriate selection of initial therapy in those with newly diagnosed hypertension ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: no difference between 2 groups in any of the adherence measures.** Conclusion:

Study number **6.**	**Study included**
Braybrook, 1996	Braybrook S, Walker R. Influencing prescribing in primary care: a comparison of two different prescribing feedback methods. J Clin Pharm Ther. 1996;21(4):247-54.
Quality appraisal score	☑ **9/14**
Country	☐ Europe ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	To evaluate two different methods of providing practice-based, antibiotic prescribing feedback to general practitioners.
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients who need antibiotics**
Caregiver targeted	☑ **Family physician (= general practitioner): 66 practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Antibiotic prescribing**
Who does academic detailing	☐ Nurse ☐ Physician

	☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: face-to-face prescribing discussion visits** ☑ **INTERVENTION II: provision of practice specific prescribing analysis workbooks** ☑ **CONTROL: NO INTERVENTION**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: antibiotic prescribing indicators (= medications)** ☑ **Economic outcomes: costs** ☐ Other: ☑ **Positive on: changes in antibiotic prescribing indicators were greater in intervention compared to control group + reduced costs** ☐ Negative on: ☐ No effect on: **Conclusion:** face-to-face visits proved most successful to influence GP prescribing, although the workbook promoted more change than seen in the control group.

Study number **7.**	**Study included**
Broadhurst, 2007	Broadhurst NA, Barton CA, Rowett D, Yelland L, Matin DK, Gialamas A, et al. A before and after study of the impact of academic detailing on the use of diagnostic imaging for shoulder complaints in general practice. BMC Family Practice. 2007;8(12).
Quality appraisal score	☑ **9/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after** ☐ Time series:
Objectives	☑ **To assess the impact of AD on GP's use of diagnostic imaging for shoulder complaints in general practice and their knowledge and confidence to manage shoulder pain.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **People with shoulder pain**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Use of diagnostic imaging for shoulder complaints in general practice and their knowledge and confidence to manage shoulder pain.**
Who does academic detailing	☐ Nurse ☐ Physician

	☐ Pharmacist ☑ **Other: specialist**
Interventions	☑ **INTERVENTION: AD + clinical guidelines + video/DVD on how to examine the shoulder, 1 session, lasting <u>30 to 60 minutes</u>** ☐ CONTROL: NA
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: requests for ultrasound imaging, knowledge about identifying and managing shoulder problems** ☑ Economic outcomes ☐ Other: ☑ **Positive on: requests for ultrasound imaging decreased significantly after six months of AD + knowledge and confidence** ☐ Negative on: ☑ **No effect on: no effect on the rate of requests over time in the control groups** **<u>Conclusion:</u>** AD together with education materials and guidelines can improve GPs' knowledge and confidence to manage shoulder problems and reduce the use of imaging, at least in the short term.

Study number **8.**	**Study included**
Brown, 2000	Brown JB, Shye D, McFarland BH, Nichols GA, Mullooly JP, Johnson RE. Controlled trials of CQI and academic detailing to implement a clinical practice guideline for depression. Jt Comm J Qual Improv. 2000;26(1):39-54.
Quality appraisal score	☑ **12/14**
Country	☐ Europe ☑ **US: US (Portland, Oregon)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ To evaluate the effectiveness of two clinical practice guidelines implementation methods (continuous quality improvement and Academic detailing) in an HMO organisation.
Setting	☑ **Physician's office** ☐ Primary care clinic ☑ **Other (specify): HMO**
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with depression: 928**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☐ Guideline adherence for the management of depression
Who does academic detailing	☐ Nurse

	☐ Physician ☑ **Pharmacist**
Interventions	☑ **INTERVENTION: AD (4 visits) containing three primary messages on the management of depression + educational materials + guideline + Continuous Quality Improvement Team (CQI)= multidisciplinary team implementing guideline on depression** ☑ **CONTROL: usual care**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: HSCL-D, receipt of depression treatment, score of SF-36** ☐ Psycho-social outcomes ☑ **Process outcomes: clinician knowledge, attitude and practices related to the detection and treatment of depression** ☑ **Economic outcomes: dispensing of antidepressant medication** ☐ Other: ☑ **Positive on: number of antidepressants** ☑ **Negative on: deterioration in self-reported physical functioning and vitality, more depressive cohort patients of control physicians improved compared to patients of AD-exposed patients** ☑ **No effect on: no changes in mean depression symptoms** **Conclusion:** New organizational structures may be necessary before CQI and AD detailing can change complex processes such as the primary care of depression.

Study number **9.**	**Study included**
Browner, 1994	Browner WS, Baron RB, Solkowitz S, Adler LJ, Gullion DS. Physician management of hypercholesterolemia. A randomized trial of continuing medical education. West J Med. 1994;161(6):572-8.
Quality appraisal score	☑ **11/14**
Country	☐ Europe ☑ **US: San Francisco** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To determine the effect of continuing medical education (CME) on compliance with the recommendations of the National Cholesterol Education Program expert Panel on high serum cholesterol levels in adults.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with high serum cholesterol levels**
Caregiver targeted	☑ **Family physician (= general practitioner): 174 practices in three groups** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Compliance with recommendations of the National Cholesterol Education Program expert Panel on high serum cholesterol levels in adults.**
Who does academic detailing	☐ Nurse

	☐ Physician ☐ Pharmacist ☐ Other ☑ **Not specified**
Interventions	☑ **INTERVENTION I: three-hour seminar on high serum cholesterol levels + follow-up seminars and free official materials + AD (not specified how many or intensity) + follow-up seminars** ☑ **INTERVENTION II:** three-hour seminar on high serum cholesterol levels ☑ **CONTROL:** seminar on hypercholesterolemia + educational materials
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: proportion of patients whose management complied to the NCEP guidelines = Screening for total cholesterol, determination of LDL-cholesterol, treatment of elevated LDL-cholesterol level, screening for hypercholesterolemia, treatment, follow-up for high serum cholesterol levels, measurements of HDL-cholesterol and triglyceride** ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: no significant differences in screening for high serum cholesterol or compliance with guidelines between the groups receiving CME and the control group. There was a trend toward a modest benefit from the CME interventions.** **Conclusion:** No significant effects measured.

Study number **10.**	**Study included**
COENEN, 2004	Coenen S, Van Royen P, Michiels B, Denekens J. Optimizing antibiotic prescribing for acute cough in general practice: a cluster-randomized controlled trial. J Antimicrob Chemother. 2004;54(3):661-72.
Quality appraisal score	☑ **11/14**
Country	☑ **Europe: Belgium** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after: (clustered –randomized before-after)** ☐ Time series:
Objectives	☑ **To assess the effect of a tailored professional intervention including AD on antibiotic prescribing for acute cough**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients (adults) who need antibiotics for acute cough**
Caregiver targeted	☑ **Family physician (= general practitioner): 85** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Antibiotics prescribing for acute cough**
Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist**

	☐ Other
Interventions	☑ **INTERVENTION: booklets and leaflets of a public campaign + a clinical practice guideline for the management of acute cough *(no specification on duration of AD!)*, an educational outreach visit + materials+ and a postal reminder of the key messages** ☑ **CONTROL: no intervention**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: patients' symptom resolution due to change in antibiotic prescribing** ☐ Psycho-social outcomes ☑ **Process outcomes: antibiotics prescribing rates + type of antibiotics prescribed** ☑ **Economic outcomes: medication cost per patient from a public perspective** ☐ Other: ☑ **Positive on: Less prescribing in intervention group + prescribed antibiotics more in line with guideline in intervention group and less expensive from public perspective** ☐ Negative on: ☑ **No effect on: patients' symptom resolution** **Conclusion:** A tailored intervention implementing a guideline for acute cough is successful in optimizing antibiotic prescribing without affecting patients' symptom resolution.

Study number **11.**	**Study included**
CRANNEY, 1999	Cranney M, Barton S, Walley T. Addressing barriers to change: an RCT of practice-based education to improve the management of hypertension in the elderly. Br J Gen Pract. 1999;49(444):522-6.
Quality appraisal score	☑ **9/14**
Country	☑ **Europe: UK** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To establish whether an exploration of barriers to change can enhance the effectiveness of an educational intervention designed to improve the management of hypertension in the elderly**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Elderly with hypertension**
Caregiver targeted	☑ **Family physician (= general practitioner): 76** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Treating systolic hypertension in the elderly (patient aged 70 to 79 years)**
Who does academic detailing	☐ Nurse ☐ Physician

	☐ Pharmacist ☑ **Other: researcher**
Interventions	☑ **INTERVENTION: semi-structured vist (one hour) in small groups with feedback and audit results, exploration of participants views on the significance of the results, discussion of the evidence-base for the treatment of hypertension in the elderly, exploration of current practice concerning hypertension management, identification of potential barriers to change, creation of a practice action plan to address the above issues, discussion on how an audit might be performed** ☑ **CONTROL: all above but without identification of potential barriers to change,**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: management of systolic hypertension and a specific patient scenario** ☐ Economic outcomes ☐ Other: ☑ **Positive on: significant difference in the stated threshold for treating systolic hypertension between intervention and control + difference in the willingness to treat patient (case) with mild hypertension** ☐ Negative on: ☐ No effect on: **Conclusion:** The effectiveness of an educational intervention is significantly improved by addressing the barriers preventing GPs from implementing findings of research.

Study number **12.**	**Study included**
DE BURG, 1995	de Burgh S, Mant A, Mattick RP, Donnelly N, Hall W, Bridges-Webb C. A controlled trial of educational visiting to improve benzodiazepine prescribing in general practice. Aust J Public Health. 1995;19(2):142-8.
Quality appraisal score	☑ **11/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effect of educational practice visiting on benzodiazepine prescribing in patients with anxiety**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with anxiety**
Caregiver targeted	☑ **Family physician (= general practitioner): 286** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Benzodiazepine prescribing in patients with anxiety** ☐
Who does academic detailing	☐ Nurse

	☑ **Physician** ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: educational visit (20 minutes, receptive educational approach) + educational materials= guidelines + a patient review card + access to relaxation audio tapes and video series on sleep + a follow-up call** ☑ **CONTROL:**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: benzodiazepine prescribing rate, axiety and insomnia diagnosis rates** ☐ Economic outcomes ☐ Other: ☑ **Positive on: when comparing the intervention arms, benzodiazepine prescribing rate, axiety and insomnia diagnosis rates declined significantly, also initial prescription rates, differential downward trend in c per insomnia diagnosis, but not to a statistical level.** ☐ Negative on: ☑ **No effect on: prescribing for anxiety diagnosis.** **Conclusion:** Although positive effects were noted, AD is not justified in an unselected population of GP's.

Study number **13.**	**Study included**
DEY, 2004	Dey P, Simpson CW, Collins SI, Hodgson G, Dowrick CF, Simison AJ, et al. Implementation of RCGP guidelines for acute low back pain: a cluster randomised controlled trial. Br J Gen Pract. 2004;54(498):33-7.
Quality appraisal score	☑ **12/14**
Country	☑ **Europe: UK** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To investigate the impact on patient management of an educational strategy to promote guidelines for the management of low back pain in primary care**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients (adults) with low back pain**
Caregiver targeted	☑ **Family physician (= general practitioner): 54 general practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Medical management of low back pain in adults= rate of referral for lumbar spine X-rays, issuing of sickness certification, referral to secondary care and prescription of muscle relaxants and opioid analgesics.**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Other: senior representatives, health authority**
Interventions	☑ **INTERVENTION: outreach visits to promote national guidelines + access to fast-track physiotherapy and to a triage service for patients with persistent symptoms. Ad included raising awareness on guidelines, emphasise key messages in guidelines, identify potential barriers to implementation and suggesting strategies to overcome barriers identified + posters** ☐ CONTROL: no visit from guidelines team and no direct access to the back clinic
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: rate of referral for lumbar spine X-rays, issuing of sickness certification, referral to secondary care and prescription of muscle relaxants and opioid analgesics.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: significant differences between study groups for referral to physiotherapists or the back pain unit** ☐ Negative on: ☑ **No effect on: no significant differences between study groups in proportion of patients who were referred for X-ray, issued with a sickness certificate, prescribed opioids or muscle relaxants, or were referred to secondary care.** **Conclusion:** Management of low back pain mostly unchanged by AD, but an increase in referral to physiotherapy and back pain unit.

Study number **14.**	**Study included**
DE SANTIS, 1994	De Santis G, Harvey KJ, Howard D, Mashford ML, Moulds RF. Improving the quality of antibiotic prescription patterns in general practice. The role of educational intervention. Med J Aust. 1994;160(8):502-5.
Quality appraisal score	☑ **9/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia:** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To assess the quality of antibiotic prescribing by GPs and the effectiveness of educational intervention techniques in improving prescribing of antibiotics for tonsillitis.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients (adults) who need antibiotics for tonsillitis**
Caregiver targeted	☑ **Family physician (= general practitioner): 182 (104 intervention, 78 control)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Improving prescribing of antibiotics for tonsillitis.**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: 3-month educational mailing campaign (brochure) + five mailings) + AD by pharmacist (intensity not specified!)** ☐ CONTROL: no intervention
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: the percentage of prescriptions of antibiotics for tonsillitis complying with those recommended in antibiotic guidelines** ☐ Economic outcomes ☐ Other: ☑ **Positive on: when comparing the interventions groups, prescriptions consistent with recommendations in the guidelines increased** ☐ Negative on: ☐ No effect on: **Conclusion:** The educational campaign significantly improved the prescribing of appropriate antibiotics for tonsillitis by GPs

Study number **15.**	**Study included**
ECCLES, 2007	Eccles MP, Steen IN, Whitty PM, Hall L. Is untargeted educational outreach visiting delivered by pharmaceutical advisers effective in primary care? A pragmatic randomized controlled trial. Implement Sci. 2007;2:23.
Quality appraisal score	☑ **11/14**
Country	☑ **Europe: UK** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (pragmatic cluster randomized controlled trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of routine outreach on the prescription of cost-effective antidepressants in primary care.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients who need antidepressants for the treatment of depression**
Caregiver targeted	☑ **Family physician (= general practitioner): 73 practices—36 intervention, 37 control.** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescription of cost-effective antidepressants in primary care.**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist (trained in educational outreach)** ☐ Other
Interventions	☑ **INTERVENTION: AD (two visits), and GPs from the same practice were seen together) including use of guidelines, exploration of knowledge and patterns of current activity, offering clear behavioural objectives, acknowledged areas of controversy + educational materials including key messages from guidelines.** ☑ **CONTROL:** Distribution of guidelines through courier or postal system
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescribing of antidepressant drugs during intervention and 12 months after intervention.** ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: When comparing the study groups, there was no significant impact of the intervention on usage of antidepressants.** **Conclusion: Untargeted** educational outreach may not be a worthwhile strategy.

Study number **16.**	**Study included**
EPSTEIN, 2008	Epstein JN, Langberg JM, Lichtenstein PK, Mainwaring BA, Luzader CP, Stark LJ. Community-wide intervention to improve the attention-deficit/hyperactivity disorder assessment and treatment practices of community physicians. Pediatrics. 2008;122(1):19-27.
Quality appraisal score	☑ **7/14**
Country	☐ Europe ☑ **US (Cincinnati)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after:** ☐ Time series:
Objectives	☑ **To implement and test a quality-improvement intervention aimed at improving community-based primary care providers' adherence to the American Academy of Pediatrics, evidence-based diagnostic and treatment guidelines for attention-deficit/hyperactivity disorder (ADHD)**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Elementary school aged children with attention-deficit/hyperactivity disorder (ADHD)**
Caregiver targeted	☑ **Family physician (= general practitioner): 55 practices and 202 GPs.** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Improving community-based primary care providers' adherence to the**

	American Academy of Pediatrics, evidence-based diagnostic and treatment guidelines for attention-deficit/hyperactivity disorder (ADHD)
Who does academic detailing	☐ Nurse ☑ **Physician** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: Four post-graduate sessions + AD (1-hour) including: incorporation of evidence-based guidelines + feedback + performance improvement techniques including small tests of change or plan-do-study-act cycles + tools including ADHD rating scales, practices were thaught to use a patient log to track progress of patient, a written care management plan, scripts for assessing medication responses during telephone interviews with parents + parent handouts describing ADHD/treatment + algorithm for making ADHD referrals to behavioural health specialists.** ☐ CONTROL: NA
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: use of guidelines for the assessment and treatment of ADHD, use of parent and teacher assessment rating scales and systematic monitoring of responses to medication.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: After intervention, GPs showed substantial improvement in the use of guidelines for the assessment and treatment of ADHD. Use of parent and teacher assessment rating scales increased significantly. Systematic monitoring of responses to medication improved.** ☐ Negative on: ☐ No effect on: **Conclusion:** Multifaceted QI intervention effective on quality of care for children with ADHD.

Study number **17.**	**Study included**
ETTER, 2006	Etter J-F. Impact of educational outreach visits on smoking cessation activities performed by specialist physicians: a randomized trial. EDUC HEALTH. 2006;19(2):155-65.
Quality appraisal score	☑ **9/14**
Country	☑ **Europe: Switzerland** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (post-test only)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To examine of educational visits by a nurse to specialist physicians improved the self-reporting of smoking cessation activities, whether these visits increased the percentage of physicians who were aware of and recommended a computer-tailored smoking cessation program and who participated in a training workshop on tobacco dependency treatment.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Adults who smoke**
Caregiver targeted	☑ **Family physician (= general practitioner) ---523 physicians in total with 261 intervention and 262 control.** ☑ **Specialists: internists, cardiologists, pneumologists and surgeons** ☐ Type of physician not specified

Behavior targeted	☑ **Self-reporting of smoking cessation activities, recommending a computer-tailored smoking cessation program and participation at a training workshop on tobacco dependency treatment**
Who does academic detailing	☑ **Nurse** ☐ Physician ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: One 40-minute visit by nurse (former medical sales representative) including: guidelines and answering questions from physicians + presentation of computer-based smoking cessation program.** ☐ CONTROL: no intervention
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: percentage of patients the physicans counselled or treated for tobacco dependency and number of physicians who took part in a workshop.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: when comparing the intervention groups, the proportion of physicians who recommended to their patients the use of computer-tailored smoking cessation program increased + the proportion of patients who received the advice to quit smoking increased** ☐ Negative on: ☑ **No effect on: The intervention had no impact on the physicians' participation in the workshop.** **Conclusion:** AD positively influences the number of recommendations to use computer smoking cessation program + advice to quit smoking.

Study number **18.**	**Study included**
FEDER, 1995	Feder G, Griffiths C, Highton C, Eldridge S, Spence M, Southgate L. Do clinical guidelines introduced with practice based education improve care of asthmatic and diabetic patients? A randomised controlled trial in general practices in east London. BMJ. 1995;311(7018):1473-8.
Quality appraisal score	☑ **11/14**
Country	☑ **Europe: UK (London)** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (cross-over design)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To determine whether locally developed guidelines on asthma and diabetes disseminated through practice based education improve quality of care in non-training general practices.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients (adults) with asthma and/or diabetes**
Caregiver targeted	☑ **Family physician (= general practitioner): 27 practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing in asthma, review of inhaler technique, review of asthma symptoms, glycaemic control, funduscopy, feet examination, weight, smoking habit,**

	use of structured consultation 'prompts'
Who does academic detailing	☑ **Nurse (specialist nurse)** ☐ Physician ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD: 3 post-graduate education sessions + guideline discussion + practice protocol for implementing guidelines + prompts + practical discussion on home urine monitoring or peak flow measurement + inhaler technique + audit + analysis of coping with implementing guidelines** ☐ CONTROL: (cross-over design)
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: asthma—peak flow rate, prophylaxis, occupation and smoking habit/ diabetes: blood glucose concentration** ☐ Psycho-social outcomes ☑ **Process outcomes: prescribing in asthma, review of inhaler technique, review of asthma symptoms, glycaemic control, funduscopy, feet examination, weight, smoking habit, use of structured consultation 'prompts'** ☑ **Economic outcomes** ☑ **Other: size of practice disease registers** ☑ **Positive on: improvements in all seven diabetes variables (see above), improved recording of review of inhaler technique, smoking habit, and review of asthma symptoms, quality of prescribing in asthma. The use of structured prompts was associated with improved recording of four of seven variables on diabetes and all six variables on asthma.** ☐ Negative on: ☑ **No effect on: sizes of disease registers were unchanged** **Conclusion:** Practice-based education on the use of guidelines improves the management of diabetes and asthma in non training practices. The use of prompts may enhance this improvement.

Study number **19.**	**Study included**
FELDSTEIN, 2006	Feldstein AC, Smith DH, Perrin N, Yang X, Simon SR, Krall M, et al. Reducing warfarin medication interactions: an interrupted time series evaluation. Arch Intern Med. 2006;166(9):1009-15.
Quality appraisal	☑ **9/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Nonprofit group model HMO**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☑ **Time series**
Objectives	To measure the effectiveness of electronic medical record alerts and group academic detailing to reduce the coprescribing of Warfarin and interacting medications.
Setting	☐ Physician's office ☑ **Primary care clinic** ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients taking WARFARIN**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescription of Warfarin**
Who does academic detailing	☐ Nurse

	☑ **Physician** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: electronic medical record alerts and group academic detailing (8 clinics)** ☑ **CONTROL: group academic detailing (7clinics)**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: the number of coprescriptions of warfarin-interacting medications per 10000 Warfarin users per month)** ☐ Economic outcomes ☐ Other: ☑ **Positive on: reduction in the rate of Warfarin-interacting medication prescription** ☐ Negative on: ☑ **No effect on: group academic detailing did not enhance alert effectiveness**

Study number **20.**	**Study included**
FIGUIERAS, 2001	Figueiras A, Sastre I, Tato F, Rodriguez C, Lado E, Caamano F, et al. One-to-one versus group sessions to improve prescription in primary care: a pragmatic randomized controlled trial. Med Care. 2001;39(2):158-67.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: Spain (Galicia)** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☑ **Controlled study (prospective/retrospective): pragmatic controlled trial** ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of two educational strategies aimed at improving prescribing standards on NSAID in primary care**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients (adults) with osteoarthrosis with inflammation signs needing NSAIDs**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing standards on NSAID**
Who does academic detailing	☐ Nurse ☐ Physician

	☑ **Pharmacist (doctoral level)** ☐ Other
Interventions	☑ **INTERVENTION I: AD (20 minutes): one-to-one education group (n= 98): relevant articles + reminder** ☑ **INTERVENTION II: a by-group education group (n= 92): 45 minutes by-group education** ☑ **CONTROL: n= 405**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: number of prescribed units of NSAIDs during intervention** ☐ Economic outcomes ☐ Other: ☑ **Positive on: prescribing behaviour improvement in case of one-to-one education in the 9 months after intervention. In the education group improvement was also noted, but significant more improvement in one-to-one education group. Reminder increased significantly the effectiveness of the one-to-one intervention.** ☐ Negative on: ☐ No effect on: **Conclusion:** proscribing standards can be improved through educational sessions with one-to-one education to be most effective.

Study number **21.**	**Study included**
FIGUIERAS, 2006	Figueiras A, Herdeiro MT, Polonia J, Gestal-Otero JJ. An educational intervention to improve physician reporting of adverse drug reactions: a cluster-randomized controlled trial. JAMA. 2006;296(9):1086-93.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: Portugal** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (cluster randomized trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of educational outreach visits for improving adverse drug reaction (ADR) reporting in physicians.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Not specified (not applicable)**
Caregiver targeted	☑ **Family physician (= general practitioner): 1388 intervention (4 clusters); 5063 control (11 clusters)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Adequate reporting of ADRs**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☐ Other ☑ **NA**
Interventions	☑ **INTERVENTION: 1 hour and 2-part session =AD (outreach visit) + reminder card + report form---but provided in groups of 10 to 20 physicians! Special focus on attitudes associated with underreporting + educational materials (essential messages on ADRs)** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: reporting of ADRs** ☐ Economic outcomes ☐ Other: ☑ **Positive on: increase in ADR reporting rates attributable to intervention for total ADRs, serious ADRs, high causality ADRs and unexpected ADRs for new drugs-related ADRs with the greatest difference to occur 4 months after intervention, and differences to remain statistically significant for 12 months.** ☐ Negative on: ☐ No effect on: **Conclusion:** A targeted outreach program may improve high-quality reporting of ADRs among physicians.

Study number **22.**	**Study included**
FRANZINI, 2007	Franzini L, Boom J, Nelson C. Cost-effectiveness analysis of a practice-based immunization education intervention. Ambul Pediatr. 2007;7(2):167-75.
Quality appraisal score	☑ **7/14**
Country	☐ Europe ☑ **US: Houston** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT—pre-intervention/post-intervention study** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To improve immunization coverage in communities through the implementation and evaluation of the Raising Immunizations Thru Education (RITE) program**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Children needing immunization aged 12-23 months**
Caregiver targeted	☑ **Family physician (= general practitioner): 189 practices** ☑ **Specialist (paediatric)** ☐ Type of physician not specified
Behavior targeted	☑ **Improving immunization coverage**
Who does academic detailing	☐ Nurse

	☑ **Physician + team** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: Peer-based (1-hour) educational lunch presentation (not-one-to-one) with three topics + educational materials + recinforcements every months (during six months)** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: immunization rates of children aged 12-23 months** ☐ Psycho-social outcomes ☑ **Process outcomes: self-reported provider behaviours (11 items) aged 12-23 months** ☑ **Economic outcomes: cost of the intervention** ☐ Other: ☑ **Positive on: improvements of self-reported provider behavior** ☑ **Negative on: costs—no favourable cost-benefit ratio** ☑ **No effect on: Immunization rates** **Conclusion:** the costs for one child with up-to-date immunization status are higher than potential societal savings.

Study number **23.**	**Study included**
FREEMANTLE, 2002	Freemantle N, Nazareth I, Eccles M, Wood J, Haines A, Evidence-based OutReach t. A randomised controlled trial of the effect of educational outreach by community pharmacists on prescribing in UK general practice. Br J Gen Pract. 2002;52(477):290-5.
Quality appraisal score	☑ **12/14**
Country	☑ **Europe: UK** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT: cross-over block design** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of AD in primary care practices in implementing 4 evidence-based guidelines.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Adults needing ACE inhibitors, raised cardiovascular risk patients needing aspirin, NSAIDs needing patients with joint pain, patients needing antidepressants.**
Caregiver targeted	☑ **Family physician (= general practitioner): four practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Adherence to guidelines: prescription**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD (4 practice visits) including role-play and practice orientation, guideline discussion, investigation of potential barriers to change + incentive= audit at the end of project.** ☐ CONTROL:
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescription of ACE inhibitors with loop diuretics to patients suffering from heart failure, aspirin, NSAIDs and antidepressants.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: AD was associated with a significant improvement in prescribing practice and an increase in the number of patients treated within the guideline recommendations.** ☐ Negative on: ☐ No effect on: **Conclusion:** There is good evidence to support the use of educational outreach in small practices.

Study number **24.**	**Study included**
FRETHEIM, 2006	Fretheim A, Oxman AD, Havelsrud K, Treweek S, Kristoffersen DT, Bjorndal A. Rational prescribing in primary care (RaPP): a cluster randomized trial of a tailored intervention. PLoS Med. 2006;3(6):e134.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: Norway** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of a tailored intervention to passive dissemination of guidelines**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing antihypertensive medication (only those patients were included in the cost-effectiveness study)**
Caregiver targeted	☑ **Family physician (= general practitioner): intervention= 69 practices and 244 physicians; Control= 70 practices and 257 physicians.** ☐ Specialist ☐ Type of physician not specified

Behavior targeted	☑ **Prescription of hypertensive drugs according to guidelines**
Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD + audit+ feedback + computerized reminders linked to the medical record system** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: a) proportions of first-time prescriptions for hypertension where thiazides were prescribed + b) patients assessed for cardiovascular risk before prescribing antihypertensive or cholesterol-lowering drugs, c) patients treated for hypertension or hypercholesterolemia for 3 months or more who had achieved recommended treatment goals.** ☐ Other: ☑ **Positive on: Significant shift in prescribing of hypertensive drugs towards the use of thiazides,** ☐ Negative on: ☑ **No effect on: Little or no differences were found for risk assessment prior to prescribing and for achievement of treatment goal.** **Conclusion:** intervention had a significant impact on prescribing hypertensive drugs, but was ineffective in improving the quality of other aspects of managing hypertension and hypercholesterolemia in primary care.

Study number **25.**	**Study included**
FRETHEIM, 2006 (cost article)	Fretheim A, Aaserud M, Oxman AD. Rational prescribing in primary care (RaPP): economic evaluation of an intervention to improve professional practice. PLoS Med. 2006;3(6):e216.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: Norway** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To assess the costs and cost-effectiveness on data from a randomized controlled trial**
Setting	☐ Physician's office ☐ Primary care clinic ☐ Other (specify): ***Not applicable***
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing antihypertensive medication (only those patients were included in the cost-effectiveness study)**
Caregiver targeted	☑ **Family physician (= general practitioner): intervention= 69 practices and 244 physicians; Control= 70 practices and 257 physicians.** ☐ Specialist ☐ Type of physician not specified

Behavior targeted	☑ **Prescription of hypertensive drugs according to guidelines**
Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD + audit+ feedback + computerized reminders** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☐ Process outcomes ☑ **Economic outcomes: cost-effectiveness of the intervention** ☐ Other: ☑ **Positive on: Significant shift in prescribing of hypertensive drugs towards the use of thiazides, and thus cost-lowering effects predicted over a two year period.** ☐ Negative on: ☐ No effect on: **Conclusion:** The cost of the intervention was more than twice the savings within the time frame of the study. Modest savings were predicted.

Study number **26.**	**Study included**
FRIJLING, 2003	Frijling BD, Lobo CM, Hulscher ME, Akkermans RP, van Drenth BB, Prins A, et al. Intensive support to improve clinical decision making in cardiovascular care: a randomised controlled trial in general practice. Qual Saf Health Care. 2003;12(3):181-7.
Quality appraisal score	☑ **11/14**
Country	☑ **Europe: The Netherlands** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effects of outreach visits combined with feedback reports on the clinical decision making of GPs in cardiovascular care.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☑ **Heart failure + hypertension, hypercholesterolemia and angina pectoris** ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner): 124 practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Compliance rates for 12 evidence-based indicators for the management of patients with hypertension, hypercholesterolemia, angina pectoris or heart failure.**
Who does academic detailing	☐ Nurse

	☐ Physician ☐ Pharmacist ☑ **Other: non physicians not specified**
Interventions	☑ **INTERVENTION: outreach visits (7) including discussion of feedback reports, selection of clinical issues for improvement, selection of methods to achieve change, provision of materials and advice, provision of a reminder and evaluation.** ☑ **CONTROL: no intervention**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: assessment of risk factors in patients with hypercholesterolemia, angina pectoris, hypertension and heart failure.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: significant improvement when comparing the intervention arms was found for: the assessment of risk factors in patients with hypercholesterolemia and angina pectoris, provision of information and advice to patients with hypercholesterolemia and hypertension, checking for clinical signs of deterioration in patients with heart failure.** ☐ Negative on: ☐ No effect on: **Conclusion:** Intensive support from trained non-physicians can alter certain aspects of the clinical decision making of GPs in cardiovascular care, although the effect is small.

Study number **27.**	
GANDJOUR, 2005	Gandjour A, Lauterbach KW. How much does it cost to change the behavior of health professionals? A mathematical model and an application to academic detailing. Medical Decision Making. 2005;25(3):341-7.
Quality appraisal score	☐ Not applicable
Country	☑ **Europe: Germany** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series: ☑ **Other: mathematical model**
Objectives	☑ **To portray the mathematical relationship between the proportion of patients who lack appropriate care due to non-compliance of health professionals and the costs of convincing health professionals to promote appropriate care.**
Setting	☐ Physician's office ☐ Primary care clinic ☑ **Other (specify): NA**
Population targeted	☐ Cancer ☑ **Heart failure: coronary heart failure (hypertension)** ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Stroke**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified

Behavior targeted	☑ **Prescription of antihypertensive drugs**
Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Other: not specified**
Interventions	☑ **INTERVENTION: outreach visits to improve prescription** ☐ CONTROL:
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☐ Process outcomes ☑ **Economic outcomes** ☐ Other: ☐ Positive on: ☐ Negative on: ☐ No effect on: **Conclusion:** Marginal implementation costs are directly proportional to the natural logarithm of the size of the current quality deficit. If outreach educators were to visit all primary care physicians in Germany to improve the prescription of hypertensive drugs, the annual implementation cost would total 238 EUR million, or **0,2%** of the health insurance total budget (same goes for coronary heart disease). Implementation costs may not have a critical impact on the cost-effectiveness ratio of preventive services through AD.

Study number **28.**	**Study included**
GOLDBERG, 1998	Goldberg HI, Wagner EH, Fihn SD, Martin DP, Horowitz CR, Christensen DB, et al. A randomized controlled trial of CQI teams and academic detailing: can they alter compliance with guidelines? Jt Comm J Qual Improv. 1998;24(3):130-42.
Quality appraisal score	☑ **12/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To determine the effectiveness of AD techniques and continuous quality improvement teams in increasing compliance with national guidelines for the primary care of hypertension and depression.**
Setting	☐ Physician's office ☑ **Primary care clinic (four primary care clinics)** ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with hypertension and depression**
Caregiver targeted	☑ **Family physician (= general practitioner): 15 small group practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Compliance with national guidelines for the primary care of hypertension and depression.**

	☐
Who does academic detailing	☐ Nurse ☑ **Physician** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD (15 minutes) by physician + educational materials + follow-up sessions by pharmacists during which computer-generated profiles comparing provider prescribing patterns** ☑ **INTERVENTION: AD + CQI teams** ☑ **CONTROL: usual care**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: percentage of depressives prescribed first-generation tricyclics** ☐ Economic outcomes ☐ Other: ☑ **Positive on: percentage of depressives prescribed first-generation tricyclics increased** ☐ Negative on: ☑ **No effect on: CQI-teams and AD in combination** **<u>Conclusion</u>: The AD techniques and the CQI teams evaluated were generally ineffective in improving guideline compliance and clinical outcomes regarding the primarycare of hypertension and depression.**

Study number **29.**	**Study included**
GOMEL, 1998 (cost-article)	Gomel MK, Wutzke SE, Hardcastle DM, Lapsley H, Reznik RB. Cost-effectiveness of strategies to market and train primary health care physicians in brief intervention techniques for hazardous alcohol use. Soc Sci Med. 1998;47(2):203-11.
Quality appraisal score	☑ **10/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia: Sydney** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the cost-effectiveness of an intervention targeting GPs in improving the management of hazardous alcohol consumption.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **People with hazardous alcohol consumption**
Caregiver targeted	☑ **Family physician (= general practitioner): 127 + 34 control** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Management of hazardous alcohol consumption (screening and counselling rates)**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: Training and no support for uptake of the "Drink-less package" (direct mail): 35** ☑ **INTERVENTION: Training and minimal support for uptake of the "Drink-less package" (tele-marketing): 45 + reminders** ☑ **INTERVENTION: Training and maximal support for uptake of the "Drink-less package" –practice visits every two weeks (AD): 40** ☑ **CONTROL: 42 (no training or support)**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: screening and counselling rates.** ☑ **Economic outcomes: cost-effectiveness** ☐ Other: ☑ **Positive on: Update of the intervention package and recruitment rates better for AD compared to direct mail and tele-marketing. Tele-marketing was found to be more cost-effective than AD and direct mail in promoting the update of the package to improve screening and counselling for hazardous alcohol consumption.** ☐ Negative on: ☐ No effect on: **<u>Conclusion:</u> Tele-marketing was found to be more cost-effective than AD and direct mail in promoting the update of the package to improve screening and counselling for hazardous alcohol consumption.**

Study number **30.**	**Study included**
GONZALES, 1999	Gonzales R, Steiner JF, Lum A, Barrett PH, Jr. Decreasing antibiotic use in ambulatory practice: impact of a multidimensional intervention on the treatment of uncomplicated acute bronchitis in adults. JAMA. 1999;281(16):1512-9.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☑ **Controlled study (prospective) but non-randomized** ☐ Before-after ☐ Time series:
Objectives	☑ **To decrease total antibiotic use for uncomplicated acute bronchitis in adults**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with uncomplicated acute bronchitis**
Caregiver targeted	☑ **Family physician (= general practitioner): 56 physicians+ 2462 adults** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescription of antibiotics**
Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist

	☑ **Not specified**
Interventions	☑ **INTERVENTION: AD (not clearly described) + household and office-based patient educational materials, education, practice profiling** ☑ **INTERVENTION LIMITED:** ☑ **CONTROL:** office-based educational materials
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: antibiotic prescription rates, return office visits within 30 days of the incident visit** ☐ Economic outcomes ☐ Other: ☑ **Positive on: substantial decline in antibiotic prescription rates in intervention group, but not at the control and limited intervention group.** ☐ Negative on: ☑ **No effect on: Return office visits within 30 days of the incident visit for bronchitis or pneumonia did not change significantly for any of the sites** **Conclusion:** Antibiotic treatment of adults diagnosed with uncomplicated bronchitis can be reduced using a combination of patient and clinician interventions

Study number **31.**	**Study included**
GRAHAM, 2008	Graham SD, Hartzema AG, Sketris IS, Winterstein AG. Effect of an academic detailing intervention on the utilization rate of cyclooxygenase-2 inhibitors in the elderly. Ann Pharmacother. 2008;42(6):749-56.
Quality appraisal score	☑ **11/14**
Country	☐ Europe ☐ US ☑ **Canada** ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after: Retrospective cohort, before/after design** ☐ Time series:
Objectives	☑ **To evaluate the effect of a GP targeted osteoarthritis AD intervention on a reduction in the prescribing of cyclooxygenase-2 (COX-2) inhibitors, as well as examine the intervention effect on the utilization rates of gastroprotective agents and medical services.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with osteoarthritis**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Reduction in the prescribing of cyclooxygenase-2 (COX-2) inhibitors, as well as examine the intervention effect on the utilization rates of gastroprotective agents and medical services.**

Who does academic detailing	☑ **Nurse (1)** ☐ Physician ☑ **Pharmacist (3)** ☐ Other
Interventions	☑ **INTERVENTION: AD (interactive)** ☐ CONTROL: usual care
Multifaceted intervention?	☑ **NO**
Outcomes	☑ **Biological outcomes: patient morbidity and mortality** ☐ Psycho-social outcomes ☑ **Process outcomes: change in COX-2 utilization rates from baseline, office visits rates visits/patients, use of protein pump inhibitor, mesoprostol and histamine2-receptor antagonist, GP office visits per patient, specialist office visits per patient and death rates per GP due to gastrointestinal complications** ☐ Economic outcomes ☐ Other: ☑ **Positive on: The osteoarthritis AD intervention was associated with a significant decrease in COX-2 utilization rates in the 3-month period immediately following the intervention.** ☐ Negative on: ☑ **No effect on: measures of patient morbidity and mortality due to gastrointestinal complications** **<u>Conclusion:</u> AD yield both positive outcomes and no outcomes.**

Study number **32.**	**Study included**
GRIFFITHS, 2004	Griffiths C, Foster G, Barnes N, Eldridge S, Tate H, Begum S, et al. Specialist nurse intervention to reduce unscheduled asthma care in a deprived multiethnic area: the east London randomised controlled trial for high risk asthma (ELECTRA). BMJ. 2004;328(7432):144.
Quality appraisal score	☑ **12/14**
Country	☑ **Europe: UK** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (cluster RCT)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To determine whether asthma specialist nurses using a liaison model of care reduce unscheduled care in a deprived multiethnic area.**
Setting	☑ **Physician's office** ☑ **Primary care clinic** ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☑ **Respiratory diseases: asthma**
Caregiver targeted	☑ **Family physician (= general practitioner): 44 practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Unscheduled care for asthma patients**
Who does academic detailing	☑ **Nurse (asthma specialist nurses)** ☐ Physician

	☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: patient review in a nurse-led clinic and liaison with GPs comprising: educational outreach (= AD, not well described), promotion of guidelines, and ongoing clinical support.** ☑ **CONTROL: a visit promoting standard asthma guidelines, and control patients where checked for inhaler technique.**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: rates of attendance for unscheduled care, self-management behaviour, asthma symptoms** ☑ **Psycho-social outcomes: quality of life** ☑ **Process outcomes: percentage of participants attending for unscheduled asthma care and the time to first attendance for unscheduled asthma care in the year after intervention.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: delayed time to first attendance when comparing intervention arms and reduction in the percentage of patients with acute asthma** ☐ Negative on: ☑ **No effect on: quality of life and self-management behaviour and asthma symptoms** **Conclusion:** Asthma specialist nurses using a liaison model of care reduced unscheduled care for asthma.

Study number **33.**	**Study included**
HALL, 2001	Hall L, Eccles M, Barton R, Steen N, Campbell M. Is untargeted outreach visiting in primary care effective? A pragmatic randomized controlled trial. J Public Health Med. 2001;23(2):109-13.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: UK** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of untargeted outreach visiting in addition to postal distribution of educational materials.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with helicobacter pylori**
Caregiver targeted	☑ **Family physician (= general practitioner): 38 practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Management of helicobacter pylori**
Who does academic detailing	☐ Nurse ☐ Physician

	☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: guidelines + AD (exploration of knowledge and patterns of current activity, behavioural objectives, acknowledged areas of controversy + educational materials + audit** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescription of three drugs** ☐ Economic outcomes ☐ Other: ☑ **Positive on: significant increase in omeprazole and metronidazole use** ☐ Negative on: ☑ **No effect on: non-significant change in prescribing of dose units** **Conclusion:** the routine use of untargeted outreach visiting is probably not a worthwhile strategy.

Study number **34.**	**Study included**
HENNESSY, 2006	Hennessy S, Leonard CE, Yang W, Kimmel SE, Townsend RR, Wasserstein AG, et al. Effectiveness of a two-part educational intervention to improve hypertension control: a cluster-randomized trial. Pharmacotherapy. 2006;26(9):1342-7
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT cluster randomized trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To measure the effectiveness of a multifaceted educational intervention to improve ambulatory hypertension control.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with hypertension**
Caregiver targeted	☑ **Family physician (= general practitioner); 39 intervention group, and 54 control group.** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Ambulatory hypertension control.**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD (20-30 minutes session) + provider-specific audits= provider specific data about hypertension control, educational materials to the provider and the patient.** ☑ **CONTROL: no intervention**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: proportion of patients achieving blood pressure control below 140/90 mmHg + secondary analysis in patients with diabetes or kidney disease—controlled hypertension: 130/80 mmHg** ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: no effect or moderate effect among patients with hypertension.** **<u>Conclusion:</u> AD yield very little or no positive effects in this study.**

Study number **35.**	**Study included**
HORN, 2007	Horn FE, Mandryk JA, Mackson JM, Wutzke SE, Weekes LM, Hyndman RJ. Measurement of changes in antihypertensive drug utilisation following primary care educational interventions. Pharmacoepidemiol Drug Saf. 2007;16(3):297-308.
Quality appraisal score	☐
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia:** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☑ **Time series: with intervention implemented over a period of 6 to 8 months.**
Objectives	☑ To measure changes in drug utilization following a national general practice education program aimed at improving prescribing for hypertension.
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with hypertension**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Changes in drug utilization following a national general practice education program aimed at improving prescribing for hypertension.**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Not specified**
Interventions	☑ **INTERVENTION: newsletters+ prescribing feed-back, AD, clinical audit with feedback and case studies (paper-based and peer group discussion) over an 6 to 8 months period.** ☐ CONTROL: ☐ NA
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: use of thiazide or thiazide like diuretics at first line therapy for hypertension, use of low-dose formulations where thiazide diuretics were used, use of beta-blockers as first line therapy.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: increase in low-dose thiazide and beta-blocker prescribing.** ☐ Negative on: ☐ No effect on: **Conclusion:** A national education program aimed at GPs is successful in improving prescribing for hypertension.

Study number **36.**	**Study included**
HULSCHER, 1997	Hulscher ME, van Drenth BB, van der Wouden JC, Mokkink HG, van Weel C, Grol RP. Changing preventive practice: a controlled trial on the effects of outreach visits to organise prevention of cardiovascular disease. Qual Health Care. 1997;6(1):19-24.
Quality appraisal score	☑ **11/14**
Country	☑ **Europe: The Netherlands** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☑ **Controlled study (prospective/retrospective): non randomized controlled trial** ☐ Before-after: ☐ Time series:
Objectives	☑ **To assess the effects of outreach visits by trained nurse facilitators on the organization of services used to prevent cardiovascular disease.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with cardiovascular disease**
Caregiver targeted	☑ **Family physician (= general practitioner): 95 general practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prevention of cardiovascular disease**
Who does academic detailing	☑ **Nurse**

	☐ Physician ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: Outreach visits (multiple visits with a total of 30 hours with 25 practice visits over an 18-month period; duration of one visit= 73 minutes) + practice feedback report + action plan for improvement + educational tools +** ☑ **CONTROL: feedback**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prevention of cardiovascular disease** ☐ Economic outcomes ☐ Other: ☑ **Positive on: Outreach visits were more effective than feedback in implementing guidelines to organise prevention. The increase in the number of practices adhering to the guidelines was significant for six out of 10 guidelines** ☐ Negative on: ☑ **No effect on: the number of practices adhering to the guideline to make a follow up appointment did not reach significance** **Conclusion:** Outreach visits by trained nurse facilitators proved to be effective in implementing guidelines within general practices.

Study number **37.**	**Study included**
ILETT, 2000	Ilett KF, Johnson S, Greenhill G, Mullen L, Brockis J, Golledge CL, et al. Modification of general practitioner prescribing of antibiotics by use of a therapeutics adviser (academic detailer). Br J Clin Pharmacol. 2000;49(2):168-73.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia:** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of AD to modify antibiotic prescribing by general practitioners**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with upper and lower respiratory tract infections, otitis media and urninary tract infections.**
Caregiver targeted	☑ **Family physician (= general practitioner): 112; 56 intervention; 56 control** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Antibiotic prescribing by general practitioners**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD (10-15 minutes) + educational materials (including guidelines)** ☐ CONTROL: usual care
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: total number of prescriptions for selected individual antibiotics** ☑ **Economic outcomes: costs** ☐ Other: ☑ **Positive on: when comparing the interventions arms, GPs in the intervention group prescribed amoxicillin and doxycilline (complied to guidelines) + positive effect on total costs of antibiotics** ☐ Negative on: ☐ No effect on: **Conclusion:** AD is successful in modifying prescribing patterns, and it also decreased prescription numbers and costs.

Study number **38.**	**Study included**
JACKSON, 2004	Jackson SL, Peterson GM, Vial JH. A community-based educational intervention to improve antithrombotic drug use in atrial fibrillation. Ann Pharmacother. 2004;38(11):1794-9.
Quality appraisal score	☑ **11/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia:** ☐ Asia (specify)
Initiator	☑ Not specified
Design	☐ RCT ☑ **Controlled study (prospective/retrospective):** ☐ Before-after: ☐ Time series:
Objectives	☑ **To assess the effectiveness of AD in reducing the risk of stroke through the use of antithombotics in patients with atrial fibrillation**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with atrial fibrillation and an elevated risk to develop stroke**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Reducing the risk of stroke through the use of antithrombotics (Warfarin) in patients with atrial fibrillation**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD + educational materials (guidelines)** ☐ CONTROL:
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescription of Warfarin and aspirin** ☐ Economic outcomes ☐ Other: ☑ **Positive on: when comparing intervention arms: increased use of Warfarin in patient at high risk of stroke.** ☐ Negative on: ☐ No effect on: **Conclusion:** the educational program led to a significant increase in the prescribing of Warfarin for stroke prevention in patients with AF

Study number **39.**	**Study included**
KIM, 1999	Kim CS, Kristopaitis RJ, Stone E, Pelter M, Sandhu M, Weingarten SR. Physician education and report cards: do they make the grade? results from a randomized controlled trial. Am J Med. 1999;107(6):556-60.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US (California)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Kaiser Permanente woodland Hills**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of a comprehensive QI program on the provision of preventive care services and patient satisfaction.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing immunization, mammography and clinical breast examination**
Caregiver targeted	☑ **Family physician (= general practitioner): 48 physicians** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Provision of preventive care services**
Who does academic detailing	☐ Nurse

	☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: comprehensive intervention: educational reminders, peer-comparison feedback + AD (= at beginning of study and after 6 and 12 months, duration of 15 minutes)** ☑ **CONTROL: education only= mailed educational materials**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: rates of reported mammography** ☐ Psycho-social outcomes ☑ **Process outcomes** ☐ Economic outcomes ☑ **Other: number of patients who reported to have received preventive care services (influenza, pneumococcal, tetanus immunization, exercise counselling)** ☑ **Positive on: positive evolution in the number of influenza, pneumococcal, and tetanus immunization in both intervention and control. Mammography and clinical breast examination worsened in the education group only. Patient satisfaction scores improved in intervention group, but no significant result** ☐ Negative on: ☐ No effect on: **Conclusion:** multifaceted intervention has modest effects on patient satisfaction and possibly on the offering of selected preventive care services.

Study number **40.**	**Study included**
LEMELIN, 2001	Lemelin J, Hogg W, Baskerville N. Evidence to action: a tailored multifaceted approach to changing family physician practice patterns and improving preventive care. CMAJ. 2001;164(6):757-63.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☐ US ☑ **Canada** ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of a multifaceted intervention on preventive performance of practices**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing preventive actions**
Caregiver targeted	☑ **Family physician (= general practitioner): 23 practices intervention/ 23 practices control** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Improved prevention: folic acid supplementation, smoking cessation and hypertension treatment**

Who does academic detailing	☑ **Nurse** ☐ Physician ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: guidelines + AD (21-50 times) with average visit length of 1 hour and 45 minutes + audit and ongoing feedback + consensus building+ opnion leaders and network + reminders systems + patient-mediated activities + patient educational materials.** ☑ **CONTROL: no intervention**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: folic acid supplementation, smoking cessation and hypertension treatment (index of preventive performance)** ☐ Economic outcomes ☐ Other: ☑ **Positive on: when comparing intervention and control: index of preventive performance significantly better in intervention group +proportion of patients who received recommended preventive services** ☐ Negative on: ☑ **No effect on: index of preventive performance** **<u>Conclusion:</u> Multifaceted intervention delivered by nurse facilitators effective on modifying physician practice patterns and preventive performance.**

Study number **41.**	**Study included**
LIN, 1997	Lin EH, Katon WJ, Simon GE, Von Korff M, Bush TM, Rutter CM, et al. Achieving guidelines for the treatment of depression in primary care: is physician education enough? Med Care. 1997;35(8):831-42.
Quality appraisal score	☑ **10/14**
Country	☐ Europe ☑ **US (Washington)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after: quasi-experimental and before/after comparisons** ☐ Time series:
Objectives	☑ **To evaluate if physician education has enduring effects on the treatment of depression.**
Setting	☑ **Physician's office** ☑ **Primary care clinic** ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with depression**
Caregiver targeted	☑ **Family physician (= general practitioner): 22** ☑ **Specialist: general internists** ☐ Type of physician not specified
Behavior targeted	☑ **Management of depression**
Who does academic detailing	☐ Nurse

	☐ Physician ☐ Pharmacist ☐ Other ☑ **Not specified**
Interventions	☑ **INTERVENTION: AD + guidelines, role-play of improved practices, review of patient education pamphlets and videotapes, use of a reference handbook on depression) + reorganizing of services + criteria for urgent psychiatric referrals and case reviews with psychiatric consultants.** ☐ CONTROL: NA
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☑ **Psycho-social outcomes: patient satisfaction and depression outcomes** ☑ **Process outcomes: physician selection of antidepressant medication, adequacy of pharmacotherapy, intensity and follow-up visits during the acute phase of depression treatment.** ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: no improvement in any of the outcomes measured.** **Conclusion:** No effect of multifaceted intervention including AD

Study number **42.**	**Study included**
LIN, 2001	Lin EH, Simon GE, Katzelnick DJ, Pearson SD. Does physician education on depression management improve treatment in primary care? Journal of General Internal Medicine. 2001;16(9):614-9.
Quality appraisal score	☑ **12/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after: before/after comparisons** ☐ Time series:
Objectives	☑ **To assess the effect of physician education on the management of depression.**
Setting	☑ **Physician's office** ☑ **Primary care clinic: 15** ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with depression**
Caregiver targeted	☑ **Family physician (= general practitioner): 109** ☑ **Specialist: general internists** ☐ Type of physician not specified
Behavior targeted	☑ **Management of depression**
Who does academic detailing	☐ Nurse ☐ Physician

	☐ Pharmacist ☐ Other ☑ **Not specified**
Interventions	☑ **INTERVENTION: Small group interactive discussions+ expert demonstrations + role-play, AD of pharmacotherapy + criteria for urgent psychiatric referrals and case reviews with psychiatric consultants + case based feedback** ☐ CONTROL: usual care
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☑ **Psycho-social outcomes:** ☑ **Process outcomes: new diagnoses per 100 primary care visits, new antidepressant medications per 100 visits, rate of new diagnosis accompanied by a new prescription per 100 visits, duration of pharmacotherapy** ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: no difference between intervention and control in the rate of new depression diagnosis, new prescription of antidepressant medicines** **Conclusion:** No effect of multifaceted intervention including AD on depression diagnosis or phamacotherapy

Study number **43.**	**Study included**
LOBO, 2002	Lobo CM, Frijling BD, Hulscher MEJL, Braspenning JC, Grol RPTM, Prins A, et al. Organizing cardiovascular preventive care in general practice: determinants of a successful intervention.[see comment]. Prev Med. 2002;35(5):430-6.
Quality appraisal score	☑ **12/14**
Country	☑ **Europe: The Netherlands** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To determine determinants of success of outreach visiting to optimizing cardiovascular preventive care.**
Setting	☐ Physician's office ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing cardiovascular preventive care**
Caregiver targeted	☑ **Family physician (= general practitioner): 62 intervention, 62 control** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Cardiovascular preventive care.** ☐

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Other: project team member**
Interventions	☑ **INTERVENTION: Outreach visits--15 (practice organization and clinical decision making, goal-setting)** ☑ **CONTROL: no intervention**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☐ Process outcomes ☐ Economic outcomes ☑ **Other: deficiency score (the difference between ideal and actual practice)** ☑ **Positive on: the duration of exposure was positively related to the change in availability of separate clinics and in the amount of teamwork. The improvement in instruments and materials was positively related to the GP's opnion about the given feedback.** ☐ Negative on: ☑ **No effect on: No relations were found between key characteristics and changes in record-keeping or follow-up routines.** **Conclusion**: Disentagling the 'black box' of an outreach visit intervention is difficult.

Study number **44.**	**Study included**
LOBO, 2002	Lobo CM, Frijling BD, Hulscher MEJL, Bernsen RMD, Braspenning JC, Grol RPTM, et al. Improving quality of organizing cardiovascular preventive care in general practice by outreach visitors: a randomized controlled trial.[see comment]. Prev Med. 2002;35(5):422-9.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: The Netherlands** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To determine determinants of success of outreach visiting to optimizing cardiovascular preventive care.**
Setting	☐ Physician's office ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing cardiovascular preventive care**
Caregiver targeted	☑ **Family physician (= general practitioner): 62 intervention, 62 control** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Cardiovascular preventive care.** ☐

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Other: project team member**
Interventions	☑ **INTERVENTION: Outreach visits—15 over 21-month period (practice organization and clinical decision making, goal-setting)** ☑ **CONTROL: no intervention**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: preventive tasks performed by the practice assistant (measurements taken, history questions asked, advice given on), follow-up including making an appointment immediately after the visit, making an identifiable note, providing an appointment car for patients.** ☐ Economic outcomes ☑ **Other: availability of instruments and materials (e.g. blood pressure meter, glucose meter,...), leaflets, adequate ancillary staff present, separate room for practice assistant, teamwork in the practice, record keeping.** ☑ **Positive on: when comparing the intervention arms, the difference in change was statistically significant for each aspect of organizing preventive care. The largest absolute improvement was found for the number of preventive tasks performed by the practice assistant.** ☐ Negative on: ☐ No effect on: **<u>Conclusion</u>: AD is effective in improving organization of cardiovascular preventive care.**

Study number **45.**	**Study included**
MANFREDI, 1998	Manfredi C, Czaja R, Freels S, Trubitt M, Warnecke R, Lacey L. Prescribe for health. Improving cancer screening in physician practices serving low-income and minority populations. Arch Fam Med. 1998;7(4):329-37.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US: Chicago** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **HMO**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of a Health Maintenance Organization (HMO)-sponsored intervention to improve cancer screening in private physician practices serving low-income, minority populations.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☑ **Cancer (breast, cervical and colorectal cancers)** ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner): 87 intervention;** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Screening of cancer (breast, cervical and colorectal cancers)**
Who does academic detailing	☐ Nurse ☐ Physician

	☐ Pharmacist ☑ **Not specified**
Interventions	☑ **INTERVENTION: Outreach visits (2; within 2 months of initial training) + chart reminder system to identify patients in need of cancer screening + guidelines + patient educational materials + awareness materials + on-site training of staff + CME seminars for physicians + feedback** ☑ **CONTROL:**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: the proportions of patients with a chart-documented mammogram, clinical breast examination, Papanicolauo smear and occult blood slide test in 2 years before preintervention and postintervention chart abstractions.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: between baseline and postinterventions, there was a net increase in the proportion of HMO members in the intervention, compared to control practices for Papanicolauo smear and fecal occult blood slide test. There was a net increase in the proportion of non-HMO patients in the intervention compared with the control practices who received clinical breast examination and a fecal blood slide test.** ☐ Negative on: ☐ No effect on: **<u>Conclusion:</u> Multifaceted intervention, including outreach visits affective on improving cancer screening**

Study number **46.**	
MASON, 2001	Mason J, Freemantle N, Nazareth I, Eccles M, Haines A, Drummond M. When is it cost-effective to change the behavior of health professionals? JAMA. 2001;286(23):2988-92.
Quality appraisal score	☐ NA
Country	☑ **Europe** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **Cost modelling study ---(based on RCT study of Freemantle)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series: ☑ **NA**
Objectives	☑ **Providing a framework for exploring the economics of influencing physician behaviour (underlying study the one of Freemantle)**
Setting	☐ Physician's office ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☑ **Heart failure** ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Depression**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Changes in prescribing medications of ACE inhibitors and SSRIs (selective serotonin reuptake inhibitor)**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☐ INTERVENTION: ☐ CONTROL:
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☐ Process outcomes ☑ **Economic outcomes: cost-effectiveness** ☐ Other: ☑ **Positive on: AD is cost-effective for implementation of ACE inhibitors + AD is cost-effective for a reduction in use of SSRIs in favour of triclyclic antidepressants in small practices** ☐ Negative on: ☐ No effect on: **Conclusion:** AD is cost-effective for implementation of ACE inhibitors + AD is cost-effective for a reduction in use of SSRIs in favour of triclyclic antidepressants in small practices

Study number **47.**	**Study included**
McDONALD, 2003	McDonald PK, Winkle CA, Askew D. Evaluation of academic detailing within a coordinated care trial. Journal of Pharmacy Practice and Research. 2003;33(2):114-6.
Quality appraisal score	☑ **7/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after: quasi-experimental design** ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of AD on general practitioners' prescribing for heart failure and chronic pain associated with osteoarthritis in an elderly population.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Elderly patients with heart failure and chronic pain associated with osteoarthritis**
Caregiver targeted	☑ **Family physician (= general practitioner): 115** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing for heart failure and chronic pain associated with osteoarthritis in an elderly population.**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist (teaching-hospital clinical pharmacists)** ☐ Other
Interventions	☑ **INTERVENTION: AD visits focusing on key messages (2 visits: 30-minute, followed by 15-minute visit to reinforce messages) + educational materials** ☐ CONTROL:
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☑ **Psycho-social outcomes: satisfaction in physicians and pharmacists** ☑ **Process outcomes: Prescribing of NSAID, angiotensine converting enzyme inhibitor and triclyclic antidepressants** ☐ Economic outcomes ☐ Other: ☑ **Positive on: prescription of NSAID and triclyclic antidepressants** ☐ Negative on: ☑ **No effect on: prescription of angiotensine converting enzyme inhibitor** **Conclusion**: AD was partly successful in changing prescribing practices for heart failure and pain management of osteoarthritis

Study number **48.**	**Study included**
MIDLOV ET AL. 2005	Effects of educational outreach visits on prescribing of bezodiazepines and antipsychotic drugs to elderly patients in primary health care in Southern Sweden.
Quality appraisal score	☑ **11/14**
Country	☑ **Europe (Sweden)** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **University**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate if educational outreach visits to GP practices can affect the prescribing of benzodiazepines and antipsychotic drugs to the elderly and evaluate the opinions of the participating GPs on such education.**
Setting of AD	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Elderly needing: benzodiazepines and antipsychotic drugs**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing of benzodiazepines and antipsychotic drugs**
Who does academic detailing	☐ Nurse

	☑ **Physician** ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: group education programmes (2 sessions) and outreach visit (2 visits): 8 practices and 23 physicians** ☑ **CONTROL: education after study period: 7 practices and 31 physicians**
Multifaceted intervention?	☑ YES ☐ NO
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescribing** of medium-and long-acting benzodiazepines and total benzodiazepines ☐ Economic outcomes ☐ Other: ☑ **Positive on: significant decreases in prescribing of medium-and long-acting benzodiazepines and total benzodiazepines** ☐ Negative on: ☑ **No effect on: decreases in prescribing of antipsychotic drugs** **Conclusion**: Educational outreach visits are effective in modifying GPs prescribing habits

Study number **49.**	**Study included**
MOLD, 2008	Mold JW, Aspy CA, Nagykaldi Z. Implementation of evidence-based preventive services delivery processes in primary care: An Oklahoma Physicians Resource/Research Network (OKPRN) study. Journal of the American Board of Family Medicine. 2008;21(4):334-44.
Quality appraisal score	☑ **9/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☐ Not specified
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To assess the effectiveness of a multifaceted program on improved delivery of preventive services.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing selected immunizations and preventive services**
Caregiver targeted	☑ **Family physician + staff of practice (= general practitioner): 12 intervention; 12 control** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Improvement of preventive services.**
Who does academic detailing	☐ Nurse

	☐ Physician ☐ Pharmacist ☑ **Other: principal investigator, practice facilitator and IT-professional**
Interventions	☑ **INTERVENTION: AD (3 evidence based processes; 90-minute session) + feedback (report listing the GPs rates of delivery of preventive services--including DTaPX4, measles/mumps/rubella, HepB for 3 to 3 year olds, pneumonia vaccination, colorectal cancer screening and mammography for 50-75 year olds + benchmarking + educational materials + assistance to practices (e.g. training staff + IT-support)** ☑ **CONTROL: Feedback and benchmarking**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: number of practices who implemented one or more of the evidence-based processes (selected immunizations and preventive services)** **+ the number of total processes implemented** ☐ Economic outcomes ☐ Other: ☑ **Positive on: Intervention practices implemented more of the processes than control practices overall, for adults and for children. Intervention practices were also more likely to implement at least one of the processes for children and to implement standing orders. Mammography rates increased significantly** ☐ Negative on: ☐ No effect on: **Conclusion:** A multicomponent implementation strategy consisting of AD, feedback, benchmarking, facilitation and IT support increased the implementation of evidence-based processes for delivering preventive services to a greater extent than performance feedback and benchmarking alone.

Study number **50.**	**Study included**
MYERS, 2004	Myers RE, Turner B, Weinberg D, Hyslop T, Hauck WW, Brigham T, et al. Impact of a physician-oriented intervention on follow-up in colorectal cancer screening. Prev Med. 2004;38(4):375-81.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of a program directed at improved management of complete diagnostic evaluation (CDE) for persons with an abnormal screening result for fecal occult blood.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Persons with an abnormal screening result for fecal occult blood > 50 years**
Caregiver targeted	☑ **Family physician (= general practitioner): 470** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Improved management of complete diagnostic evaluation (CDE) for persons with an abnormal screening result for fecal occult blood.**

Who does academic detailing	☑ **Nurse** ☐ Physician ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: screening program + intervention: CDE-reminders + CDE feedback report + <u>two</u> AD visits (including tailored letter and phone call + discussion on colorectal cancer screening + educational materials + barriers to CDE** ☑ **CONTROL: only screening program + CDE reminders**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: CDE rates for FOBT** ☐ Economic outcomes ☐ Other: ☑ **Positive on: CDE (complete diagnostic evaluation) recommendation and performance rates were both significantly higher in the intervention practices compared to the control practices** ☐ Negative on: ☐ No effect on: **<u>Conclusion:</u>** the reminder-feedback plus educational outreach intervention significantly increased CDE recommendation and performance

Study number **51.**	**Study included**
NAUGHTON, 2007	Naughton C, Feely J, Bennett K. A clustered randomized trial of the effects of feedback using academic detailing compared to postal bulletin on prescribing of preventative cardiovascular therapy. Fam Pract. 2007;24(5):475-80.
Quality appraisal score	☑ **14/14**
Country	☑ **Europe: Ireland** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT: cluster randomized trial** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effect of of prescribing feedback on GP practice using AD compared to postal bulletin on prescribing of CVD preventive therapies in patients with CVD or diabtetes at 3 and 6 months post intervention, and to evaluate the intervention from the GP perspective**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with CVD or diabetes**
Caregiver targeted	☑ **Family physician (= general practitioner): 48 intervention; 50 control** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing of CVD preventive therapies (cardiovascular) in patients with CVD or diabetes at 3 and 6 months post intervention**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Other: researcher**
Interventions	☑ **INTERVENTION: individualized prescribing feedback via AD (= postal bulletin + outreach visit). Interactive AD= 15 to 30 minutes + educational materials** ☑ **CONTROL: postal bulletin including prescribing feedback**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☑ **Psycho-social outcomes: satisfaction in GPs** ☑ **Process outcomes: level of antiplatelet prescribing in patients with coronary heart disease, statin prescribing in patients with CVD and, antiplatelet and statin prescribing in patients with diabetes** ☐ Economic outcomes ☐ Other: ☑ **Positive on: High level of satisfaction in GPs** ☐ Negative on: ☑ **No effect on: there was a 3% increase in statin prescribing in CVD patients at 6 months post-intervention for both groups, but not statistically significant. Same for: statin and antiplatelet/warfarin prescribing in diabetic patients** **Conclusion:** Prescribing preventive therapies increased in both randomized groups, but AD did not have an additional effect on changing prescribing over the postal bulletin alone.

Study number **52.**	**Study included**
NEW, 2004	New JP, Mason JM, Freemantle N, Teasdale S, Wong L, Bruce NJ, et al. Educational outreach in diabetes to encourage practice nurses to use primary care hypertension and hyperlipidaemia guidelines (EDEN): a randomized controlled trial. Diabet Med. 2004;21(6):599-603.
Quality appraisal score	☑ **14/14**
Country	☑ **Europe: UK (Salford)** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT—practice–level randomized controlled trial.** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To determine the effectiveness of specialist nurse delivered education in primary care to improve control of hypertension and hyperlipidemia in patients with diabetes.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with diabetes**
Caregiver targeted	☑ **Family physician (= general practitioner): 44 practices (10.303 subjects)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Control of hypertension and hyperlipidemia in patients with diabetes.**

Who does academic detailing	☑ **Nurse (specialist nurses)** ☐ Physician ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD (intervention targets, measurement methods and work through case examples) + guidelines + list of patients that were above target + every three month visits visit to provide support and encouragement to continue intervening as patients returned for annual reviews.** ☑ **CONTROL: --**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: percentage of patients that received adequate control= targets for blood pressure and lipid management** ☐ Psycho-social outcomes ☑ **Process outcomes: cholesterol control, blood pressure control** ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: no improvement in the number of patients achieving target after 1 year; same for hyperlipidemia and hypertension.** **Conclusion:** specialist nurses to perform educational outreach does not improve target adherence to patients with diabetes care.

Study number **53.**	**Study included**
NEWTON-SYMS, 1992	Newton-Syms FA, Dawson PH, Cooke J, Feely M, Booth TG, Jerwood D, et al. The influence of an academic representative on prescribing by general practitioners. Br J Clin Pharmacol. 1992;33(1):69-73.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: UK, Leeds** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To analyse the effect of providing information about NSAI medicines by a short sales interview provided by an academic representative on prescribing**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients who need NSAI medications**
Caregiver targeted	☑ **Family physician (= general practitioner): 101** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Rational and economic prescribing of NSAIs to reduce costs**
Who does academic detailing	☐ Nurse

	☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD-one visit (educational messages) + educational materials + educational materials for patients (posters)** ☐ CONTROL:
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☐ Process outcomes ☑ **Economic outcomes: prescribing costs** ☐ Other: ☑ **Positive on: there was a decrease in the average prescribing cost per month in the intervention group compared with the reference group.** ☐ Negative on: ☐ No effect on: **Conclusion:** AD positively affects cost-effective prescribing.

Study number **54.**	**Study included**
NILSSON, 2001	Nilsson G, Hjemdahl P, Hassler A, Vitols S, Wallen NH, Krakau I. Feedback on prescribing rate combined with problem-oriented pharmacotherapy education as a model to improve prescribing behaviour among general practitioners. Eur J Clin Pharmacol. 2001;56(11):843-8.
Quality appraisal score	☐
Country	☑ **Europe: Sweden (Stockholm)** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of a problem-oriented pharmacotherapy education model on prescribing rates of medications for hypertension, peptic ulcer/dyspepsia and depression.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with hypertension, peptic ulcer/dyspepsia and depression**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing rates of medications for hypertension, peptic ulcer/dyspepsia and depression.**

Who does academic detailing	☐ Nurse ☑ **Physician** ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD operationalized as a pharmacotherapy education group consisting of four teacher-physicians, hospitals specialists and clinical pharmacists. The group provided medical education + educational materials on hypertension, peptic ulcer/dyspepsia and depression. Three visits were organized + feedback** ☑ **CONTROL: intervention groups acted as each others control**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescribing rates and DDDs per prescription in the year before and after the intervention** ☐ Economic outcomes ☐ Other: ☑ **Positive on: significant effect on prescriptions for agents acting on the renin-angiotensin system.** ☐ Negative on: ☑ **No effect on: prescribing rates of proton-pump inhibitors and medications for depression.** **Conclusion:** Mixed results for a model taregtting prescription behaviour of GPs.

Study number **55.**	**Study included**
OFMAN, 2003	Ofman JJ, Segal R, Russell WL, Cook DJ, Sandhu M, Maue SK, et al. A randomized trial of an acid-peptic disease management program in a managed care environment. Am J Manag Care. 2003;9(6):425-33.
Quality appraisal score	☑ **14/14**
Country	☐ Europe ☑ **US (Orlando)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (cluster randomized clinical trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of a disease management program on processes of care for patients with acid-related disorders.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with new dyspepsia and chronic users of antisecretory drugs.**
Caregiver targeted	☑ **Family physician (= general practitioner): 35 physicians (200 patients) in intervention; 48 control (206 patients)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Processes of care for patients with acid-related disorders.**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: guidelines + single group meeting with alocal physician champion + AD + 3 follow-up group meetings + nursing & pharmacist education + on-site H pylori serology testing + education of patients on h pylori and the management of side effects + follow up by phone of patients by nurse.** ☑ **CONTROL:** usual care
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: symptoms (epigastric pain, heartburn,..)** ☑ **Psycho-social outcomes: satisfaction with care, health-related quality of life** ☑ **Process outcomes: H.pylori testing** ☐ Economic outcomes ☐ Other: ☑ **Positive on: improvements in helicobacter pylori testing, use of recommended helicobacter pylori treatment regimens, and discontinuation rates of proton pump therapy after treatment. Few differences in patient quality of life and symptoms.** ☐ Negative on: ☑ **No effect on: Few differences in patient quality of life and symptoms.** **Conclusion:** The disease management program for patients with acid-related disorders led to improvements in processes of care.

Study number **56.**	**Study included**
ORNSTEIN, 2004	Ornstein S, Jenkins RG, Nietert PJ, Feifer C, Roylance LF, Nemeth L, et al. A multimethod quality improvement intervention to improve preventive cardiovascular care: a cluster randomized trial. Ann Intern Med. 2004;141(7):523-32.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To determine whether a multimethod quality improvement program was more effective than a less intensive intervention for improving adherence to 21 quality indicators for primary and secondary prevention of cardiovascular disease and stroke.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with (risk for) cardiovascular disease and (risk for)stroke**
Caregiver targeted	☑ **Family physician (= general practitioner): 20 community based practices or general internal medicine practices in 14 states.** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prevention of cardiovascular disease and stroke.**

Who does academic detailing	☐ Nurse ☑ **Physician** ☑ **Pharmacist** ☑ **Other: persons with experience in quality improvement**
Interventions	☑ **INTERVENTION: guidelines + quarterly performance reports (= feedback) documenting the practice's adherence to each of the 21 study indicators + practice site visits (6-7 visits with an elapse time of one or two days every three months) + network meetings + instructions for the use of quality improvement tools available in the electronic medical record** ☑ **CONTROL: performance reports**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: 7 outcome measures which reflected whether patients achieved recommended treatment goals.** ☐ Psycho-social outcomes ☑ **Process outcomes: 14 process measures reflecting if recommended tests were done, appropriate diagnoses made or appropriate medication prescribed. Percentage of performance targets achieved.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: positive trends for the percentage of quality indicators at or above target, but no differences between intervention and control. Positive results for diagnoses of hypertension and blood pressure control in patients with hypertension.** ☐ Negative on: ☑ **No effect on: no differences between intervention and control.** **Conclusion:** Mixed results of DM-program on prevention of cardiovascular disease and stroke. A multi-method QI improvement program is only marginally more effective than performance reports alone for improving adherence to 21 quality indicators for primary and secondary prevention of cardiovascular disease and stroke in primary care practices.

Study number **57.**	**Study included**
PATON, 2008	Paton C. The use of academic detailing to improve evidence based prescribing of risperidone long acting injection. Int. J. Psychiatry Clin. Pract. 2008, 12 (3): 210-214.
Quality appraisal score	☑ **9/14**
Country	☑ **Europe: UK** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **Time series** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of AD on Rational Prescribing of risperidone long-acting injection (RLAI)**
Setting	☑ Physician's office ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with schizophrenia**
Caregiver targeted	☐ Family physician ☑ **Specialist: psychiatrists** ☐ Type of physician not specified
Behavior targeted	☑ **Rational Prescribing of risperidone long-acting injection (RLAI)**
Who does academic detailing	☐ Nurse ☐ Physician

	☐ Pharmacist ☑ **Other: trained detailer, not specified**
Interventions	☑ **INTERVENTION: Ad visits + guidelines (summaries)**
Multifaceted intervention?	☑ **NO**
Outcomes	Biological outcomes: Psycho-social outcomes ☑ **Process outcomes: prescribing of risperidone long-acting injection (RLAI)** Economic outcomes ☑ **Other: Prescribers ' knowledge of the evidence base and why RLAI is used** ☑ **Positive on: AD was effective in changing prescribing practice (Rational Prescribing of risperidone long-acting injection (RLAI)** Negative on: No effect on: **Conclusion: AD was effective in changing prescribing practice + improving knowledge on rational Prescribing of risperidone long-acting injection (RLAI)**

Study number **58.**	**Study included**
PETERSON, 1996	Peterson GM, Bergin JK, Nelson BJ, Stanton LA. Improving drug use in rheumatic disorders. J Clin Pharm Ther. 1996;21(4):215-20.
Quality appraisal score	☐
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia (Southern Tasmania)** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☑ **Controlled study (prospective/retrospective):** ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate if academic detailing (AD) was effective on rational prescribing of NSAIDs**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with rheumatic disorders**
Caregiver targeted	☑ **Family physician (= general practitioner): 177** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Rational prescribing of NSAIDs**
Who does academic detailing	☐ Nurse

	☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD—20 session (interactive discussion + educational materials)** ☐ CONTROL:
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: (DDD) Daily Dosed Dispensed for NSAID compared to paracetamol** ☑ **Economic outcomes: hospital admissions due to gastric ulcers** ☐ Other: ☑ **Positive on: Changes in prescribing of NSAIDs were evident in both study regions, but were significantly greater in the intervention area compared to the control area. A decline in public hospital admissions was noted too.** ☐ Negative on: ☐ No effect on: **Conclusion:** This study shows that an educational programme utilizing AD by pharmacists can modify prescribing practices within the community. AD session well received by GPs.

Study number **59.**	**Study included**
PETERSON, 1997	Peterson GM, Stanton LA, Bergin JK, Chapman GA. Improving the prescribing of antibiotics for urinary tract infection. J Clin Pharm Ther. 1997;22(2):147-53.
Quality appraisal score	☑ **10/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia (South Tasmania)** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☑ **Controlled study (prospective/retrospective):** ☐ Before-after: ☐ Time series:
Objectives	☑ **To examine whether AD performed by a pharmacist could modify prescribing for antibiotics used in the treatment of Urinary Tract Infections (UTI) in the community setting.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with urinary tract infections**
Caregiver targeted	☑ **Family physician (= general practitioner): 169** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing for antibiotics used in the treatment of Urinary Tract Infections (UTI) in the community setting.**
Who does academic detailing	☐ Nurse

	☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD—20 session (interactive discussion + educational materials)** ☐ CONTROL:
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: the total DDDs dispensed for the recommended first-line agents (amoxicillin-potassium clavulanate, cephalexin and trimethoprim)** ☐ Economic outcomes ☐ Other: ☑ **Positive on: total DDDs in intervention group** ☐ Negative on: ☐ No effect on: **Conclusion:** This study shows that an educational programme utilizing AD by pharmacists can modify prescribing practices for antibiotics within the community. AD session well received by GPs.

Study number **60.**	**Study included**
PIT, 2007	Pit SW, Byles JE, Henry DA, Holt L, Hansen V, Bowman DA. A Quality Use of Medicines program for general practitioners and older people: a cluster randomised controlled trial. Med J Aust. 2007;187(1):23-30.
Quality appraisal score	☑ **14/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia** ☐ Asia (specify)
Initiator	☑ Not specified
Design	☑ **RCT (cluster randomized trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To investigate the effectiveness of an educational Quality Use of Medicines program, delivered at the level of general practice, on medicines use, falls and quality of life in people > 65 years.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Elderly people taking benzodiazepines, NSAIDs/COX-2 inhibitors and antihypertensives.**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Rational prescribing**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD + provision of prescribing information and feedback + medication risk assessment + facilitation of medication review + financial incentives.** ☑ **CONTROL: clinical audit (feedback)**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: occurrence of falls** ☑ **Psycho-social outcomes: quality of life assessed by SF-12 and EQ-5D Scores.** ☑ **Process outcomes: Use of benzodiazepines, NSAIDs and thiazide diuretics** ☐ Economic outcomes ☑ **Other: use of medication reviews** ☑ **Positive on: in intervention group; improved medication use composite score at 4-month follow-up (but not after 12 months), reduction in use of NSAIDs, benzodiazepines (not significant) and thiazide diuretics, lower number of falls and injury requiring medical attention.** ☐ Negative on: ☑ **No effect on: Quality of life scores** **Conclusion:** Education and systems for medication review conducted by GPs can be used to improve use of medicines. These interventions are associated with a reduction in falls among older people, without adverse effects on quality of life.

Study number **61.**	**Study included**
RAISCH, 1990	Raisch DW, Bootman JL, Larson LN, McGhan WF. Improving antiulcer agent prescribing in a health maintenance organization. Am J Hosp Pharm. 1990;47(8):1766-73.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US (Arizona)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **HMO**
Design	☐ RCT ☑ **Controlled study (prospective/retrospective):** ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effect of one-to-one educational meetings between physicians and pharmacists on the prescribing of anti-ulcer agents for outpatients.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing anti-ulcer agents**
Caregiver targeted	☑ **Family physician (= general practitioner): intervention (16), control (8).** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing of antiulcer agents.**
Who does academic detailing	☐ Nurse

	☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD (10 minutes presentations) using case studies (= 'vivid interventions')** ☑ **CONTROL: statistical data (='nonvivid interventions')**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescribing of anti-ulcer agents (cimetidine, ranitidine and sucralfate)** ☑ **Economic outcomes: cost per precription** ☐ Other: ☑ **Positive on: no differences in appropriateness were found between the two intervention groups, but in the first postintervention month the mean rate of inappropriate prescribing per control practitioner was 80% versus > 32% for the intervention groups. Positive effect on mean cost per control practitioner and per patient due to appropriate prescribing.** ☐ Negative on: ☑ **No effect on:** **Conclusion:** One-to-one educational meetings between physicians and a pharmacist improved the prescribing of anti-ulcer agents for outpatients.

Study number **62.**	**Study included**
RAY, 1985	Ray WA, Schaffner W, Federspiel CF. Persistence of improvement in antibiotic prescribing in office practice. JAMA. 1985;253(12):1774-6.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US (Tennessee)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Tennessee Medical Association**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☑ **Time series**
Objectives	☑ **To evaluate whether the improvement in antibiotic prescribing produced by the physician-counselor vists persisted for a second year, and if the improvement persisted, whether the effect was attenuated and what the estimated reducation was in expenditures produced by the educational program.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing antibiotics**
Caregiver targeted	☑ **Family physician (= general practitioner): 332** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescription of contra-indicated antibiotics and cephalosporins.**

Who does academic detailing	☐ Nurse ☑ **Physician** ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD by physician/pharmacist, but in separate regions of the state (interactive discussion—poor explanation in article)** ☑ **CONTROL: usual care**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: average change index of contra-indicated antibiotics (chloramphenicol, clindamycin, tetracycline for children younger than 8 years) and cephalosporins.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: the beneficial effect of the physician-counselors persisted throughout year 2 with reductions in prescribing for both classes of drugs and cost savings.** ☐ Negative on: ☑ **No effect on: reductions in prescribing in the group of pharmacist-counselors** **Conclusion:** the beneficial effect of the physician-counselors is demonstrated through this project.

Study number **63.**	**Study included**
RAY, 1986	Ray WA, Blazer DG, 2nd, Schaffner W, Federspiel CF, Fink R. Reducing long-term diazepam prescribing in office practice. A controlled trial of educational visits. JAMA. 1986;256(18):2536-9.
Quality appraisal score	☑ **9/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ Tennessee Medical Association
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **This study tested the efficacy of positive, educational methods in the reduction of diazepam prescribing in office practice**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing benzodiazepine anxiolytic drug**
Caregiver targeted	☑ **Family physician (= general practitioner): 44** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Reduction of diazepam prescribing in office practice**

Who does academic detailing	☐ Nurse ☑ **Physician** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD + educational materials** ☑ CONTROL: usual care
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescribing of diazepam** ☐ Economic outcomes ☑ **Other: Receptivity of doctors to educational program** ☑ **Positive on: Lower prescribing of diazepam in intervention group and positive receptivity of doctors to educational program** ☐ Negative on: ☐ No effect on: Conclusion:

Study number **64.**	**Study included**
RICORDEAU, 2003	Ricordeau P, Durieux P, Weill A, Chatellier G, Vallier N, Bissery A, et al. Effect of a nationwide program of educational outreach visits to improve the processes of care for patients with type 2 diabetes. International Journal of Technology Assessment in Health Care. 2003;19(4):705-10.
Quality appraisal score	☑ **9/14**
Country	☑ **Europe: France** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☑ **Time series:**
Objectives	☑ **To evaluate the effectiveness of physician to physician AD on the management of type 2 diabetes**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with diabetes**
Caregiver targeted	☑ **Family physician (= general practitioner)—22.940** ☑ **Specialist: endocrinologists** ☐ Type of physician not specified
Behavior targeted	☑ **Management of type 2 diabetes**
Who does academic detailing	☐ Nurse

	☑ **Physician** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD (outreach or phone consultation) + guidelines** ☐ CONTROL: ---
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: monthly proportion of the number of HbA1c measurements to the total of laboratory tests** ☐ Economic outcomes ☐ Other: ☑ **Positive on: the number of HbA1c tests (increase) and blood glucose measurements and urine microalbumin** ☐ Negative on: ☐ No effect on: ☑ **Conclusion:** Physician to physician outreach visits can be effective to improve processes of care for diabetes and to routinize nationwide use of practice guidelines.

Study number **65.**	**Study included**
SCHUSTER, 2008	Schuster RJ, Tasosa J, Terwoord NA. Translational research - Implementation of NHLBI obesity guidelines in a primary care community setting: The physician obesity awareness project. Journal of Nutrition, Health and Aging. 2008;12(10 SUPPL.):764S-9S.
Quality appraisal score	☑ **11/14**
Country	☐ Europe ☑ **US: Dayton, Ohio** ☐ Canada ☐ Australia ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☑ **Controlled study (prospective/retrospective):** ☐ Before-after: ☐ Time series
Objectives	☑ **To increase involvement in translating proven research into practice to improve physician awareness and improve outcomes of overweight/obesity**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with obesity**
Caregiver targeted	☑ **Family physician (= general practitioner): 21** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Management of obesity**
Who does academic detailing	☐ Nurse

	☐ Physician ☐ Pharmacist ☐ Other ☑ **Not specified**
Interventions	☑ **INTERVENTION: physician obesity education through AD** ☑ (enhanced intervention): **physician obesity education**
Multifaceted intervention?	☑ **YES**
Outcomes	☑ **Biological outcomes: cardiovascular disease risk factors: lipid levels, blood pressure and blood glucose** ☐ Psycho-social outcomes ☑ **Process outcomes: documentation of physician obesity management: BMI, weight, record height to allow BMI calculation** ☐ Economic outcomes ☑ **Other: Physician knowledge of obesity as a CVD factor** ☑ **Positive on: the number of physicians that discussed obesity with their patients, reference to obesity management increased, BMI and cardio-vascular co-morbidities improved.** ☐ Negative on: ☐ No effect on: **Conclusion:** A combination of AD and presentation of outcomes to physicians improves awareness and result in improved outcomes.

Study number **66.**	**Study included**
SCHAFFNER, 1983	Schaffner W, Ray WA, Federspiel CF, Miller WO. Improving antibiotic prescribing in office practice. A controlled trial of three educational methods. JAMA. 1983;250(13):1728-32.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **A consortium of State's medical societies**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To improve antibiotic prescribing in office practice**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Children needing antibiotics**
Caregiver targeted	☑ **Family physician (= general practitioner): 372 (1087 patients)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Elimination of prescription of contraindicated antibiotics for use in office practice: chloramphenicol, clindamycin and tetracycline for children younger than 8 years) and reduction of oral cephalosporins.**

Who does academic detailing	☐ Nurse ☑ **Physician** ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD (15 minutes) + educational materials** ☑ **CONTROL: usual care**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: Prescription of contraindicated antibiotics for use in office practice: chloramphenicol, clindamycin and tetracycline for children younger than 8 years and oral cephalosporins.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: when physician educators were used, strong attributable reductions in prescribing of both drug classes were obtained. The drug educator had only a modest effect.** ☐ Negative on: ☑ **No effect on: The mailed brochure had no detectable effect.** **Conclusion:** AD by physicians if effective on the prescription of contracindicated antibiotics and a reduction in the prescribing of cephalosporines.

Study number **67.**	**Study included**
SHANAHAN, 2006	Shanahan M, Shakeshaft A, Mattick RP. Modelling the costs and outcomes of changing rates of screening for alcohol misuse by GPs in the Australian context. Applied Health Economics and Health Policy. 2006;5(3):155-66.
Quality appraisal score	☑ **10/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series: ☑ **A modelling approach**
Objectives	☑ **To assess the relative cost effectiveness of four strategies (academic detailing, computerised reminder systems, target payments and interactive continuing medical education) of screening for alcohol misuse.**
Setting	☐ Physician's office ☐ Primary care clinic ☐ Other (specify): ☑ **Not specified**
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☐ Elderly ☑ **Alcohol abuse**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified

Behavior targeted	☑ **Screening of alcohol abuse**
Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☐ Other ☑ **Not specified**
Interventions	☐ INTERVENTION: NA ☐ CONTROL: NA
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: screening for alcohol abuse in adults** ☐ Economic outcomes ☐ Other: ☑ **Positive on: achieving a decrease in the number of standards drinks consumed by risky drinkers.** ☐ Negative on: ☐ No effect on: **Conclusion:** Targeted payments are the least efficient of four commonly used strategies to increase GPs provision of care to reduce alcohol consumption among their patients. Academic detailing and computerised reminder system appear most effective in achieving a decrease in the number of standards drinks consumed by risky drinkers.

Study number **68.**	**Study included**
SIEGEL, 2003	Siegel D, Lopez J, Meier J, Goldstein MK, Lee S, Brazill BJ, et al. Academic detailing to improve antihypertensive prescribing patterns. American Journal of Hypertension. 2003;16(6):508-11.
Quality appraisal score	☑ **10/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after** ☐ Time series:
Objectives	☑ **To increase practitioners compliance with antihypertensive treatment guidelines**
Setting	☑ **Physician's office (community outpatient centers and academic medical clinics)** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with hypertension, diabetes mellitus and heart failure**
Caregiver targeted	☑ **Family physician (= general practitioner): 308 patients** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Compliance with antihypertensive treatment guidelines**
Who does academic detailing	☐ Nurse

	☐ Physician ☐ Pharmacist ☐ Other ☑ **Not specified**
Interventions	☑ **INTERVENTION: face-to face (10-15 minutes) and group AD + 4 hour training sessions (effective communication techniques, discussion on normal antihypertensive recommendations, use of computer programs to extract and format data) + teleconference + educational materials + feedback (provider profiling of prescribing patterns)** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescription of thiazide diuretics, beta-blockers and calcium antagonists, angiotensine converting enzyme inhibitor, angiotensine receptor blocker** ☐ Economic outcomes ☐ Other: ☑ **Positive on: prescribing of number of calcium antagonists, beta-blockers, thiazide diuretics for patients with hypertension. For hypertensive subjects with diabetes mellitus or congestive heart failure, the proportion receiving an angiotensine converting enzyme inhibitor or angiotensin receptor blocker increased. Among hypertensive subjects with coronary artery disease and increase in beta-blocker use was noted.** ☐ Negative on: ☐ No effect on: **Conclusion:** Multifaceted intervention including AD effective on prescribing patterns compliant to national guidelines

Study number **69.**	**Study included**
SIMON, 2005	Simon SR, Majumdar SR, Prosser LA, Salem-Schatz S, Warner C, Kleinman K, et al. Group versus individual academic detailing to improve the use of antihypertensive medications in primary care: a cluster-randomized controlled trial. Am J Med. 2005;118(5):521-8.
Quality appraisal score	☑ **14/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (cluster randomized controlled trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To compare group versus individual academic detailing to increase diuretic of beta-blocker use in hypertension.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with newly diagnosed hypertension**
Caregiver targeted	☑ **Family physician (= general practitioner): 9 practices randomized to 3 intervention arms (physicians: 75; patients: 1066 individual AD; physicians: 87; patients: 1007 group AD; 1619 in mail intervention sites)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Diuretic of beta-blocker use in hypertension**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☐ Other ☑ **Not specified 'trained detailer'**
Interventions	☑ **INTERVENTION: individual AD (15-30 minutes)** ☑ **INTERVENTION: group AD (45 small group session: 7-8 physicians attendance)** ☑ **CONTROL:** mail intervention
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: rates of diuretic or beta-blocker use** ☐ Economic outcomes: intervention costs and medication costs ☐ Other: ☑ **Positive on: rates of diuretic or beta-blocker use increased in both individual and group AD practices** ☐ Negative on: ☑ **No effect on: neither intervention affected blood pressure control** **Conclusion:** both individual and group AD imrpved antihypertensive prescribing above and over usual care. Individual AD had a more persistent effect two years after intervention

Study number **70.**	**Study included**
SIMON, 2007	Simon SR, Rodriguez HP, Majumdar SR, Kleinman K, Warner C, Salem-Schatz S, et al. Economic analysis of a randomized trial of academic detailing interventions to improve use of antihypertensive medications. J Clin Hypertens (Greenwich). 2007;9(1):15-20.
Quality appraisal score	☑ **14/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **Retrospective cost-analysis of a RCT (cluster randomized controlled trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **Estimating the costs and cost savings (perspective of the payer) of implementing a program of mailed practice guidelines, single-visits individual and group academic detailing in a RCT to improve the use of antihypertensive medications.**
Setting	☑ **Physician's office (NA)** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with hypertension**
Caregiver targeted	☑ **Family physician (= general practitioner): 9 practices randomized to 3 intervention arms (patients: 1066 individual AD; 1007 group AD; 1619 in mail intervention sites)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Diuretic of beta-blocker use in hypertension**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☐ Other ☑ **Not specified 'trained detailer'**
Interventions	☑ **INTERVENTION: individual AD (15-30 minutes)** ☑ **INTERVENTION: group AD (45 small group session: 7-8 physicians attendance)** ☑ **CONTROL:** mail intervention
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☐ Process outcomes: ☑ **Economic outcomes: average daily drug cost** ☐ Other: ☑ **Positive on: the individual AD resulted in an estimated net decrease in average daily drug cost per person beyond the reductions in the mail group, although this finding did not reach statistical significance. The estimated net reduction corresponded to savings.** ☐ Negative on: ☑ **No effect on: The group AD resulted in no change in the average daily cost of antihypertensive agents.** **Conclusion:** Mixed results on cost-savings, but individual AD demonstrated better cost savings compared to group and mailing intervention

Study number **71.**	**Study included**
SIRIWARDENA, 2002	Siriwardena AN, Rashid A, Johnson MR, Dewey ME. Cluster randomised controlled trial of an educational outreach visit to improve influenza and pneumococcal immunisation rates in primary care. Br J Gen Pract. 2002;52(482):735-40.
Quality appraisal score	☑ **12/14**
Country	☑ **Europe: UK (Trent region)** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (cluster randomized controlled trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To improve the delivery of influenza and pneumoccocal vaccinations to high-risk groups**.
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **High risk patients (age > 65 years, coronary heart disease, diabetes and a history of splenectomy) needing influenza and pneumoccocal vaccinations.**
Caregiver targeted	☑ **Family physician (= general practitioner): 30 (15 intervention; 15 control)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Influenza and pneumoccocal vaccinations**

Who does academic detailing	☐ Nurse ☑ **Physician (general practitioner)** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD (+/- one hour; often during primary health care team meeting, exploring barriers to vaccination + information) + audit + feedback of practice vaccination rates** ☑ **CONTROL:** written feed-back on vaccination rates
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: rates of influenza and pneumoccocal vaccination for patients age > 65 years, coronary heart disease, diabetes and a history of splenectomy** ☐ Economic outcomes ☐ Other: ☑ **Positive on: Improvements in pneumoccocal vaccination rates in the intervention practices were significantly greater compared to controls in patients with CHD and diabetes but <u>not splenectomy</u>. Improvements for influenza vaccination were also greater in intervention practices but did not reach statistical significance.** ☐ Negative on: ☐ No effect on: **<u>Conclusion:</u>** AD is effective on the uptake pneumococcal vaccination in high risk groups, but not for influenza vaccination.

Study number **72.**	**Study included**
SHEINFELD, 2000	Sheinfeld Gorin S, Gemson D, Ashford A, Bloch S, Lantigua R, Ahsan H, et al. Cancer education among primary care physicians in an underserved community. Am J Prev Med. 2000;19(1):53-8.
Quality appraisal score	☑ **10/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after design** ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of a QI program on cancer screening and prevention in an underserved community**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☑ **Cancer (colon, rectum, cervix, prostate, breast and lung)** ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner): 84 intervention; 38 control.** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Cancer prevention and screening practices**
Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist

	☐ Other ☑ **Not specified (bachelors, masters and public health professionals)**
Interventions	☑ **INTERVENTION: AD (+/- 2-3 visits; practice visits and contacts over the phone, information) + educational materials + perceived barriers to implementation + educational materials for patients + dinner seminars about cancer prevention and screening** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: self-reported cancer prevention and screening practices** ☐ Economic outcomes ☑ **Other: knowledge of ACS screening guidelines for the colon, rectum, cervix, prostate, breast and lung** ☑ **Positive on: Identified barriers to practice** ☐ Negative on: ☑ **No effect on: no significant differences in knowledge of cancer prevention or screening.** **Conclusion:** Educational visits did not seem to alter cancer screening and prevention practices.

Study number **73.**	**Study included**
STONE, 2005	Stone CA, May FW, Pinnock CB, Elwood M, Rowett DS. Prostate cancer, the PSA test and academic detailing in Australian general practice: an economic evaluation. Aust N Z J Public Health. 2005;29(4):349-57.
Quality appraisal score	☑ NA
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series: ☑ **Modelling scenario**
Objectives	☑ **To evaluate whether introduction of a national education program for GPS to improve decision making relating to the use of prostate specific antigen (PSA) testing for screening represents value-for-money from the perspective of the Australian government.**
Setting	☐ Physician's office ☐ Primary care clinic ☐ Other (specify): ☑ **NA**
Population targeted	☑ **Cancer (prostate cancer)** ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified

Behavior targeted	☑ **PSA screening**
Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☐ INTERVENTION: ☐ CONTROL: ☑ **NA**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☐ Process outcomes ☑ **Economic outcomes** ☐ Other: ☑ **Positive on: A national program would reduce the burden of disease by 4.7% of total DALYs due to prostate cancer in those aged 70 and over, with no loss of life and an incremental cost effectiveness ratio of 16.000/DALY (gross) and 8.500/DALY (net).** ☐ Negative on: ☐ No effect on: Conclusion:

Study number **74.**	**Study included**
TENG, 2006	Teng CL, Achike FI, Phua KL, Nurjahan MI, Mastura I, Asiah HN, et al. Modifying antibiotic prescribing: the effectiveness of academic detailing plus information leaflet in a Malaysian primary care setting.[see comment]. Med J Malaysia. 2006;61(3):323-31.
Quality appraisal score	☑ **8/14**
Country	☐ Europe ☐ US ☐ Canada ☐ Australia: ☑ **Asia (specify): Malaysia**
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☑ **Time series: Interrupted time series design**
Objectives	☑ **To evaluate the effectiveness of AD on prescribing of antibiotics for URTI**
Setting	☐ **Physician's office** ☑ **Primary care clinic** ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☑ **Respiratory diseases (Upper respiratory Tract Infections)**
Caregiver targeted	☑ **Family physician (= general practitioner): 29** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescription of antibiotics**
Who does academic detailing	☐ Nurse ☑ **Physician (family care specialist)**

	☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD (20 minute one-to-one meeting + guidelines (summarized on one page leaflet) + poster (leaflet)** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescription of antibiotics** ☐ Economic outcomes ☐ Other: ☑ **Positive on: reductions in the prescription of antibiotics for URTI** ☐ Negative on: ☐ No effect on: **Conclusion:** AD is effective on a reduction in the prescription of antibiotics for URTI .

Study number **75.**	**Study included**
TURNER, 2000	Turner CJ, Parfrey P, Ryan K, Miller R, Brown A. Community pharmacist outreach program directed at physicians treating congestive heart failure. American Journal of Health-System Pharmacy. 2000;57(8):747-52.
Quality appraisal score	☑ **9/14**
Country	☐ Europe ☑ **US** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the ability of a pharmacist outreach program to address underutilization of ACE inhibitors among patients receiving treatment for CHF (congestive heart failure)**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☑ **Heart failure (congestive heart failure)** ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified ☑ **Pharmacist**
Behavior targeted	☑ **Prescription of ACE inhibitors and angiotensin 2 receptor antagonists for the prevention and management of CHF.**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist** ☐ Other
Interventions	☑ **INTERVENTION: AD + guidelines** ☑ **CONTROL:** AD
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: self-reported use of prescription of ACE inhibitors and angiotensin 2 receptor antagonists for the prevention and management of CHF.** ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: no significant difference in ACE-inhibitor prescribing between intervention and control group** **Conclusion:** A pharmacist outreach program involving AD did not affect prescribing or dosages of ACE inhibitors but demonstrated value as a quality assurance tool.

Study number **76.**	**Study included**
VARONEN, 2007	Varonen H, Rautakorpi U-M, Nyberg S, Honkanen PO, Klaukka T, Palva E, et al. Implementing guidelines on acute maxillary sinusitis in general practice--a randomized controlled trial. Fam Pract. 2007;24(2):201-6.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: Finland** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (multi-centre RCT conducted in 30 health centers).** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To study whether a nationwide guidelines implementation programme has an effect on the management of acute maxillary sinusitis (antibiotics prescribing)**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☑ **Respiratory diseases: acute maxillary sinusitis**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Management of acute maxillary sinusitis (antibiotics prescribing)**
Who does academic detailing	☐ Nurse ☑ **Physician**

	☐ Pharmacist ☐ Other ☐ **Not specified ('external experts')**
Interventions	☑ **INTERVENTION: AD (information sources, feedback, and visits) by local general practitioner** ☑ **CONTROL: problem-based learning**
Multifaceted intervention?	☑ **NO**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: prescribing of antibiotics for acute maxillary sinusitis (Amoxicillin), proportion of courses of antibiotics with recommended duration** ☐ Economic outcomes ☐ Other: ☑ **Positive on: Use of first line drugs (amoxicillin): increased** ☐ Negative on: ☑ **No effect on: there were no significant changes between AD and problem-based learning methods.** **Conclusion:** The program produced modest changes in the management of AMS, but AD was not more effective compared to other educational techniques.

Study number **77.**	**Study included**
VAN DEN HOMBERG, 1999	Van den Hombergh, P, Grol R, et al. Practice visits as a tool in quality improvement: mutual visits and feedback by peers compared with visits and feedback by non-physician observers. Qual Health Care 8, 1999 (3): 161-6
Quality appraisal score	☑ **14/14**
Country	☑ **Europe: The Netherlands** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (prospective, randomised intervention study, with follow-up after one year).** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate and compare the effects of two programs of assessment of practice management in a practice visit on functioning of GP practices**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Not applicable**
Caregiver targeted	☑ **Family physician (= general practitioner): 14 local groups with 109 GPs** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Global Practice functioning**

Who does academic detailing	☐ Nurse ☑ **Physician** ☐ Pharmacist ☑ **Other: non-physician observers**
Interventions	☑ **INTERVENTION: Practice visits by peers (physicians)** ☑ **INTERVENTION: Practice visit by non physician observers**
Multifaceted intervention	☑ **NO**
Outcomes	☐ Biological outcomes ☑ **Psycho-social outcomes: job-stress in physicians** ☑ **Process outcomes: delegation and collaboration** ☐ Economic outcomes ☑ **Other: Premises and equipment, service and organization, record keeping, organisation of quality improvement, workload** ☑ **Positive on: both programmes resulted into improvements on many aspects of practice management. Practice visits by peers resulted into better performance for equipment, collaboration with colleagues, accessibility of patient information than after a visit of a non physician observer. Visits by non physician observers resulted in a higher score on extent of use of records, outcome assessment and year report.** ☐ Negative on: ☐ No effect on: **Conclusion:** AD by either physicians or non-physician observers effective on improvements in practice management.

Study number **78.**	**Study included**
VAN DER WEIJDEN, 1999	van der Weijden T, Grol RP, Knottnerus JA. Feasibility of a national cholesterol guideline in daily practice. A randomized controlled trial in 20 general practices. Int J Qual Health Care. 1999;11(2):131-7.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: The Netherlands** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the feasibility and implementation needs of a cholesterol guideline by assessing the effectiveness of simple dissemination as well as extensive implementation of this guideline on actual performance of GPs.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients with abnormal cholesterol levels**
Caregiver targeted	☑ **physician (= general practitioner): 32 GPs in 20 practices, 3950 patient records** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Management of cholesterol**
Who does academic detailing	☐ Nurse

	☐ Physician ☐ Pharmacist ☑ **Other: scientific collaborator**
Interventions	☑ **INTERVENTION: extensive implementation of guideline= guideline+ educational materials + 3h educational session by local opinion leader + feedback + 2 outreach visits with face-to-face instruction + barriers to change** ☑ **CONTROL: simple implementation of guideline= postal distribution of the guideline with scientific background materials**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: quality of selective case finding (= targeting cholesterol testing to patients with at least one of the six risk factors mentioned in the guideline), and quality of diagnostic procedures (= properly diagnosed hypercholesterolemia requires that average of 3 measurements to be higher than 6.5 mmol/l)** ☐ Economic outcomes ☐ Other: ☑ **Positive on: quantity of cholesterol testing** ☑ **Negative on: performance of the procedure necessary to diagnose hypercholesterolemia even deteriorated** ☑ **No effect on: quality of selective case finding or quality of diagnostic procedures** **Conclusion:** Mixed results from multifaceted intervention on management of cholesterol.

Study number **79.**	**Study included**
VAN EIJK, 2001	van Eijk ME, Avorn J, Porsius AJ, de Boer A. Reducing prescribing of highly anticholinergic antidepressants for elderly people: randomised trial of group versus individual academic detailing. BMJ. 2001;322(7287):654-7.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: The Netherlands** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (with 3 intervention arms)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To compare the effect of individual educational visits versus group visits using academic detailing to discuss prescribing of highly anticholinergic antidepressants in elderly people.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Elderly patients (> 60) needing anticholinergic antidepressants**
Caregiver targeted	☑ **Family physician (= general practitioner): 37 practices – 190 GPs** ☑ **Pharmacists** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing of highly anticholinergic antidepressants in elderly people.**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Other: researcher**
Interventions	☑ **INTERVENTION:** individual academic detailing (two 20 minute visits) + educational materials + feedback on practice performance ☑ **INTERVENTION:** group academic detailing (two visits) ☑ **CONTROL:** no intervention
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: numbers of elderly people with new prescriptions of highly anticholinergic antidepressants and less anticholinergic antidepressants** ☐ Economic outcomes ☐ Other: ☑ **Positive on: in both the intervention arms the use of highly anticholinergic antidepressants decreased + the use of less anticholinergic antidepressants increased.** ☐ Negative on: ☐ No effect on: **Conclusion:** Academic detailing has a positive effect on the prescribing of anticholinergic antidepressants.

Study number **80.**	**Study included**
WALSH, 2005	Walsh JM, Salazar R, Terdiman JP, Gildengorin G, Perez-Stable EJ. Promoting use of colorectal cancer screening tests. Can we change physician behavior? J Gen Intern Med. 2005;20(12):1097-101.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☑ **US (San Francisco)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To assess the effect of an intervention targeting physicians and their patients on rates of colorectal cancer screening (CRC).**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☑ **Cancer: patients at risk for development of colorectal cancer** ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner) or internal medicine: 94; 9652 patients enrolled for 2 years and 3732 patients were enrolled for 5 years.** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Colorectal cancer screening (patients aged 50-79)**
Who does academic detailing	☐ Nurse

	☑ **Physician: opinion leaders** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD + educational sessions + guidelines + identification of barriers + patient intervention: letter, brochure, and a Fecal Occult Blood test cards** ☑ **CONTROL: ---**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: FOBT in the last 2 years, flexible sigmoidoscopy and colonoscopy in the previous 5 years, CRC screening.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: patient rates of screening SIG (flexible sigmoidoscopy)** ☐ Negative on: ☑ **No effect on: rates of CRC screening.** **Conclusion:** Mixed results from study applying academic detailing.

Study number **81.**	**Study included**
WATSON, 2001	Watson M, Gunnell D, Peters T, Brookes S, Sharp D. Guidelines and educational outreach visits from community pharmacists to improve prescribing in general practice: a randomised controlled trial. J Health Serv Res Policy. 2001;6(4):207-13.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: UK (Avorn)** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (cluster randomized trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of guidelines with or without ont-to-one educational oureach visits in improving general practice prescribing for non-steroidal anti-inflammatory drugs (NSAIDs).**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients needing non-steroidal anti-inflammatory drugs (NSAIDs).**
Caregiver targeted	☑ **Family physician (= general practitioner): 20 practices;** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescribing for non-steroidal anti-inflammatory drugs (NSAIDs).**

Who does academic detailing	☐ Nurse ☐ Physician ☑ **Pharmacist (community pharmacists)** ☐ Other
Interventions	☑ **INTERVENTION: mailed guidelines + educational outreach visits (two 10-minutes visits)** ☑ **INTERVENTION: mailed guidelines** ☑ **CONTROL:** not intervention
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: change in the volume prescription (DDD) of ibuprofen, diclofenac and naproxen (= recommended NSAIDs) as a percentage of total NSAID prescribing** ☑ **Economic outcomes: cost-benefit analysis** ☐ Other: ☑ **Positive on: the proportion of prescribing of the five most frequently used drugs.** ☑ **Negative on: a net increase in costs with both interventions** ☑ **No effect on: prescription of ibuprofen, diclofenac and naproxen** **Conclusion:** no impact on prescribing behaviour was noted

Study number **82.**	**Study included**
WELLER, 2003	Weller D, May F, Rowett D, Esterman A, Pinnock C, Nicholson S, et al. Promoting better use of the PSA test in general practice: randomized controlled trial of educational strategies based on outreach visits and mailout. Fam Pract. 2003;20(6):655-61.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia (South Adelaide)** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To compare the effectiveness of educational outreach visits and mailout strategies targeting PSA testing.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☑ **Cancer: prostate cancer** ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner): 145 (46 AD; 47: mail; 52 control)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prostate-specific antigen testing (PSA)**
Who does academic detailing	☐ Nurse ☐ Physician

	☑ **Pharmacist (trained in social marketing techniques)** ☐ Other
Interventions	☑ **INTERVENTION: AD + educational materials + feedback** ☑ **INTERVENTION: educational materials by mail** ☑ **CONTROL: no intervention**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: PSA testing rates** ☐ Economic outcomes ☑ **Other: GP knowledge** ☑ **Positive on: correct responses to questions about prostate cancer treatment effectiveness and endorsement of PSA testing for prostate cancer by professional bodies.** ☐ Negative on: ☑ **No effect on: PSA testing rate lower in AD group compared to mail group and control group.** **Conclusion:** Mixed results from intervention targeting PSA screening.

Study number **83.**	**Study included**
WILLIAMS, 1994	Williams PT, Eckert G, Epstein A, Mourad L, Helmick F. In-office cancer-screening education of primary care physicians. Journal of Cancer Education. 1994;9(2):90-5.
Quality appraisal score	☑ **8/14**
Country	☐ Europe ☑ **US (Ohio)** ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☐ RCT ☐ Controlled study (prospective/retrospective): ☑ **Before-after** ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of academic detailing on cancer preventive and screening actions in family physicians + increase knowledge of physicians about and use of educational and patient service resources of local, state and national units of the American Cancer Society (ACS) + evaluating if physicians employ the prevention and screening recommendations of the ACS and whether they have developed ways to deal with barriers to implementation of these recommendations + discover what barriers prevent the performance of cancer prevention and screening activities.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☑ **Cancer: breast, colon-rectum and prostate cancer** ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases
Caregiver targeted	☑ **Family physician (= general practitioner): 22 physicians + staff members** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Screening and preventive actions on breast, colon-rectum and prostate cancer.**

Who does academic detailing	☑ **Nurse** ☑ **Physician** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD (one/two face-to-face visit) + follow-up phone calls + educational materials for physicians and patients + guidelines + action list for office management** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: activities in compliance with cancer prevention guidelines** ☐ Economic outcomes ☐ Other: ☑ **Positive on: compliance rates + increased awareness of resources of ACS and in prompting physicians to adopt cancer prevention and screening procedures, but least effective in making office changes.** ☐ Negative on: ☐ No effect on: **Conclusion:** AD effective on cancer screening and prevention action in physicians.

Study number **84.**	**Study included**
WITT, 2004	Witt K, Knudsen E, Ditlevsen S, Hollnagel H. Academic detailing has no effect on prescribing of asthma medication in Danish general practice: a 3-year randomized controlled trial with 12-monthly follow-ups. Fam Pract. 2004;21(3):248-53.
Quality appraisal score	☑ **13/14**
Country	☑ **Europe: (Denmark)** ☐ US ☐ Canada ☐ Australia: ☐ Asia (specify)
Initiator	☑ Not specified
Design	☑ **RCT (cluster randomized trial)** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To examine the effect of academic detailing as a method of implementing a clinical guideline in general practice and to improve GPs prescribing in accordance with the current best medical evidence and to ensure efficient use of health care sources.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☑ **Respiratory diseases: asthma (children < 16 years of age)**
Caregiver targeted	☑ **Family physician (= general practitioner)** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescription of asthma medication (to change medication in children to more inhaled steroids and less B2-aginists, and to increase the GPs use of peak-flow meters and spirometry).**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Other: researchers**
Interventions	☑ **INTERVENTION: AD (15-20 minute visit) + guideline + feedback (prescription profile)** ☑ **CONTROL: guideline by post + feedback**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: number of asthma medication prescribed (DDD of steroids and B2-agonists expressed as sales of asthma medication by pharmacies).** ☐ Economic outcomes ☐ Other: ☐ Positive on: ☐ Negative on: ☑ **No effect on: prescription of asthma medication** **Conclusion:** No effect of AD on prescribing of asthma medication.

Study number **85.**	**Study included**
WONG, 2004	Wong RY, Lee PE. Teaching physicians geriatric principles: a randomized control trial on academic detailing plus printed materials versus printed materials only. J Gerontol A Biol Sci Med Sci. 2004;59(10):1036-40.
Quality appraisal score	☑ **12/14**
Country	☐ Europe ☐ US ☑ **Canada** ☐ Australia: ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **Promotion of geriatric knowledge to physicians**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Elderly**
Caregiver targeted	☑ **Family physician (= general practitioner): 31 (intervention: 16; intervention 2: 15)** ☐ Specialist ☐ Type of physician not specified ☑ **Postgraduate trainees + staff physicians**
Behavior targeted	☑ **Geriatric knowledge on cognitive impairment, competency, urinary incontinence, malnutrition, and stroke.**

Who does academic detailing	☐ Nurse ☐ Physician ☐ Pharmacist ☑ **Other: specialist in geriatric medicine**
Interventions	☑ **INTERVENTION: AD (15 minute session) + printed educational materials** ☑ **CONTROL: printed materials only**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☐ Process outcomes ☐ Economic outcomes ☑ **Other: Knowledge score on geriatric knowledge** ☑ **Positive on: improvements in geriatric knowledge scores** ☐ Negative on: ☐ No effect on: **Conclusion:** Intervention effective on geriatric knowledge retention.

Study number **86.**	**Study included**
YOUNG, 2002	Young JM, D'Este C, Ward JE. Improving family physicians' use of evidence-based smoking cessation strategies: a cluster randomization trial. Prev Med. 2002;35(6):572-83.
Quality appraisal score	☑ **13/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT (cluster randomized trial): 2 X 2 balanced incomplete block design** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To improve family physicians' use of evidence-based smoking cessation strategies**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients who smoke (age 18-70 years)**
Caregiver targeted	☑ **Family physician (= general practitioner): 60 from 39 practices** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Smoking cassation advice**
Who does academic detailing	☐ Nurse

	☐ Physician ☐ Pharmacist ☑ **Other: not specified**
Interventions	☑ **INTERVENTION: AD (Three visits) + audit + feedback + skills training video and workbook package + clinical guidelines + prompt sheet to assist with smokers' excuses and self-exemptions + patient-mediated prompts + reminders for medical records + patient brochures and free starter packs of nicotine replacement gum.** ☑ **CONTROL: same intensity program, but on cervical screening**
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: recall of GPs advice about nicotine replacement patches and gum, patient recall of assessment of smoking status and GP use of 'quit dates', behavioural advice and provision of written materials** ☐ Economic outcomes ☐ Other: ☑ **Positive on: recall of GPs advice about nicotine replacement patches and gum** ☐ Negative on: ☑ **No effect on: Positive increases but not significant for: patient recall of assessment of smoking status and GP use of 'quit dates', behavioural advice and provision of written materials** **Conclusion:** Multifaceted intervention effective on promotion of use of nicotine replacement therapy in GPs.

Study number **87.**	**Study included**
ZWAR, 2000	Zwar NA, Wolk J, Gordon JJ, Sanson-Fisher RW. Benzodiazepine prescribing by GP registrars. A trial of educational outreach. Aust Fam Physician. 2000;29(11):1104-7.
Quality appraisal score	☑ **12/14**
Country	☐ Europe ☐ US ☐ Canada ☑ **Australia (New South Wales)** ☐ Asia (specify)
Initiator	☑ **Not specified**
Design	☑ **RCT** ☐ Controlled study (prospective/retrospective): ☐ Before-after: ☐ Time series:
Objectives	☑ **To evaluate the effectiveness of an educational academic detailing program about prescribing of benzodiazepines.**
Setting	☑ **Physician's office** ☐ Primary care clinic ☐ Other (specify):
Population targeted	☐ Cancer ☐ Heart failure ☐ Neurodegenerative diseases ☐ Respiratory diseases ☑ **Patients (long term users of) benzodiazepines**
Caregiver targeted	☑ **Family physician (= general practitioner): 157: 79 intervention; 78 control** ☐ Specialist ☐ Type of physician not specified
Behavior targeted	☑ **Prescription of benzodiazepines**
Who does academic detailing	☐ Nurse

	☑ **Physician** ☐ Pharmacist ☐ Other
Interventions	☑ **INTERVENTION: AD (20 minute appointment) + guidelines on anxiety and insomnia + leaflets for patients on relaxation techniques + a patient held aid to managing the benzodiazepine withdrawal process** ☐ CONTROL:
Multifaceted intervention?	☑ **YES**
Outcomes	☐ Biological outcomes ☐ Psycho-social outcomes ☑ **Process outcomes: rate of benzodiazepine prescribing for all indications, for anxiety and sleep disorders.** ☐ Economic outcomes ☐ Other: ☑ **Positive on: Overall benzodiazepine prescribing (in continuing rather than initial prescriptions), but no difference between groups** ☐ Negative on: ☐ No effect on: **Conclusion:** A marked decrease in benzodiazepine prescribing was seen in both intervention and control groups but no differential effect due to the educational outreach visit

2 APPENDICES QUALITATIVE PART

2.1 APPENDIX A: PHONE SCRIPT (FRENCH)

« Bonjour, [X], du laboratoire SPIRAL, département de Science Politique de l'Université de Liège. Êtes-vous bien le Docteur [Y] ? Je vous contacte dans le cadre de l'étude KCE [*si question sur la signification de KCE : « Il s'agit du Centre Fédéral d'Expertise des Soins de Santé, qui dépend du SPF Santé Publique »*] sur l'évaluation de la visite du délégué médical indépendant sur la pratique des médecins généralistes.

Comme vous aviez marqué votre accord pour participer à cette enquête, vous avez reçu un courrier cette semaine à ce sujet. Donc, je vous contacte pour fixer un rendez-vous pour un entretien qui durera une vingtaine de minutes. Je suis dans votre région le [JJ] et le [JJ]/[MM]. Une de ces dates vous convient-elle ? »

(…)

« L'entretien sera enregistré, mais votre identité restera confidentielle : seul un groupe de chercheurs du SPIRAL connaîtra votre identité, qui n'apparaîtra nulle par sur les documents que nous produirons. »

2.2 APPENDIX B: MAIN FIVE QUESTIONS, USED AS A GUIDE FOR THE FIRST INTERVIEWS (FRENCH)

Ces questions ont été pré-testées le 21 août chez un médecin généraliste. Il s'agit de questions définies comme incontournables, de guidelines, qui seront complétées lors des passations selon la grille disponible en Annexe C. Elles serviront essentiellement à amorcer et à cadrer l'entretien.

- Que pensez-vous des différents types d'information sur les médicaments en Belgique ? *[Le but est ici de voir si les généralistes parlent spontanément de Farmaka.*]
- Au sujet des informations qui vous ont été fournies par Farmaka, quelque chose a-t-il changé pour vous ces dernières années ?
- Que pensez-vous du niveau de formation des visiteurs indépendants ? Quelle est leur légitimité, leur crédibilité ?
- Recevez-vous des délégués médicaux privés, à quelle fréquence ? [*Cette question, qui semble redondante par rapport à une étude KCE précédente, nous renseigne en fait sur les habitudes du médecin interrogé – elle permet aussi de voir quelle est la légitimité du délégué médical privé aux yeux du médecin.]*
- Avez-vous autre chose à ajouter ?

En plus de ces questions, des informations seront récoltées systématiquement, comme :

- L'âge précis et le sexe du médecin ;
- L'interviewer notera si le médecin dispose d'un ordinateur sur son bureau ;
- Les caractéristiques de la patientèle (observation, question) ;
- Les caractéristiques géographiques (milieu urbain, rural) ;
- La méthodologie de travail du médecin (seul, en association).

Il est à noter que la plupart de ces informations peuvent être observées et que seules quelques-unes d'entre elles feront l'objet de questions, dans les cas où l'observation (quartier du cabinet, salle d'attente) ne donnera pas de résultats suffisants.

2.3 APPENDIX C: CHARACTERISTICS OF FACE-TO-FACE INTERVIEWEES

Province	Gender	Age	Work practice	Number of pharmaceutical delegates	Duration of the interview
Namur	M	34	Medical centre	Few	17’
Namur	M	59	Associated	None	40’
Namur	M	56	Alone	Average	8’
Liège	M	34	Medical House + Hospital	None	31’
Liège	M	61	Alone	A lot	35’
Bruxelles	F	53	Alone	Few	16’
Brabant Wallon	F	49	Alone	None	17’
Brabant Wallon	M	56	Associated	None	15’
Brabant Wallon	F	36	Alone	Very few	26’
Brabant Wallon	M	35	Medical House + Social work	Very few	16’
Brabant Wallon	F	59	Medical House	Very few	31’
Hainaut	F	34	Medical House + Social work	Few	15’
Hainaut	F	33	Medical House	Few	26’
Oost-Vlaanderen	M	52	Alone	None	16’
Oost-Vlaanderen	M	56	Alone	Very few	30’
Oost-Vlaanderen	M	58	Alone	Very few	33’
Limburg	F	58	Alone	None	30’
West-Vlaanderen	M	54	Associated	Few	8’
West-Vlaanderen	M	64	Associated	Average	20’
West-Vlaanderen	M	61	Alone	N/A	30’
West-Vlaanderen	M	48	Alone	Average	23’
West-Vlaanderen	M	55	Alone	A lot	15’
West-Vlaanderen	M	54	Alone	N/A	19’
West-Vlaanderen	M	51	Alone	Very few	30’
Antwerpen	M	54	Associated	A lot	25’
Antwerpen	F	35	Associated	None	16’
Antwerpen	M	35	Associated	Few	27’
Antwerpen	M	58	Alone	N/A	15’
Antwerpen	M	54	Associated	Very few	19’
Antwerpen	M	51	Alone	Very few	13’
Antwerpen	M	58	Alone	Average	21’
Antwerpen	M	58	Alone	N/A	30’

Antwerpen	M	48	Alone	Few	13’
Oost-Vlaanderen	M	73	Alone	Average	8’
Oost-Vlaanderen	F	55	Alone	Very few	20’
Oost-Vlaanderen	M	71	Alone	Average	11’
Vlaams Brabant	F	37	Work Medicine	N/A	13’
Vlaams Brabant	M	50	Alone	N/A	17’
Antwerpen	M	56	Associated	Few	20’
Antwerpen	M	38	Associated	None	20’

Caption for the “Number of pharmaceutical delegates” column:
None: does not see any pharmaceutical delegate
Very few: sees less than 15 pharmaceutical delegates a year
Few: sees less than 30 pharmaceutical delegates a year
Average: sees 1 or 2 delegates a week
A lot: sees 6+ delegates a week

2.4 APPENDIX D. MAIN TOPICS TO BE INVESTIGATED, IN A GRID (FRENCH)

Médecin – données générales	Farmaka	Visites	Visiteur indépendant (*vs* représentants privés)
Généralités et pratique • Organisation du cabinet (*Seul / En association*) • Âge (*Ancienneté / Parcours professionnel*) • Milieu (*Ville / Semi rural / Campagne*)	**Connaissances du projet** • Idée des objectifs (*vague / précise*) • Comment ont-ils connu Farmaka ? • Connaissance des Autres produits ?	**Si elle a été acceptée :** • Évaluation du processus • Comparaison des techniques visiteurs indépendants *vs* délégués médicaux • Impact sur la pratique du médecin interviewé : si changements : en quoi, pourquoi	**Évaluation des connaissances et de la qualification :** • Sur le domaine de la santé en général • A-t-il une représentation correcte de la pratique de la médecine générale?
Attitude par rapport à l'information sur les médicaments • Utilisation de la littérature • Attitude par rapport aux nouveautés thérapeutiques	**Expérience personnelle (vécu)** • Contacts préliminaires • Visite : description générale	**Si elle a été refusée :** • Pourquoi ?	**Vis-à-vis des spécialistes :** • Aident-ils à la communication avec les spécialistes ? (*Pourquoi / En quoi*)
Patientèle • Fréquentation du cabinet • Caractéristiques démographiques de la patientèle	**Opinion par rapport au projet (sources et message)** • Pertinence • Qualité • Crédibilité • Acceptabilité • Contenu	**Perception des avantages et inconvénients de la visite**	**Qualité du contact**
Accueil des délégués médicaux en général • Contact avec les délégués médicaux (*Sur rendez-vous / Pendant les visites / Horaire prédéfini / Jamais*) • Nombres de délégués médicaux reçus par semaine	**Opinion par rapport aux fiches de transparence :** • Support des visites *leave behind* relu? • En rapport avec pratique ?	**Suggestions** • D'améliorations • D'alternatives • D'activités autres que la visite des médecins généralistes • Pour une meilleure adéquation aux besoins et contraintes des médecins généralistes • Autres sources que les fiches de transparence ?	**Pertinence des propos (portant sur les connaissances médicales en général mais également sur les nouveautés) :** • Par rapport à une pathologie • Par rapport aux prises en charges médicamenteuses et non médicamenteuses

2.5 APPENDIX E: INVITATION MAIL TEXTS

2.5.1 Version in French

Docteur,

Dans le cadre d'une étude portant sur votre perception du projet « évaluation de l'impact de la visite des délégués médicaux indépendants », de son utilité, de son influence, de son adéquation aux besoins des médecins, etc., le Centre fédéral d'expertise des soins de santé (KCE) a chargé le SPIRAL, centre de recherche de l'Université de Liège, de procéder à des entretiens individuels ainsi qu'à la mise en œuvre d'un questionnaire en ligne.

Vous avez accepté de participer à cette étude nous vous en remercions. Votre avis est important pour notre recherche. Dans ce cadre, je me permets de prendre contact avec vous afin de vous inviter à participer à ce questionnaire en ligne.

Le processus est confidentiel. En un simple clic sur ce lien <http://www.mesydel.com/?language=french>, vous aurez accès à l'outil informatique Mesydel qui servira de support à ce questionnaire. Vos identifiant et mot de passe sont :

Identifiant : xxxxxx

Mot de passe : yyyyyy

Je vous serais très reconnaissante de bien vouloir compléter le questionnaire avant le dimanche 4 octobre prochain inclus. N'hésitez pas à me contacter – ou un autre membre de l'équipe – à tout moment ; nous sommes à votre disposition pour répondre à vos questions.

D'avance, je vous remercie pour votre précieuse collaboration et vous prie de croire, Docteur, en l'assurance de mes sentiments les meilleurs.

Stéphanie Vanhaeren

Chargée de recherche

Département de Science Politique de l'Université de Liège

Laboratoire de recherche SPIRAL

Téléphone : +32 (0) 4 366 46 97

E-mail : S.Vanhaeren@ulg.ac.be

2.5.2 Version in Dutch

Beste Doktor,

In het kader van een lopende studie om de impact van zelfstandig medisch afgevaardigden op het voorschrijfgedrag van huisartsen te evalueren, heeft het Federaal Kenniscentrum voor de Gezondheidszorg (KCE) het SPIRAL (een kenniscentrum van de ULg) opdracht gegeven om face-to-face gesprekken en een online vragenlijst te boeken.

U heeft aanvaard om aan deze studie deel te nemen, waarvoor wij u danken.

Uw mening is belangrijk voor ons onderzoek. In dit kader neem ik contact met u op om u vriendelijk uit te nodigen deel te nemen aan deze online vragenlijst.

Het proces is vertrouwelijk. Met een eenvoudige klik op de link http://www.mesydel.com/?language=dutch krijgt u toegang tot het informatienetwerk Mesydel, met hierop onze vragenlijst. Uw login en paswoord zijn:

Login: xxxxxx

Passwoord: yyyyyy

Deadline: 04/10/2009

Aarzel niet om mij (of een ander lid van ons team) te contacteren. Wij staan steeds tot uw beschikking om al uw vragen te beantwoorden.

Ik dank u voor uw waardevolle medewerking.

Met de meeste hoogachting,

Nick Geukens

Onderzoeker

Departement Politieke Wetenschappen – Universiteit van Luik

SPIRAL kenniscentrum

Telefoon: +32 (0) 4 366 46 97

E-mail: Nick.Geukens@ulg.ac.be

2.6 APPENDIX F: WEB WELCOME (LOGGED-IN) TEXT

2.6.1 Version in French

Docteur,

Vous avez donné votre accord pour participer au Mesydel du projet « évaluation de l'impact de la visite des délégués médicaux indépendants ». Ce dernier est organisé par le Centre fédéral d'expertise des soins de santé. La partie enquête est mise en œuvre par le centre de recherche SPIRAL de l'Université de Liège.

La date limite pour répondre au questionnaire est le dimanche 4 octobre 2009. D'ici-là, vous aurez la possibilité d'enrichir à tout moment vos réponses *via* cette interface.

Le processus est tout à fait anonyme et la seule contrainte à respecter pour remplir le questionnaire est d'argumenter vos réponses. Le temps pour répondre aux neuf questions est estimé à une demi-heure au maximum.

Au nom de l'équipe du SPIRAL, je vous remercie pour votre précieuse participation. Si vous êtes intéressé par les résultats de cette étude, laissez-nous votre adresse mail. Nous nous ferons un plaisir de vous contacter lors de sa publication. N'hésitez pas à me contacter – ou un autre membre de l'équipe – à tout moment ; nous sommes à votre disposition pour répondre à vos questions.

Stéphanie Vanhaeren

Chargée de recherche

Département de Science Politique de l'Université de Liège

Laboratoire de recherche SPIRAL

Téléphone : +32 (0) 4 366 46 97

E-mail : S.Vanhaeren@ulg.ac.be

2.6.2 Version in Dutch

Beste Doktor,

U hebt geaccepteerd om deel te nemen aan de studie over de evaluatie van zelfstandig medisch aanvaardigden. Het KCE is verantwoordelijk voor deze studie. Een deel ervan wordt aan het SPIRAL – een kenniscentrum van de ULg - toevertrouwd.

De deadline om de vragenlijst in te vullen is 4 oktober 2009. Het proces is vertrouwelijk en duurt ongeveer een half uur. U kunt uw vragen tot de deadline op ieder ogenblik blijven aanpassen en aanvullen.

In naam van SPIRAL dank ik u voor uw deelname. Indien u geïnteresseerd bent in de resultaten van ons onderzoek, gelieve dan uw e-mail adres te geven. Het zal ons plezier doen u van de publicatie op de hoogte te stellen. Aarzel niet om mij (of een ander teamlid) te contacteren. Wij staan steeds tot uw beschikking om al uw vragen te beantwoorden.

Ik dank u voor uw waardevolle medewerking.

Met de meeste hoogachting,

Nick Geukens

Onderzoeker

Departement Politieke Wetenschappen – Universiteit van Luik

SPIRAL kenniscentrum

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E-mail: Nick.Geukens@ulg.ac.be

2.7 APPENDIX G: MESYDEL PARTICIPANTS

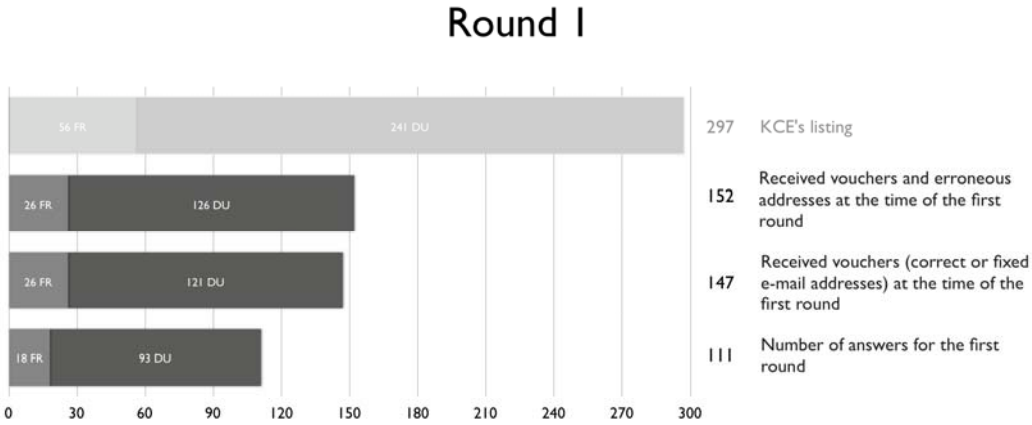
2.7.1 Contacted GPs for the Mesydel session: response rates

Round 1

All GPs who accepted to participate by letter (297 GPs) received a voucher. By sending back this voucher to KCE, they gave Spiral their e-mail address and agreed to participate to the study.

At the end of the first round (October 5th), 152 GPs sent their voucher back to KCE with their e-mail address, therefore accepting to participate to the Mesydel.

Figure 4. Attrition table for the first round of the Mesydel



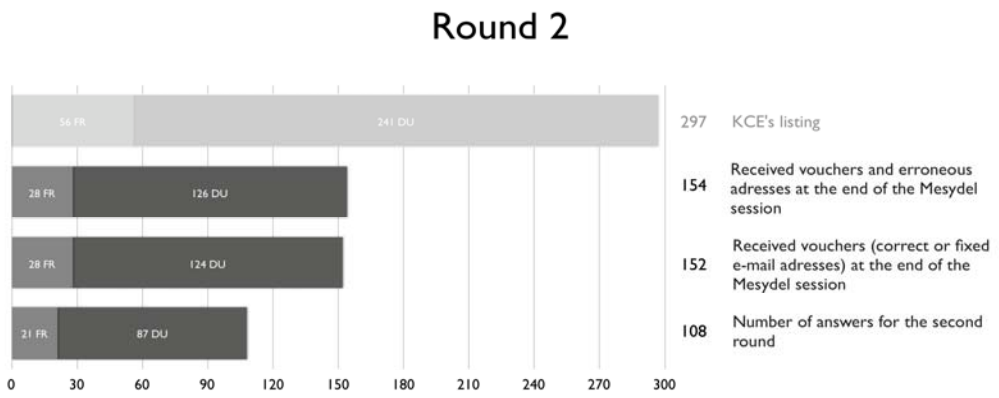
A few of them did provide an incorrect e-mail address. We were able to fix most of them by phoning the GPs and therefore to encode and invite 147 of the 152 GPs (26 French-speaking and 121 Dutch-speaking). By not having the e-mail address of all the GPs and having recourse to the voucher system, we lost half of the sample for the Mesydel (50,5%). The KCE original listing based on the original Farmaka sample appears greyed in Figure 4.

As of October 5th, 18 (on 26, *i.e.* 69,2%) French-speaking GPs and 93 (on 121, *i.e.* 76,9%) Dutch-speaking GPs answered the Mesydel (a total of 111 GPs, *i.e.* 75,6% of the GPs who sent their voucher back to KCE).

B. Round 2

At the end of the Mesydel session, 154 GPs had send their voucher back to KCE with their e-mail addresses, therefore accepting to participate to the Mesydel.

Figure 5. Attrition table for the second round of the Mesydel



After fixing a few more e-mail addresses, we invited 152 of the 154 GPs (28 French-speaking and 124 Dutch-speaking).

At the end of the second round, 21 (on 28, *i.e.* 75%) French-speaking GPs and 87 (on 124, *i.e.* 70,1%) Dutch-speaking GPs answered the Mesydel (a total of 108 GPs, *i.e.* 71% of the GPs who sent their voucher back to KCE).

2.7.2 Characteristics of the Mesydel participants

Province	Gender	Age	Work Practice	Number of pharmaceutical delegates	Round 1	Round 2
Antwerp	M	50	Alone	A lot	X	X
Antwerp	M	58	Alone	Few	X	X
Antwerp	M	58	Alone	A lot	X	X
Antwerp	M	55	Alone	A lot	X	X
Antwerp	F	43	Alone	Very few	X	
Antwerp	M	60	Alone	N/A	X	X
Antwerp	F	37	Alone	A lot	X	X
Antwerp	M	50	Alone	A lot	X	X
Antwerp	M	38	Alone	Few	X	X
Antwerp	M	53	Alone	A lot	X	X
Antwerp	M	54	Alone	A lot	X	X
Antwerp	M	32	Associated	Few	X	X
Antwerp	M	35	Associated	Few	X	X
Antwerp	F	46	Associated	Average	X	X
Antwerp	M	50	Associated	Few	X	X
Antwerp	M	44	Associated	Few	X	
Antwerp	M	N/A	Associated	Few	X	X
Antwerp	M	65	Associated	Very few	X	X
Antwerp	M	32	Associated	Few	X	X
Antwerp	F	37	Associated	Very few	X	X
Antwerp	M	50	Associated	None	X	
Antwerp	M	N/A	N/A	N/A		X
Antwerp	M	N/A	N/A	N/A		X
Antwerp	M	N/A	N/A	N/A		X
Antwerp	M	N/A	N/A	N/A		X
Antwerp	M	N/A	N/A	N/A		X
Antwerp	F	N/A	N/A	N/A		X
Antwerpen	M	67	Alone	Very few	X	X
Antwerpen	M	51	Alone	Few	X	X
Antwerpen	M	53	Alone	N/A	X	
Antwerpen	M	62	Associated	None	X	X

Brabant Wallon	F	49	Alone	None	X	X
Brabant Wallon	M	49	Alone	A lot	X	X
Brabant Wallon	F	51	Associated	Average	X	X
Brabant Wallon	M	57	Associated	Very few	X	
Brabant Wallon	M	34	Associated	Few	X	X
Brabant Wallon	M	36	Medical House	Few	X	X
Brabant Wallon	M	N/A	N/A	N/A		X
Brabant Wallon	F	N/A	N/A	N/A		X
Hainaut	M	60	Alone	None	X	X
Hainaut	F	33	Associated	Average	X	X
Hainaut	M	53	Associated	None	X	X
Hainaut	M	48	Medical House	None	X	X
Hainaut	M	61	Medical House	None	X	X
Hainaut	F	47	Medical House	Few	X	X
Hainaut	F	54	Medical House	Very few	X	X
Hainaut	F	35	Medical House	Few	X	X
Hainaut	F	N/A	N/A	N/A	X	X
Liège	M	36	Medical House + Hospital	None	X	X
Limburg	M	60	Alone	Few	X	X
Limburg	F	41	Alone	Few	X	X
Limburg	M	45	Alone	A lot	X	X
Limburg	M	58	Alone	A lot	X	
Limburg	F	58	Alone	None	X	
Limburg	M	61	Associated	Very few	X	X
Limburg	M	55	Associated	Few	X	X
Limburg	M	N/A	N/A	N/A	X	
Namur	M	51	Alone	Average	X	X
Namur	M	35	Associated	A lot	X	X
Namur	M	N/A	N/A	N/A		X
Namur	M	N/A	N/A	N/A		X
Oost-Vlaanderen	M	46	Alone	A lot	X	X
Oost-Vlaanderen	M	65	Alone	Few	X	X
Oost-Vlaanderen	M	51	Alone	A lot	X	X
Oost-Vlaanderen	F	55	Alone	Very few	X	X
Oost-Vlaanderen	M	59	Alone	Few	X	X
Oost-Vlaanderen	M	56	Alone	A lot	X	X
Oost-Vlaanderen	M	42	Alone	Few	X	X
Oost-Vlaanderen	M	63	Alone	Few	X	X
Oost-Vlaanderen	F	30	Alone	A lot	X	X
Oost-Vlaanderen	M	47	Alone	N/A	X	X
Oost-Vlaanderen	M	56	Alone	Few	X	X
Oost-Vlaanderen	M	52	Alone	None	X	X
Oost-Vlaanderen	M	53	Alone	A lot	X	X
Oost-Vlaanderen	M	48	Alone	Few	X	X
Oost-Vlaanderen	F	56	Alone	Few	X	X
Oost-Vlaanderen	M	71	Alone	A lot	X	X
Oost-Vlaanderen	M	64	Alone	Very few	X	
Oost-Vlaanderen	M	72	Associated	Average	X	X
Oost-Vlaanderen	M	51	Associated	Average	X	X
Oost-Vlaanderen	M	33	Associated	None	X	X

Oost-Vlaanderen	M	61	Associated	A lot	X	X
Oost-Vlaanderen	M	56	Associated	Few	X	
Oost-Vlaanderen	F	37	Associated	Few	X	
Oost-Vlaanderen	M	57	Associated	Very few	X	X
Oost-Vlaanderen	M	59	Associated	Few	X	X
Oost-Vlaanderen	M	53	Associated	A lot	X	X
Oost-Vlaanderen	M	43	Associated	Few	X	X
Oost-Vlaanderen	M	55	Associated	Few	X	X
Oost-Vlaanderen	M	52	Associated	A lot	X	X
Oost-Vlaanderen	M	59	Associated	Few	X	X
Oost-Vlaanderen	M	50	Associated	Few	X	
Oost-Vlaanderen	M	N/A	N/A	N/A	X	X
Oost-Vlaanderen	M	N/A	N/A	N/A		X
Vlaams Brabant	M	56	Alone	Very few	X	X
Vlaams Brabant	M	50	Alone	A lot	X	
Vlaams Brabant	F	37	Associated	Average	X	X
Vlaams Brabant	F	64	Associated	None	X	X
Vlaams Brabant	M	40	Associated	A lot	X	X
Vlaams Brabant	F	49	Associated	A lot	X	X
Vlaams Brabant	M	N/A	N/A	N/A		X
West-Vlaanderen	M	65	Alone	Average	X	X
West-Vlaanderen	M	59	Alone	None	X	X
West-Vlaanderen	F	49	Alone	Few	X	X
West-Vlaanderen	M	49	Alone	N/A	X	X
West-Vlaanderen	M	51	Alone	Very few	X	X
West-Vlaanderen	M	61	Alone	A lot	X	X
West-Vlaanderen	M	57	Alone	Few	X	X
West-Vlaanderen	M	49	Alone	A lot	X	X
West-Vlaanderen	M	57	Alone	Few	X	
West-Vlaanderen	M	57	Alone	A lot	X	
West-Vlaanderen	M	55	Alone	A lot	X	
West-Vlaanderen	M	48	Alone	Few	X	X
West-Vlaanderen	M	58	Alone	Few	X	
West-Vlaanderen	M	54	Alone + Social work	A lot	X	X
West-Vlaanderen	F	34	Associated	Average	X	X
West-Vlaanderen	M	55	Associated	Average	X	X
West-Vlaanderen	M	53	Associated	None	X	X
West-Vlaanderen	F	35	Associated	Few	X	X
West-Vlaanderen	M	38	Associated	None	X	X
West-Vlaanderen	F	31	Associated	Very few	X	X
West-Vlaanderen	M	N/A	N/A	N/A	X	X
West-Vlaanderen	M	N/A	N/A	N/A		X
West-Vlaanderen	M	N/A	N/A	N/A		X
West-Vlaanderen	M	N/A	N/A	N/A		X
West-Vlaanderen	M	N/A	N/A	N/A	X	

Caption for the "Number of pharmaceutical delegates" column:
None: does not see any pharmaceutical delegate
Very few: sees less than 15 pharmaceutical delegates a year
Few: sees less than 30 pharmaceutical delegates a year
Average: sees 1 or 2 delegates a week
A lot: sees 6+ delegates a week

2.8 APPENDIX H: QUESTIONS FOR THE FIRST MESYDEL ROUND

2.8.1 Version in French

1. L'information fournie par les délégué(e)s Farmaka est-elle applicable dans votre pratique ?
2. L'information fournie par les délégué(e)s Farmaka est-elle utile à votre pratique ?
3. Selon vous, les délégué(e)s Farmaka ont-ils une formation adéquate ?
4. Quelle serait la formation minimale requise pour être délégué(e) Farmaka ?
5. Est-ce que les délégué(e)s Farmaka ont changé votre pratique professionnelle?
6. Quel est ou quels sont les sujets qui vous a ou ont été présenté(s) par le ou la délégué(e) Farmaka?
7. Vous sentiez-vous concerné par ces sujets?
8. Dans quelle mesure compareriez-vous les visites de délégués médicaux indépendants à celles des représentants commerciaux?
9. Quelle est votre opinion sur le rôle des firmes pharmaceutiques dans le processus d'information médicale?
10. Quel rôle devrait jouer à vos yeux l'État dans le processus d'information médicale?
11. Pouvez-vous nous préciser (en quelques mots si nécessaire) :
    a. Combien d'heures vous travaillez par semaine ;
    b. L'organisation de votre cabinet (vous travaillez seul, en collaboration avec d'autres médecins, en maison médicale, etc.) ;
    c. Votre type de patientèle (âgée, précaire, faible niveau d'instruction, etc.);
    d. Le nombre de représentants commerciaux que vous recevez par semaine ou par mois ;
    e. Votre âge.

2.8.2 Version in Dutch

1. Geven de artsenbezoekers van Faramaka informatie die u in uw praktijk kan toepassen?
2. Verschaffen de artsenbezoekers van Farmaka nuttige informatie voor uw praktijk?
3. Hebben de artsenbezoekers van Farmaka volgens u een adequate vorming genoten?
4. Wat zou volgens u het minimum niveau moeten zijn om arstenbezoeker te kunnen worden?
5. Hebben de arstenbezoekers van Farmaka uw professionele praktijk gewijzigd?
6. Welke thema(s) werde(n) u door de artsenbezoekers van Farmaka voorgesteld?
7. Gaan deze thema's u aan?
8. In welke mate kunt u de bezoeken van de onafhankelijke artsenbezoekers vergelijken met die van de vertegenwoordigers van de medische firma's?
9. Wat denkt u over de rol van de farmaceutische firma's in de verstrekking van medische informatie?

10. Welke rol zou de Staat volgens u moeten spelen in de verstrekking van medische informatie?
11. Kunt u verduidelijken of uitleggen (in enkele woorden):
    a. Hoeveel uur werkt u gemiddeld per week?;
12. De organisatie van uw medisch kabinet (groeps-praktijk of solo);
13. Uw patiënten (leeftijd, sociaal niveau,…);
14. Het aantal medisch afgevaardigden dat u per week of per maand ontvangt;
15. Uw leeftijd.

2.9 APPENDIX I. QUESTIONS FOR THE SECOND MESYDEL ROUND

2.9.1 Version in French

1. Le rôle de l'État sur les habitudes de prescription des médecins a suscité des polémiques lors du premier tour de ce questionnaire. :

Nous avons pu lire :

- « Avec les visiteurs médicaux indépendants, on a le sentiment d'être dans un processus de formation, un peu comme à un recyclage (formation continue), mais sur un sujet qui m'intéresse. Ça devrait peut-être compter pour l'accréditation. »
- « L'État ne devrait avoir aucun rôle [dans nos habitudes de prescription]. J'ai un regard très soupçonneux par rapport à l'État. Ils nous poussent à prescrire toujours moins cher. »

Pourriez-vous vous situer quant à ces deux positions ?

Seriez-vous disposé(e) à modifier vos habitudes de prescription ? Si oui, pensez-vous qu'une contrepartie soit nécessaire ?

2. Lors du premier tour de ce questionnaire, nous avons pu lire :
    - « [Le visiteur Farmaka est] un scientifique concerné par la santé des patients et soucieux d'améliorer la qualité de la médecine sur base de critères validés internationalement. »
    - « [Les visiteurs Farmaka] sont politiquement teintés. Je n'ai pas besoin qu'un vienne m'apprendre la science sous un couverture idéologique – c'est un peu ce qu'ils font. »

Avez-vous le sentiment que le visiteur Farmaka a un discours plutôt scientifique ou plutôt politique ?

3. Lors du premier tour de ce questionnaire, nous avons pu lire :
    - « [Nous devrions avoir accès à une] information la plus objective possible comme déjà avec le CBIP. Pourquoi pas offrir aussi une sorte de hotline ? »
    - « Ils devraient nous donner accès à la bibliothèque Cochrane. Là, on aurait tout ce qu'il nous faut ! »
    - « Si Farmaka s'adressait aussi aux patients, ça faciliterait mon travail, parce qu'il y a plein d'infos que je ne devrais plus donner. »

Pensez-vous que Farmaka devrait étendre ses services (via une ligne téléphonique, la fourniture d'accès à des bibliothèques en ligne, ou même donner une information directe aux patients) ?

Si oui, quel(s) service(s) vous paraîtraient les plus adéquats ?

4. Lors de nos entretiens, nous avons entendu :

- « Je sais que mes confrères pensent différemment, mais j'ai une très haute opinion de Farmaka ! »
- « Sans Farmaka (et le CBIP ou encore les folia) nous serions manipulés dans tous les sens. »

Comment vous situez-vous par rapport à ces citations ?

5. Lors de nos entretiens, nous avons entendu :

« Vous savez, un de mes rôles, moi, c'est d'informer mon patient pour qu'il soit juge de sa maladie. Mais je ne pense pas que la majorité de mes confrères partage ma vision. »

- Êtes-vous d'accord avec cette affirmation ?
- Vous-même, vous sentez-vous représentatif des médecins généralistes belges ? Quelle(s) serai(en)t votre/vos particularités par rapport à vos confrères ?

6. Dans votre pratique, trouvez-vous plus facile de gérer une incertitude liée à un traitement
   - selon que l'information vous est communiquée via un spécialiste faisant autorité ;
   - selon des études basées sur des preuves scientifiques.
7. Pensez-vous que le service rendu par Farmaka devrait s'étendre à tous les médecins généralistes de Belgique ?

Pour quelle(s) raison(s) ?

8. Ceci conclut les deux tours de notre enquête en ligne.

Avez-vous des suggestions, des sujets, des idées qui n'ont pas été abordées et que vous trouvez essentielles quant aux visiteurs indépendants ?

2.9.2 Version in Dutch

1. De rol van de overheid op het voorschrijfgedrag van huisartsen heeft controverse opgewekt in de eerste ronde van de vragenlijst.

Uit de eerste ronde van de vragenlijst konden we afleiden:

- "Bij de onafhankelijke artsenbezoekers hadden we het gevoel dat we ons in een soort bijscholing bevonden, een beetje een opfrissing (continue navorming), maar dan van een onderwerp dat me interesseert. Misschien zou het voor accreditering in aanmerking moeten komen."
- "De overheid zou geen rol mogen spelen [in ons voorschrijfgedrag]. Ik kijk zeer wantrouwig naar de overheid. Ze pushen ons altijd om goedkoper voor te schrijven."

Hoe situeert u zichzelf ten aanzien van deze twee visies?

Bent u bereid uw voorschrijfgedrag aan te passen? Indien ja, vindt u dan dat daar iets zou moeten tegenover staan?

2. Uit de eerste ronde van de vragenlijst konden we afleiden:
   - "[De artsenbezoeker van Farmaka is] een wetenschapper, begaan met de gezondheid van patiënten en gericht op de kwaliteitsverbetering van (niet-)medicamenteuze behandeling, gebaseerd op internationaal gevalideerde criteria."
   - "[De artsenbezoekers van Farmaka zijn] politiek gekleurd. Ik heb niemand nodig om me wetenschap te komen aanleren onder een ideologische paraplu, en dat doet het KCE een beetje."

Heeft u het gevoel dat de artsenbezoeker van Farmaka een meer wetenschappelijk of een meer politiek discours volgt?

3. Uit de eerste ronde van de vragenlijst konden we afleiden:

- "[We zouden toegang moeten hebben tot] de meest neutrale informatie mogelijk, zoals we nu al hebben met het BCFI. Waarom bieden ze ook niet een soort hotline aan?"
- "Ze zouden ons toegang moeten geven tot de Cochrane Library. Daar zouden we alles vinden wat we nodig hebben!"
- "Als Farmaka ook met patiënten zou praten, zou dit mijn eigen werk vergemakkelijken, omdat er veel informatie zou zijn die ik zelf niet meer zou moeten geven."

Denkt u dat Farmaka zijn diensten zou moeten uitbreiden (telefonisch, door toegang te verschaffen tot online bibliotheken, of zelfs door rechtstreeks informatie te verschaffen aan de patiënten zelf)?

Indien ja, welke dienst(en) zou u als de meest afdoende beschouwen?

4. Tijdens de interviews hoorden we:
   - "Ik weet dat mijn collega's er anders over denken, maar ik sta erg positief tegenover Farmaka!"
   - "Zonder Farmaka (en het BCFI en de Folia) zouden we gemanipuleerd worden langs alle kanten."

Hoe situeert u zichzelf ten aanzien van deze twee visies?

5. Tijdens de interviews hoorden we:

"Weet u, één van mijn rollen, voor mij althans, is mijn patiënten te informeren zodat hij/zij in staat is om zelf te oordelen over zijn/haar ziekte. Maar ik denk niet dat de meerderheid van mijn collega's mijn visie deelt."

   - Bent u het met dit statement eens?
   - Beschouwt u zichzelf als een vertegenwoordiger van de Belgische huisartsen? Wat zou u zelf als uw (eventuele) specifieke kenmerken beschouwen in vergelijking met uw collega's?

6. Vindt u het gemakkelijker om een onzekerheid ten aanzien van een bepaalde behandeling aan te pakken:
   - overeenkomstig de visie van een specialist, een autoriteit in zijn/haar domein;
   - overeenkomstig studies gebaseerd op wetenschappelijke bewijzen.
7. Vindt u dat de diensten aangeboden door Farmaka uitgebreid zouden moeten worden tot alle huisartsen in België?

Om welke reden(en)?

8. Hiermee besluiten we de tweede ronde van onze online vragenlijst.

Heeft u suggesties, topics, ideeën die nog niet werden aangesproken en die u essentieel acht ten aanzien van de onafhankelijke artsenbezoekers?

2.10 APPENDIX J: DISCUSSION OF THE MESYDEL QUESTIONS

2.10.1 Round 1

The questions for the first round of the Mesydel were exploratory questions and modelled against the *behaviour change theory*. We analysed them in a classical way (by reading them and analysing answers sequentially). We were not able to apply a methodology based on the *grounded theory*, both because they were written with another framework in mind and because it would not have made much sense for exploratory questions (see appendix H for the questions in French and in Dutch.).

2.10.2 Round 2

The questions for the second round of the Mesydel were the final ones. They were written so that the answers could be analyzed with a methodology based on the *grounded theory*. In this section, we briefly illustrate the method of the *tag clouds* (questions are in English in this appendix, see appendix I the original versions).

Question 1

The role of the State on the prescribing behaviour of GP's has generated a lot of controversy in the first round of the questionnaire.

In the first round of the questionnaire, we read:

- "With the independent medical visitors, we have the feeling of being in a process of training, just as a refresher (continuing education), but on a subject that interests me. Perhaps it should count for accreditation."
- "The State should have no role [in our prescribing habits]. I look very suspiciously at the State. They push us to always prescribe cheaper."

How do you stand in relation to these two visions?

Would you be willing to change your prescribing behaviour? If yes, do you think that a return is necessary?

Figure 3: Tags for the French Mesydel question 1, round 2

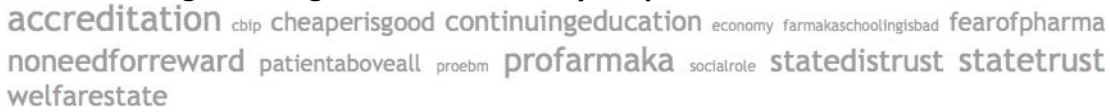


Figure 4: Tags for the Dutch Mesydel question 1, round 2

In this question, we searched to:

- dig further the question of the State perception by GP's;
- see how GP's see the role of the State in their prescribing behaviour;
- if a return would be welcome or necessary in order for GP's to accept to meet Farmaka visitors.

Question 2

In the first round of the questionnaire, we read:

- "[The Farmaka visitor is] a scientist concerned with the health of patients and willing to improve the quality of medicine based on internationally validated criteria."
- "[Farmaka visitors] are politically tainted. I don't need people to teach me science under an ideological umbrella – it's a bit what they do."

Do you feel that the Farmaka visitor has a rather scientific or rather political discourse?

Figure 5: Tags for the French Mesydel question 2, round 2

Figure 6: Tags for the Dutch Mesydel question 2, round 2

In this question, we searched to see if the Farmaka visitor was seen as being scientific or political. A third answer emerged: economical.

Question 3

In the first round of the questionnaire, we read:

- "[We should have access to] the most objective information possible, as we already have with the CBIP. Why not also provide some sort of hotline?"
- "They should give us access to the Cochrane Library. There, we would have everything we need!"
- "If Farmaka was aimed at patients too, it would facilitate my work, because there would be many details that I would not have to give myself anymore."

Do you think Farmaka should extend its services (through a telephone line, providing access to online libraries, or even by providing direct information to patients)?

If yes, what service(s) do you think would be most appropriate?

Figure 7: Tags for the French Mesydel question 3, round 2

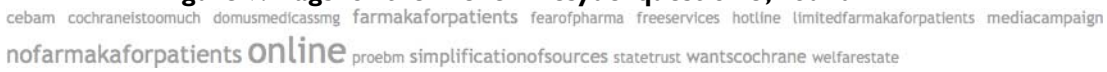


Figure 8: Tags for the Dutch Mesydel question 3, round 2

In this question, we searched to:

- test if an online service or a hotline would be of interest to the GP's and how they would like to see it implemented.
- test if an access to the Cochrane Library (and other publications of the same kind) would interest the GP's;
- test if Farmaka should extend its services to patients.

Question 4

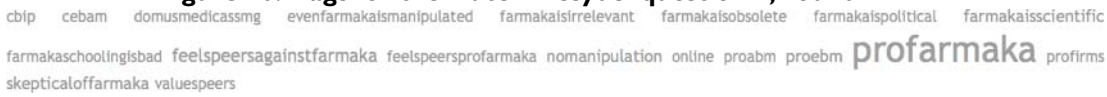
During our interviews, we heard:

- "I know my colleagues feel differently, but I have a very high opinion of Farmaka!"
- "Without Farmaka (and the CBIP/BCFI and the folia) we would be manipulated from all sides."

How do you stand in relation to these views?

Figure 9: Tags for the French Mesydel question 4, round 2

Figure 10: Tags for the Dutch Mesydel question 4, round 2



In this question, we searched to:

- test the visibility of Farmaka;
- test the perception of Farmaka;
- test if Farmaka was an efficient counterweight to pharmaceutical delegates.

Question 5

During our interviews, we heard:

"*You know, one of my roles in my opinion is to inform my patients so that they can be a judge to their own illness. But I don't think the majority of my colleagues share my view.*"

- Do you agree with this statement?
- Do you feel yourself a representative of the Belgian GP's? What would be your characteristic features wehn compared to your colleagues?

Figure 11: Tags for the French Mesydel question 5, round 2

Figure 12: Tags for the Dutch Mesydel question 5, round 2

In this question, we searched to:

- see if the GP's have open discussions with their patients or have a more paternalistic posture;
- see if the GP's feel representative of the "Belgian GP".

Question 6

In your practice do you find it easier to manage uncertainty related to a treatment

- according to the view of a who has an authority in his/her domain;
- according to studies based on scientific evidence.

Figure 13: Tags for the French Mesydel question 6, round 2

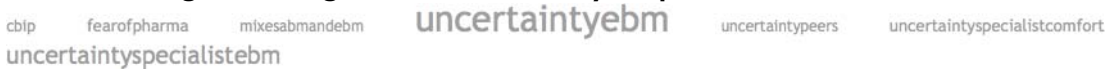


Figure 14: Tags for the Dutch Mesydel question 6, round 2

In this question, we searched to:

- see if uncertainties related to a treatment are solved through EBM or ABM ("Authority Based Medicine);
- test the relation between GP's and specialists.

Question 7

Do you think the services provided by Farmaka should be extended to all GP's in Belgium?

For what reason(s)?

Figure 15: Tags for the French Mesydel question 7, round 2

Figure 16: Tags for the Dutch Mesydel question 7, round 2

In this question, we searched to see if Farmaka should extend its services to all Belgian GP's and to make emerge various opinions about the topic.

Question 8

This concludes the two rounds of our online survey.

Do you have any suggestions, topics, ideas that have not been addressed and that you feel are essential when it comes to independent visitors?

Figure 17: Tags for the French Mesydel question 8, round 2

Figure 18: Tags for the Dutch Mesydel question 8, round 2

This question was essentially there to check if we had not forgotten important topics. Nothing new emerged; we can therefore conclude that the two Mesydel rounds covered the important parts about the topic. This question also served as information for the GP's that the Mesydel session was now finished for them.

3 APPENDICES - ANALYSIS OF IMA DATABASE

3.1 DIABETES TOPIC

3.1.1 Descriptive statistics: number of patients by GP – Overall Population

Statistics	Value
N	156
Mean (sd)	42 (26)
Median	41
Q1 – Q3	25 – 55
Min – Max	1 – 156

3.1.2 Age distribution of the patients analyzed for Diabetes – Overall Population

Statistics	Value
N	6584
Mean (sd)	68 (13)
Median	69
Q1 – Q3	60 – 77
Min – Max	18 - 101

3.1.3 Number (%) of patients by type of therapy given before and after the AD visit for the diabetes topic – Overall Population

Therapy given Before AD Visit	Therapy given After the AD visit										
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**Total**
0	0	733	236	0	36	118	47	14	5	4	1193
	0.00	11.13	3.58	0.00	0.55	1.79	0.71	0.21	0.08	0.06	18.12
1	457	1614	45	35	18	76	60	5	2	4	2316
	6.94	24.51	0.68	0.53	0.27	1.15	0.91	0.08	0.03	0.06	35.18
2	208	49	818	16	4	140	2	11	2	3	1253
	3.16	0.74	12.42	0.24	0.06	2.13	0.03	0.17	0.03	0.05	19.03
4	61	17	3	7	161	3	39	12	0	7	310
	0.93	0.26	0.05	0.11	2.45	0.05	0.59	0.18	0.00	0.11	4.71
5	95	73	135	2	4	492	6	6	11	4	828
	1.44	1.11	2.05	0.03	0.06	7.47	0.09	0.09	0.17	0.06	12.58
6	49	70	2	60	47	0	207	3	1	11	450
	0.74	1.06	0.03	0.91	0.71	0.00	3.14	0.05	0.02	0.17	6.83
7	13	2	18	12	14	8	11	42	4	5	129
	0.20	0.03	0.27	0.18	0.21	0.12	0.17	0.64	0.06	0.08	1.96
8	6	2	2	7	0	7	1	6	11	0	42
	0.09	0.03	0.03	0.11	0.00	0.11	0.02	0.09	0.17	0.00	0.64
9	5	0	1	4	4	3	5	7	0	34	63
	0.08	0.00	0.02	0.06	0.06	0.05	0.08	0.11	0.00	0.52	0.96
Total	894	2560	1260	143	288	847	378	106	36	72	6584
	13.58	38.88	19.14	2.17	4.37	12.86	5.74	1.61	0.55	1.09	100.00

0 = None/ No data available
1 = Monotherapy – Metformin (Recommended)
2 = Monotherapy – Sulfonylurea (Recommended)

3 = Monotherapy – Insulin
4 = Monotherapy – Others
5 = Bitherapy – Metformin & Sulfonylurea (Recommended)
6 = Bitherapy – Metformin & Others
7 = Bitherapy – Others
8 = Tritherapy – Metformin & Sulfonylurea + Insulin (Recommended)
9 = Others

3.1.4 Number (%) of Patients by type of therapy given before and after the AD visit for diabetes topic – "Complete" Cases Subgroup

Therapy given Before AD Visit	Therapy given After the AD visit									
	1	2	3	4	5	6	7	8	9	Total
1	1614 35.89	45 1.00	35 0.78	18 0.40	76 1.69	60 1.33	5 0.11	2 0.04	4 0.09	1859 41.34
2	49 1.09	818 18.19	16 0.36	4 0.09	140 3.11	2 0.04	11 0.24	2 0.04	3 0.07	1045 23.24
4	17 0.38	3 0.07	7 0.16	161 3.58	3 0.07	39 0.87	12 0.27	0 0.00	7 0.16	249 5.54
5	73 1.62	135 3.00	2 0.04	4 0.09	492 10.94	6 0.13	6 0.13	11 0.24	4 0.09	733 16.30
6	70 1.56	2 0.04	60 1.33	47 1.05	0 0.00	207 4.60	3 0.07	1 0.02	11 0.24	401 8.92
7	2 0.04	18 0.40	12 0.27	14 0.31	8 0.18	11 0.24	42 0.93	4 0.09	5 0.11	116 2.58
8	2 0.04	2 0.04	7 0.16	0 0.00	7 0.16	1 0.02	6 0.13	11 0.24	0 0.00	36 0.80
9	0 0.00	1 0.02	4 0.09	4 0.09	3 0.07	5 0.11	7 0.16	0 0.00	34 0.76	58 1.29
Total	1827 40.63	1024 22.77	143 3.18	252 5.60	729 16.21	331 7.36	92 2.05	31 0.69	68 1.51	4497 100.00

1 = Monotherapy – Metformin (Recommended)
2 = Monotherapy – Sulfonylurea (Recommended)
3 = Monotherapy – Insulin
4 = Monotherapy – Others
5 = Bitherapy – Metformin & Sulfonylurea (Recommended)
6 = Bitherapy – Metformin & Others
7 = Bitherapy – Others
8 = Tritherapy – Metformin & Sulfonylurea + Insulin (Recommended)
9 = Others

3.1.5 Volume (in number of Defined Daily Doses) by Group of Medications, Population and Semesters – Diabetes

			Volume in number of DDDs							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Medication Group	**population**	**semestre**								
Glitazones	**Visited GPs**	**2006-S1**	80	341.31	402.86	158.67	74.67	494.67	18.67	1829.34
		2006-S2	76	347.48	376.85	205.34	93.34	541.33	18.67	1642.67
		2007-S1	82	355.01	373.27	214.67	112.00	448.01	14.00	1810.66
		2007-S2	77	378.79	412.29	224.00	112.00	485.34	14.00	2183.99
		2008-S1	75	398.72	433.09	224.00	112.00	504.00	18.67	2165.32
		2008-S2	73	359.40	402.90	224.00	93.34	466.67	18.67	1829.32
	Overall GPs	**2006-S1**	6432	258.04	312.87	149.34	70.00	336.00	0.00	4242.02
		2006-S2	6609	259.79	316.88	149.33	74.67	336.00	0.00	4624.70
		2007-S1	6710	279.60	335.31	168.00	74.67	354.67	14.00	4703.98
		2007-S2	6724	272.37	325.21	168.00	74.67	354.67	0.00	4741.30
		2008-S1	6403	292.04	350.56	186.67	74.67	373.34	0.00	5058.65
		2008-S2	6128	302.83	367.24	186.67	74.67	392.00	14.00	5319.97

			Volume in number of DDDs							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Metformin	**Visited GPs**	**2006-S1**	148	2290.27	1732.81	1992.25	1066.75	3261.25	15.00	10207.50
		2006-S2	149	2315.58	1722.86	2072.00	1081.00	2977.50	42.50	9395.00
		2007-S1	149	2540.19	1847.33	2219.00	1170.00	3490.00	30.00	11068.50
		2007-S2	153	2600.99	1890.20	2377.00	1198.00	3450.00	15.00	10967.50
		2008-S1	155	2872.65	2098.09	2519.50	1186.00	4121.00	75.00	11862.00
		2008-S2	155	3018.93	2132.44	2675.00	1329.50	4254.50	57.50	11053.50
	Overall GPs	**2006-S1**	17094	1504.20	1848.73	915.00	127.50	2266.50	15.00	41077.50
		2006-S2	17258	1503.96	1834.01	907.50	127.50	2287.50	15.00	41766.00
		2007-S1	17229	1627.86	1998.23	987.50	136.00	2468.50	0.00	38453.50
		2007-S2	17525	1639.94	1998.89	970.50	127.50	2533.50	15.00	40278.00
		2008-S1	17925	1833.11	2298.22	1053.50	127.50	2822.00	0.00	43457.00
		2008-S2	17993	1870.97	2306.01	1064.50	127.50	2920.00	0.00	41649.50

			Volume in number of DDDs							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Metformin & derivates of Sulfonylurea	Visited GPs	2006-S1	64	598.13	687.44	420.00	240.00	750.00	60.00	3780.00
		2006-S2	72	485.83	532.97	300.00	150.00	690.00	60.00	2940.00
		2007-S1	73	527.67	621.69	300.00	180.00	660.00	60.00	3540.00
		2007-S2	77	472.21	551.57	240.00	180.00	600.00	60.00	2640.00
		2008-S1	79	535.44	661.17	240.00	180.00	660.00	60.00	3480.00
		2008-S2	80	495.00	670.21	240.00	120.00	600.00	60.00	4200.00
	Overall GPs	2006-S1	5189	491.16	701.33	240.00	120.00	600.00	0.00	15660.00
		2006-S2	5357	464.27	626.66	240.00	120.00	540.00	60.00	10260.00
		2007-S1	5309	493.84	715.63	240.00	120.00	600.00	60.00	18720.00
		2007-S2	5272	469.56	616.12	240.00	120.00	540.00	60.00	10500.00
		2008-S1	5396	508.90	749.19	240.00	120.00	600.00	60.00	14400.00
		2008-S2	5357	479.46	664.10	240.00	120.00	540.00	60.00	9240.00

			Volume in number of DDDs							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Others (Diabetes), including the medications in Metformin & Rosiglitazone	Visited GPs	2006-S1	101	578.01	670.07	315.00	180.00	690.00	15.00	3270.00
		2006-S2	103	586.39	665.97	330.00	135.00	810.00	15.00	3540.00
		2007-S1	108	644.21	783.76	360.00	150.00	682.50	15.00	3765.00
		2007-S2	110	655.95	823.95	378.50	150.00	810.00	15.00	3825.00
		2008-S1	116	782.53	968.22	390.00	180.00	979.00	15.00	4868.00
		2008-S2	127	735.58	917.31	435.00	135.00	908.00	0.67	4948.67
	Overall GPs	2006-S1	9921	509.99	689.23	255.00	75.00	660.00	15.00	10395.00
		2006-S2	10089	502.65	671.67	255.00	75.00	645.00	15.00	9375.00
		2007-S1	10299	533.86	717.43	270.00	90.00	690.00	0.00	11460.00
		2007-S2	10430	540.39	718.05	270.00	90.00	705.00	15.00	9885.00
		2008-S1	10921	607.69	822.62	300.00	90.00	795.00	0.00	14911.00
		2008-S2	11189	635.94	831.26	330.00	98.00	840.00	0.00	11498.67

			Volume in number of DDDs							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Sulfonylurea	**Visited GPs**	**2006-S1**	144	1894.38	1699.95	1422.75	757.25	2526.25	30.00	10153.00
		2006-S2	146	1846.28	1697.22	1313.75	691.50	2520.00	60.00	10882.00
		2007-S1	146	1845.26	1680.90	1362.75	710.00	2388.00	90.00	9883.00
		2007-S2	149	1792.90	1620.30	1320.00	650.50	2351.50	10.50	8979.00
		2008-S1	150	1828.70	1673.14	1304.00	716.50	2460.00	15.00	9744.00
		2008-S2	150	1817.72	1715.19	1301.75	768.50	2231.50	10.50	10352.00
	Overall GPs	**2006-S1**	15648	1284.70	1615.47	732.00	140.00	1861.50	10.00	36151.50
		2006-S2	15686	1237.61	1535.89	717.25	132.00	1790.00	10.00	31069.50
		2007-S1	15620	1246.81	1570.77	722.00	132.00	1788.00	10.00	36933.50
		2007-S2	15610	1205.62	1527.25	690.00	140.00	1726.00	10.00	43247.50
		2008-S1	15724	1250.06	1621.65	707.50	132.00	1781.75	0.00	48238.00
		2008-S2	15721	1206.05	1558.79	686.50	126.00	1734.00	0.00	44794.50

3.1.6 Proportion (in %) of the Medications prescriptions by Group of Medications, Population and Semesters – Diabetes

			Proportion (in%) of prescriptions							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Group of Medications	**population**	**semestre**								
Glitazones	**Visited GPs**	**2006-S1**	80	5.33	4.51	3.51	1.62	7.89	0.28	17.57
		2006-S2	76	5.34	4.38	3.55	1.95	8.46	0.44	18.05
		2007-S1	82	6.71	11.36	3.99	2.04	8.03	0.32	100.00
		2007-S2	77	5.89	5.06	3.64	2.09	9.58	0.24	21.21
		2008-S1	75	5.94	5.20	3.61	1.95	9.03	0.16	21.52
		2008-S2	73	4.62	4.12	2.83	1.62	7.06	0.12	18.51
	Overall GPs	**2006-S1**	6432	7.10	10.80	4.14	1.97	8.20	0.00	100.00
		2006-S2	6609	7.18	11.02	4.27	2.04	8.15	0.00	100.00
		2007-S1	6710	6.90	9.75	4.21	2.06	8.40	0.06	100.00
		2007-S2	6724	7.12	10.92	4.19	2.04	8.18	0.00	100.00
		2008-S1	6403	6.63	9.86	4.08	1.95	7.83	0.00	100.00
		2008-S2	6128	6.79	10.40	3.96	1.96	7.79	0.07	100.00

			Proportion (in%) of prescriptions							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Metformin	**Visited GPs**	**2006-S1**	148	48.83	15.82	47.49	37.87	57.62	14.49	100.00
		2006-S2	149	49.34	15.22	48.27	38.02	58.94	13.40	100.00
		2007-S1	149	50.28	15.23	48.94	39.54	59.06	17.06	100.00
		2007-S2	153	51.98	15.48	50.72	42.07	61.32	4.16	100.00
		2008-S1	155	53.83	16.73	51.33	43.34	63.56	13.72	100.00
		2008-S2	155	55.22	15.37	53.32	44.76	64.24	26.57	100.00
	Overall GPs	**2006-S1**	17094	55.48	23.19	50.97	39.29	67.15	1.05	100.00
		2006-S2	17258	56.38	22.98	51.94	40.41	68.04	1.75	100.00
		2007-S1	17229	57.40	22.60	53.32	41.58	69.08	0.00	100.00
		2007-S2	17525	58.58	22.69	54.60	42.88	70.88	1.48	100.00
		2008-S1	17925	60.27	22.49	56.50	44.74	73.00	0.00	100.00
		2008-S2	17993	61.26	22.33	57.70	45.80	74.13	0.00	100.00

			Proportion (in%) of prescriptions							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Metformin & derivates of Sulfonylurea	**Visited GPs**	**2006-S1**	64	11.40	9.46	9.79	4.56	14.38	0.73	45.99
		2006-S2	72	10.19	9.31	7.83	2.50	14.40	0.64	43.06
		2007-S1	73	10.00	8.68	7.61	3.23	14.29	0.84	42.02
		2007-S2	77	9.14	8.90	5.59	2.90	13.22	0.71	41.46
		2008-S1	79	9.10	10.20	5.33	2.48	11.80	0.72	57.74
		2008-S2	80	7.99	8.46	4.96	2.08	10.78	0.25	40.75
	Overall GPs	**2006-S1**	5189	13.12	16.78	7.42	3.35	16.01	0.00	100.00
		2006-S2	5357	12.63	16.01	7.17	3.25	15.53	0.22	100.00
		2007-S1	5309	13.04	16.87	7.36	3.25	15.95	0.15	100.00
		2007-S2	5272	12.52	16.32	7.04	3.22	14.92	0.14	100.00
		2008-S1	5396	12.16	16.62	6.56	2.86	14.31	0.17	100.00
		2008-S2	5357	11.44	15.85	6.09	2.80	13.20	0.11	100.00

			Proportion (in%) of prescriptions							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Others (Diabetes), including the medications in Metformin & Rosiglitazone	Visited GPs	2006-S1	101	11.21	10.32	7.40	3.24	14.78	0.26	44.24
		2006-S2	103	11.22	10.27	8.58	3.50	16.75	0.29	48.64
		2007-S1	108	11.67	11.17	8.26	2.62	16.35	0.14	49.87
		2007-S2	110	11.77	11.10	8.67	3.17	17.07	0.27	50.39
		2008-S1	116	12.23	10.64	8.88	4.16	18.72	0.23	41.47
		2008-S2	127	11.55	10.05	8.67	3.26	18.16	0.03	43.47
	Overall GPs	2006-S1	9921	16.22	18.61	10.50	4.40	20.64	0.10	100.00
		2006-S2	10089	15.87	18.02	10.33	4.44	20.45	0.07	100.00
		2007-S1	10299	16.16	18.43	10.52	4.57	20.54	0.00	100.00
		2007-S2	10430	16.22	18.27	10.64	4.64	20.69	0.10	100.00
		2008-S1	10921	16.17	18.08	10.73	4.76	20.63	0.00	100.00
		2008-S2	11189	16.42	17.87	11.27	5.21	20.83	0.00	100.00

			Proportion (in%) of prescriptions							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Sulfonylurea	**Visited GPs**	**2006-S1**	144	36.70	15.07	36.80	24.71	46.24	8.65	80.00
		2006-S2	146	36.67	15.83	36.51	25.29	46.61	4.91	100.00
		2007-S1	146	34.02	15.09	34.53	22.38	45.14	3.81	75.00
		2007-S2	149	32.86	15.33	33.35	20.60	43.09	3.25	80.33
		2008-S1	150	31.15	14.94	29.72	18.60	42.28	4.31	100.00
		2008-S2	150	29.98	14.46	28.86	19.35	38.93	1.28	69.12
	Overall GPs	**2006-S1**	15648	41.82	23.28	38.13	25.71	52.49	0.06	100.00
		2006-S2	15686	40.87	23.10	37.04	24.90	50.87	0.05	100.00
		2007-S1	15620	39.31	23.10	35.28	23.28	49.04	0.31	100.00
		2007-S2	15610	38.12	22.99	34.04	22.17	47.66	0.12	100.00
		2008-S1	15724	36.73	23.14	32.23	20.58	45.57	0.00	100.00
		2008-S2	15721	35.48	23.15	30.64	19.80	43.96	0.00	100.00

3.2 DEMENTIA TOPIC

3.2.1 Descriptive statistics of the number of patients by GP – Overall Population

Statistics	Value
N	117
Mean (sd)	5 (3)
Median	4
Q1 – Q3	2 – 6
Min – Max	1 - 23

3.2.2 Age distribution of the Patients analyzed for Dementia – Overall Population

Statistics	Value
N	543
Mean (sd)	82 (7)
Median	82
Q1 – Q3	78 – 93
Min – Max	54 - 101

3.2.3 Number (%) of Patients by type of therapy given before and after the AD Visit for dementia topic – Overall Population

Therapy before	Therapy after												Total
	0	1	2	3	4	5	6	7	8	9	10	11	
0	0 0.00	42 7.73	3 0.55	20 3.68	2 0.37	0 0.00	12 2.21	2 0.37	2 0.37	2 0.37	0 0.00	0 0.00	85 15.65
1	26 4.79	102 18.78	0 0.00	0 0.00	1 0.18	0 0.00	28 5.16	0 0.00	0 0.00	0 0.00	0 0.00	8 1.47	165 30.39
2	7 1.29	0 0.00	21 3.87	0 0.00	0 0.00	0 0.00	0 0.00	2 0.37	0 0.00	0 0.00	0 0.00	0 0.00	30 5.52
3	10 1.84	2 0.37	0 0.00	33 6.08	1 0.18	0 0.00	0 0.00	0 0.00	2 0.37	0 0.00	0 0.00	3 0.55	51 9.39
4	6 1.10	0 0.00	0 0.00	0 0.00	16 2.95	0 0.00	0 0.00	0 0.00	0 0.00	8 1.47	0 0.00	2 0.37	32 5.89
5	2 0.37	0 0.00	0 0.00	0 0.00	0 0.00	1 0.18	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	3 0.55
6	7 1.29	15 2.76	0 0.00	0 0.00	0 0.00	0 0.00	40 7.37	0 0.00	0 0.00	0 0.00	0 0.00	9 1.66	71 13.08
7	1 0.18	0 0.00	6 1.10	0 0.00	0 0.00	0 0.00	0 0.00	9 1.66	0 0.00	0 0.00	0 0.00	3 0.55	19 3.50
8	3 0.55	0 0.00	0 0.00	6 1.10	0 0.00	0 0.00	0 0.00	0 0.00	12 2.21	0 0.00	0 0.00	5 0.92	26 4.79

Therapy before the AD Visit	Therapy after the AD Visit												Total
	0	1	2	3	4	5	6	7	8	9	10	11	
9	3 0.55	0 0.00	0 0.00	0 0.00	1 0.18	0 0.00	0 0.00	0 0.00	0 0.00	10 1.84	0 0.00	2 0.37	16 2.95
10	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	3 0.55	0 0.00	3 0.55
11	0 0.00	11 2.03	4 0.74	7 1.29	1 0.18	1 0.18	8 1.47	4 0.74	4 0.74	1 0.18	1 0.18	0 0.00	42 7.73
Total	65 11.97	172 31.68	34 6.26	66 12.15	22 4.05	2 0.37	88 16.21	17 3.13	20 3.68	21 3.87	4 0.74	32 5.89	543 100.00

0 = None/ data not available
1 = Donepezil
2 = Rivastigmine
3 = Galantamine
4 = Memantine
5 = Ginkgo Biloba
6 = Donepezil in association with Other(s)
7 = Rivastigmine in association with Other(s)
8 = Galantamine in association with Other(s)
9 = Memantine in association with Other(s)
10 = Ginkgo Biloba in association with Other(s)
11 = Other(s)

3.2.4 Volume (in number of Defined Daily Doses) by Group of Medications, Population and Semesters – Dementia

			Volume in number of DDDs							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Group of medications	**population**	**semestre**								
Inhibitors of Cholinesterase	**Visited GPs**	**2006-S1**	112	481.92	434.47	401.33	186.67	616.00	37.33	3047.32
		2006-S2	113	506.15	518.11	373.34	186.67	606.67	18.67	4130.00
		2007-S1	111	555.00	465.65	448.00	242.67	756.00	18.67	3094.00
		2007-S2	109	573.15	421.76	522.67	261.33	714.00	18.67	2193.34
		2008-S1	115	592.95	488.56	466.67	242.67	886.67	18.67	3103.34
		2008-S2	117	640.49	502.14	541.34	266.00	858.67	18.67	2781.34
	Overall GPs	**2006-S1**	9205	402.71	470.54	270.67	121.33	532.00	9.33	11438.01
		2006-S2	9412	422.95	499.62	294.00	126.00	560.00	9.33	11545.35
		2007-S1	9431	455.41	532.86	308.00	149.33	606.66	9.33	11718.02
		2007-S2	9774	466.50	545.56	308.00	149.33	625.33	9.33	12166.01
		2008-S1	9906	511.78	612.92	350.00	149.33	681.33	9.33	16443.07
		2008-S2	10039	535.51	655.05	364.00	149.33	714.00	9.33	19427.49

			Volume in number of DDDs							
			N	Mean	Std	Median	Q1	Q3	Min	Max
Memantine & Ginkgo Biloba	**Visited GPs**	**2006-S1**	40	144.97	70.26	140.00	103.33	168.00	28.00	336.00
		2006-S2	45	132.85	113.09	84.00	56.00	168.00	28.00	569.33
		2007-S1	37	155.77	90.16	140.00	84.00	224.00	28.00	364.00
		2007-S2	38	150.32	109.67	140.00	56.00	168.00	28.00	448.00
		2008-S1	38	153.65	91.17	140.00	84.00	196.00	28.00	392.00
		2008-S2	44	147.27	101.58	126.00	84.00	196.00	25.00	448.00
	Overall GPs	**2006-S1**	2938	132.51	104.34	112.00	56.00	168.00	25.00	917.33
		2006-S2	3086	132.94	106.72	112.00	56.00	168.00	0.00	1092.00
		2007-S1	3140	138.64	112.30	112.00	56.00	178.00	0.00	1129.00
		2007-S2	3298	135.66	111.36	112.00	56.00	168.00	25.00	1533.33
		2008-S1	3417	140.28	121.72	112.00	56.00	178.67	0.00	1967.67
		2008-S2	3543	143.16	120.24	112.00	56.00	196.00	25.00	1799.67

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