

Protocol WP 2 ODHIN

Title

A systematic literature study: the identification of effective dissemination and implementation strategies to increase the use of screening and brief intervention programmes for hazardous alcohol consumption in primary care settings.

Background

Systematic reviews (University of Sheffield 2009aⁱ; Kaner et al 2009ⁱⁱ) have shown that screening and brief interventions (SBI) reduce the level of alcohol consumption when implemented in normal clinical settings. However, screening and brief interventions for hazardous and harmful alcohol consumption are not routinely implemented.

Although a series of reviews have been conducted on dissemination and implementation strategies, these do not address specifically prevention of risky lifestyle or unhealthy behaviour. Improvement of healthcare is expected to be more likely when strategies for dissemination and implementation of best evidence are linked to specific features of the innovation, the target population and the setting. Various strategies may be necessary depending on the phases of the change process (Grol & Wensing, 2004ⁱⁱⁱ; Grol et al, 2005^{iv}): Orientation, insight, acceptance, change and maintenance.

To fill a gap in the evidence base, it is proposed to undertake a series of systematic reviews of dissemination and implementation strategies to engage primary health care providers in the management of alcohol problems. Estimates of the effect sizes of the strategies will be made, predictors of effect will be studied, and, where they are available, cost and cost effectiveness of the strategies will be reported.

This review primarily builds on the systematic review carried out by Anderson et al (2004)^v.

Objective

To complete, by month 24, a series of systematic reviews investigating the impact of different behavioural, organizational and financial strategies in changing provider behaviour across a range of clinical lifestyle interventions.

Strategy

A three-stepped approach will be used. The outcomes of this review will primarily be used to fine tune the strategies used in WP5, our cluster Randomised Controlled Trial.

We first focus on (cost-) effectiveness of strategies of Continuing Medical Education (CME) and reimbursement strategies targeted at health professionals, and e-health targeted at patients/citizens, as these are the strategies intended to be used in WP5 cluster Randomised Controlled Trial. In first instance, we focus at lifestyle issues and prevention. If this result is unsatisfactory, we will apply a wide perspective, looking at all kinds of subjects.

The proposed search strategy in this first step primarily draws upon a former report, Knowledge of Implementation Programme (KIP)^{vi}, which focuses on systematic reviews of implementation strategies effect studies. Firstly, two reviewers will independently prioritize the included studies of the KIP report relevant for ODHIN. To follow, the report will be updated by searching Pubmed and Cochrane Library from January 2010 till April 2011. We slightly modified the search strategy used for KIP, the following search terms are used:

- Set 1: identification of dissemination and implementation strategies of our interest
 - Quality improvement
 - Improvement
 - Improving intervention(s)
 - Educational
 - e-learning
 - Internet-based learning

- ICT
- Information technology
- Financial
- Pay for performance
- Reimbursement
- Contracting
- Transparency
- Set 2: Identification of literature reviews
 - Systematic reviews
 - Meta-analysis
- Depending on the number of papers identified a third set will be used to limit the number of papers
 - Set 3:
 - Lifestyle
 - Smoking
 - Non-exercise
 - Exercise
 - Unhealthy diet
 - Diet

Next, two reviewers will independently prioritize the identified papers, and select the papers reporting on 'Financial', 'Continuing Medical Education', 'e-health', or multifaceted studies including one of these strategies related to lifestyle prevention, prevention or other topics (depending on the number of literature reviews identified).

Subsequently, the eligible papers will be obtained full text and will independently scored by two reviewers using a data-extraction template (Author, Aim of the review, Topic, Setting, Patients group, Implementation strategy, Participants, Number of Studies included, Results, and Conclusion).

In our second step, we focus on individual papers reporting the effects on hazardous and harmful alcohol consumption. The guidelines for performing a systematic literature review will be applied (Higgins & Green, 2011^{vii}; Center for Reviews and Dissemination, 2009^{viii}). To ensure the quality of reports of meta-analyses we will use the guidelines as described by the PRISMA (formerly QOURUM statement) (Moher, Liberati, Tetzlaff, Altman, 2009^{ix}). The second step is worked out in detail below.

Thirdly, the outcomes of our review on hazardous and harmful alcohol consumption will be compared with (systematic) literature reviews on other lifestyle issues such as smoking, non-exercise and unhealthy diet. This third step will be worked out in detail later on, to fine tune it to resulting studies from step one and two.

ODHIN participants

The review will be carried out by Scientific Institute for Quality of Healthcare (IQ healthcare, RUNMC):

- Myrna Keurhorst, junior researcher/PhD student: first responsible person to conduct the review and independent reviewer
- Miranda Laurant, senior researcher: supervision of the review and independent reviewer
- Jozé Braspenning, senior researcher: independent reviewer and advisor

Other partners involved:

- University of Maastricht: Peter Anderson, independent reviewer and advisor
- University of Newcastle: Eileen Kaner, independent reviewer and advisor
- Barcelona University: Michaela Bitarello, independent reviewer and advisor

Besides ODHIN partners, we will also contact global experts to be involved as experts to identify grey literature, unpublished papers and conference abstracts/proceedings and possibly to extract non-English literature.

**BELOW, ONLY THE SECOND STEP IS WORKED OUT IN DETAIL AS THIS IS THE CORE OF WP2
SYSTEMATIC REVIEW ON SBI FOR HAZARDOUS AND HARMFUL ALCOHOL CONSUMPTION IN PRIMARY HEALTH
CARE**

Type of study design

(cluster) Randomised controlled trials
Controlled (clinical) trials
Controlled Before-after studies
Interrupted Time Series

Setting

Primary Health Care including general practice, family practice, health centres, and outpatient (primary) clinics, all of which usually provides first-contact health care.

Type of participants

Health care professionals including physicians, nurses, psychologists, doctors' assistants and receptionists working in primary health care (including general practice, family practice, health centres, and polyclinics, all of which usually provides first-contact health care). Furthermore, patients in Primary Health Care Settings at risk for hazardous and harmful alcohol consumption will be included.

Types of intervention

All kinds of patient and professional oriented (behavioural), organisational oriented, structural and regulatory or financial strategies aimed at the dissemination and implementation of SBI will be included in the review. Strategies exclusively focused on alcohol as well as prevention and health promotion activities including alcohol will be included.

Type of outcomes

The containing outcome measures are objective measurements in the following domains:

- i) health professional performance including measurement of alcohol intake, screening, counselling, making a follow-up and referral; and
- ii) client outcomes, including numbers screened, numbers counselled, numbers referred, changes in alcohol consumption over time, numbers drinking within recommended alcohol consumption limits, and physiological measures.

Where information is available relevant data on the costs of the SBI and of dissemination and implementation strategies, and on health care costs will be collected.

In-/exclusion criteria

The following inclusion criteria were adopted:

- studies that addressed hazardous and harmful alcohol consumption, but not alcohol dependence as defined by the World Health Organization (Babor et al. 1994^x) and the ICD 10 Classification of Mental and Behavioural Disorders (World Health Organization 1992^{xi})
- studies that included interventions that were exclusively focused on alcohol as well as alcohol related interventions that were a part of broader prevention
- studies in English and other languages that at least two reviewers could manage (Dutch and Spanish)
- studies that addressed the adult population (≥ 18)
- studies that were published from onset of literature databases searched till april 2011

Search methods for identification of studies

It is proposed to use a range of methods to identify studies, including:

- Searching computerized databases:

MEDLINE, EMBASE, CINAHL, Cochrane Central Register of Controlled Trials (CENTRAL)

- Scanning reference lists of appropriate review articles and books;
- Contacting ODHIN partners and other global experts in the field.

To overcome the problem of publication bias, the review will attempt to identify some of the grey literature in this area, including conference abstracts and some unpublished findings.

Selection of relevant papers

Identified references, key words and abstracts will be entered into Reference Manager and reviewed by two independent reviewers. Hard copies of potentially relevant studies will be obtained and screened for inclusion independently by two reviewers. Studies that do not fulfil the inclusion criteria will be marked as not eligible and listed by excluded studies. Disagreements between the reviewers will be resolved through discussion, or a third reviewer will be contacted.

Data extraction

A data extraction form will be developed and tested. Each paper will be reviewed and data extracted by two independent reviewers. Differences will be resolved through discussion. Less experienced (junior) researchers will not be coupled together, and there will be no constant pairs during the data extraction (preventing selection bias).

Furthermore, the included articles will be screened for barriers and facilitators for SBI in Primary Health Care Units. This will be done by screening discussion sections; fragments in text describing the process of implementation; references to relevant authors of cited articles; references to strengths and weaknesses of the (implementation) studies. To describe the results of the screening for barriers and facilitators, the implementation theory of Grol^{xii} will be applied.

Methodological quality

The methodological quality of studies included in the review will be assessed using a criteria list derived from EPOC template, the GRADE checklist^{xiii} for quality of evidence and strengths of recommendations of studies, and “a checklist of items to include when reporting a systematic review or meta-analysis” derived from the PRISMA statement^{ix}.

Data analyses

Where possible, standardized effect sizes will be calculated and a formal meta-analysis of the research findings will be undertaken according to the methods outlined in the Cochrane Handbook (Deeks 2009^{xiv}) and PRISMA statement. Comparisons that randomize or allocate clusters (professionals or health care organizations) but do not account for clustering during analysis have ‘potential unit of analysis errors’ resulting in artificially extreme p-values and over narrow confidence intervals (Ukoumunne 1999^{xv}). We will attempt to reanalyze studies with potential unit of analysis errors where possible and include them within the meta-analysis. If re-analysis is not possible we exclude the studies from the meta-analysis and report the effect size of any studies separately (without p-values or confidence intervals) in tabular form. If meta-analysis is not possible due to substantial heterogeneity, we will present the results of included studies in a tabular form and undertake a qualitative analysis based upon the study quality, the size and direction of effect observed and the statistical significance of the studies will be presented.

Exploring heterogeneity:

Sub-group analyses will be undertaken to explore the effect of differences in interventions (for example: educational approaches versus organisational approaches), the intensity of the interventions (high, moderate and low) and the target population of SBI (for example: young versus old, large practices versus small practices, etc.).

Proposed search strategy

We use the 'gold standard' set of studies known to be within the scope of EPOC (i.e. dissemination and implementation strategies to improve quality of healthcare), combined with alcohol consumption and primary health care setting. Below we report the search strategy used to search MEDLINE, EMBASE and CENTRAL and Cinahl (to be added) database. By EPOC described search string for the CINAHL search will be translated to the EBSCO database, since RUNMC does not have entrance to CINAHL via Ovid SP.

OVID- MEDLINE Search Strategy:

1. exp *education,continuing/
2. (education\$ adj2 (program\$ or intervention? or meeting? or session? or strateg\$ or workshop? or visit?)).tw.
3. (behavio?r\$ adj2 intervention?).tw.
4. pamphlets/
5. (leaflet? or booklet? or poster? or pamphlet?).tw.
6. ((written or printed or oral) adj information).tw.
7. (information\$ adj2 campaign).tw.
8. (education\$ adj1 (method? or material?)).tw.
9. *advance directives/
10. outreach.tw.
11. ((opinion or education\$ or influential) adj1 leader?).tw.
12. facilitator?.tw.
13. academic detailing.tw.
14. consensus conference?.tw.
15. *guideline adherence/
16. practice guideline?.tw.
17. (guideline? adj2 (introduc\$ or issu\$ or impact or effect? or disseminat\$ or distribut\$)).tw.
18. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 training program\$).tw.
19. *reminder systems/
20. reminder?.tw.
21. (recall adj2 system\$).tw.
22. (prompter? or prompting).tw.
23. algorithm?.tw.
24. *feedback/ or feedback.tw.
25. chart review\$.tw.
26. ((effect? or impact or records or chart?) adj2 audit).tw.
27. compliance.tw.
28. marketing.tw.
29. or/1-28 **Professional oriented interventions**

30. exp *reimbursement mechanisms/
31. fee for service.tw.
32. *capitation fee/
33. *"deductibles and coinsurance"/
34. cost shar\$.tw.
35. (copayment? or co payment?).tw.
36. (prepay\$ or prepaid or prospective payment?).tw.
37. *hospital charges/
38. formular\$.tw.
39. fundhold\$.tw.
40. *medicaid/
41. *medicare/
42. blue cross.tw.
43. or/30-42 **financial interventions**

- 44. *nurse clinicians/
- 45. *nurse midwives/
- 46. *nurse practitioners/
- 47. (nurse adj (rehabilitator? or clinician? or practitioner? or midwi\$)).tw.
- 48. *pharmacists/
- 49. clinical pharmacist?.tw.
- 50. paramedic?.tw.
- 51. *patient care team/
- 52. exp *patient care planning/
- 53. (team? adj2 (care or treatment or assessment or consultation)).tw.
- 54. (integrat\$ adj2 (care or service?)).tw.
- 55. (care adj2 (coordinat\$ or program\$ or continuity)).tw.
- 56. (case adj1 management).tw.
- 57. exp *ambulatory care facilities/
- 58. *ambulatory care/
- 59. or/44-58 **Organizational oriented interventions**

- 60. *home care services/
- 61. *hospices/
- 62. *nursing homes/
- 63. *office visits/
- 64. *house calls/
- 65. *day care/
- 66. *aftercare/
- 67. *community health nursing/
- 68. (chang\$ adj1 location?).tw.
- 69. domiciliary.tw.
- 70. (home adj1 treat\$).tw.
- 71. day surgery.tw.
- 72. *medical records/
- 73. *medical records systems, computerized/
- 74. (information adj2 (management or system?)).tw.
- 75. *peer review/
- 76. *utilization review/
- 77. exp *health services misuse/
- 78. or/60-77 **structural interventions**

- 79. *physician's practice patterns/
- 80. quality assurance.tw.
- 81. *process assessment/ [health care]
- 82. *program evaluation/
- 83. *length of stay/
- 84. (early adj1 discharg\$).tw.
- 85. discharge planning.tw.
- 86. offset.tw.
- 87. triage.tw.
- 88. exp *"Referral and Consultation"/ and "consultation"/
- 89. *drug therapy,computer assisted/
- 90. near patient testing.tw.
- 91. *medical history taking/

92. *telephone/
93. (physician patient adj (interaction? or relationship?)).tw.
94. *health maintenance organizations/
95. managed care.tw.
96. (hospital? adj1 merg\$).tw.
97. or/79-96 **structural interventions**
98. ((standard or usual or routine or regular or traditional or conventional or pattern) adj2 care).tw.
99. (program\$ adj2 (reduc\$ or increas\$ or decreas\$ or chang\$ or improv\$ or modify\$ or monitor\$ or care)).tw.
100. (program\$ adj1 (health or care or intervention?)).tw.
101. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 treatment program\$).tw.
102. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 care program\$).tw.
103. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 screening program\$).tw.
104. ((effect? or impact or evaluat\$ or introduc\$ or compara\$) adj2 prevent\$ program\$).tw.
105. (computer\$ adj2 (dosage or dosing or diagnosis or therapy or decision?)).tw.
106. ((introduc\$ or impact or effect? or implement\$ or computer\$) adj2 protocol?).tw.
107. ((effect? or impact or introduc\$) adj2 (legislation or regulations or policy)).tw.
108. or/98-107 **improving health care**
109. 29 or 43 or 59 or 78 or 97 or 108 **combining above**
110. randomized controlled trial.pt.
111. random\$.tw.
112. control\$.tw.
113. intervention?.tw.
114. evaluat\$.tw.
115. or/110-114 **study design**
116. animal/
117. human/
118. 116 not (116 and 117)
119. 115 not 118 **study design**
120. 109 and 119 **combining 'interventions' with study design**
- Adding theme specific search terms:**
121. ((alcohol adj1 (drink* or consumption or intoxication)) not (dependence or dependent)).mp
122. ((alcohol adj1 (abuse or hazardous or harmful)) not (dependence or dependent)).mp
123. Exp Alcohol drinking/
124. 121 or 122 or 123
125. limit 124 to "all adult (19 plus years)" **Alcohol consumption and related terms**
126. Exp Physicians-Family /
127. Exp Family-Medicine /
128. Exp Primary-Health-Care /
129. Exp Family-Practice /
130. Exp Rural-Health /
131. Exp Rural-Health-Services /
132. Exp Community-Health-Services /
133. Exp Comprehensive-Health-Care
134. 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 **Setting**

135. 125 and 134 **Combining these terms**

136. 135 and 120 **Combining MEDLINE dissemination and implementation strategies with theme of systematic review**

OVID- EMBASE EPOC Search Strategy:

1. (education\$ adj2 (program\$ or intervention? or meeting? or session? or strateg\$ or workshop? or visit?)).tw.
2. (behavior?r\$ adj2 intervention?).tw.
3. (leaflet? or booklet? or poster or posters).tw.
4. ((written or printed or oral) adj information).tw.
5. (information\$ adj2 campaign).tw.
6. (education\$ adj1 (method? or material?)).tw.
7. outreach.tw.
8. ((opinion or education\$ or influential) adj1 leader?).tw.
9. facilitator?.tw.
10. academic detailing.tw.
11. consensus conference?.tw.
12. practice guideline?.tw.
13. (guideline? adj2 (introduc\$ or issu\$ or impact or effect? or disseminat\$ or distribut\$ or compli\$)).tw.
14. ((introduc\$ or impact or effect? or implement\$ or computer\$ or compli\$) adj2 protocol?).tw.
15. ((introduc\$ or impact or effect? or implement\$ or computer\$ or compli\$) adj2 algorithm?).tw.
16. clinical pathway?.tw.
17. critical pathway?.tw.
18. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 training program\$).tw.
19. reminder?.tw.
20. (recall adj2 system\$).tw.
21. (prompter? or prompting).tw.
22. advance directive?.tw.
23. feedback.tw.
24. chart review\$.tw.
25. ((effect? or impact or records or chart?) adj2 audit).tw.
26. (compliance and (physician? or doctor? or practitioner? or pharmacist? or nurse? or health)).tw.
27. marketing.tw.
28. ((cost or clinical or medical) adj information).tw.
29. medical education/
30. medical audit/
31. continuing education/
32. postgraduate education/
33. or/1-32 **professional oriented interventions**
34. fee for service.tw.
35. cost shar\$.tw.
36. (copayment? or co payment?).tw.
37. (prepay\$ or prepaid or prospective payment?).tw.
38. formular\$.tw.
39. fundhold\$.tw.
40. (blue cross or bluecross).tw.
41. voucher?.tw.
42. (free adj2 care).tw.
43. exp health insurance/

44. health care costs/
45. health care financing/
46. medical fee/
47. prospective payment/
48. or/34-47 **financial interventions**

49. (nurse adj (rehabilitator? or clinician? or practitioner? or midwi\$)).tw.
50. ((nurse or midwi\$ or practitioner) adj managed).tw.
51. clinical pharmacist?.tw.
52. paramedic?.tw.
53. exp paramedical personnel/
54. general practitioner/
55. physician/
56. (team adj2 (care or treatment or assessment or consultation)).tw.
57. (integrat\$ adj2 (care or service?)).tw.
58. (care adj2 (coordinat\$ or program\$ or continuity)).tw.
59. (case adj1 management).tw.
60. patient care/
61. (chang\$ adj1 location?).tw.
62. domiciliary.tw.
63. (home adj1 (treat\$ or visit?)).tw.
64. day surgery.tw.
65. exp primary health care/
66. ambulatory surgery/
67. nursing home/
68. day hospital/
69. outpatient care/
70. terminal care/
71. group practice/
72. general practice/
73. rural health care/
74. community mental health center/
75. information system/
76. medical record/
77. (information adj2 (management or system?)).tw.
78. peer review/
79. professional standards review organization/
80. clinical practice/
81. quality assurance.tw.
82. exp health care delivery/
83. health care quality/
84. professional practice/
85. (early adj1 discharg\$).tw.
86. discharge planning.tw.
87. offset.tw.
88. triage.tw.
89. near patient testing.tw.
90. patient referral/
91. (physician patient adj (interaction? or relationship?)).tw.
92. managed care.tw.
93. health care organization/

- 94. health maintenance organization/
- 95. health care system/
- 96. health care access/
- 97. (hospital? adj1 merg\$).tw.
- 98. (computer\$ adj2 (dosage or dosing or diagnosis therapy or decision?)).tw.
- 99. (computer\$ adj2 (diagnosis or therapy)).tw.
- 100. gatekeep\$.tw.
- 101. or/49-100 **organizational oriented interventions**

- 102. ((standard or usual or routine or regular or traditional or conventional or pattern) adj2 care).tw.
- 103. (program\$ adj2 (reduc\$ or increas\$ or decreas\$ or chang\$ or improv\$ or modif\$ or monitor\$ or care)).tw.
- 104. (program\$ adj1 (health or care or intervention?)).tw.
- 105. ((effect or impact or introduc\$) adj2 (legislation or regulations or policy)).tw.
- 106. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 treatment program\$).tw.
- 107. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 care program\$).tw.
- 108. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 screening program\$).tw.
- 109. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 prevention program\$).tw.
- 110. or/102-109 **improving health care**

- 111. 33 or 48 or 101 or 110 **combining above**

- 112. Randomized controlled trial/
- 113. random\$.tw.
- 114. experiment\$.tw.
- 115. (time adj series).tw.
- 116. (pre test or pretest or post test or posttest).tw.
- 117. impact.tw.
- 118. intervention?.tw.
- 119. chang\$.tw.
- 120. evaluat\$.tw.
- 121. effect?.tw.
- 122. compar\$.tw.
- 123. control\$.tw.
- 124. or/112-123 **study design**
- 125. Nonhuman/
- 126. 124 not 125 **study design**

- 127. 111 and 126 **combining interventions with study design**

- Adding specific search terms:**
- 128. ((alcohol adj1 (drink* or consumption or intoxication)) not (dependence or dependent)).mp
- 129. ((alcohol adj1 (abuse or hazardous or harmful)) not (dependence or dependent)).mp
- 130. Exp Alcohol drinking/
- 131. 128 or 129 or 130
- 132. limit 131 to (adult <18 to 64 years> or aged <65+ years>) **Alcohol consumption and related terms**

- 133. Exp Physicians-Family /
- 134. Exp Family-Medicine /
- 135. Exp Primary-Health-Care /
- 136. Exp Family-Practice /
- 137. Exp Rural-Health /

138. Exp Rural-Health-Services /
139. Exp Community-Health-Services /
140. Exp Comprehensive-Health-Care /
141. 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 **Setting**

142. 132 and 141 **Combining these terms**

141. 142 and 127 **Combining EMBASE dissemination and implementation strategies with theme specific of systematic review**

CENTRAL Search strategy:

1. SR-EPOC

(THAT SEARCH TERM INCLUDES THE FOLLOWING:)

EDUCATION-CONTINUING*:ME

EDUCATION* near PROGRAM*

EDUCATION* near INTERVENTION*

EDUCATION* near MEETING*

EDUCATION* near SESSION*

EDUCATION* near STRATEG*

BEHAVIOR near INTERVENTION*

BEHAVIOUR near INTERVENTION*

PAMPHLETS:ME

(LEAFLET* OR BOOKLET* OR POSTER OR POSTERS)

WRITTEN next INFORMATION

PRINTED next INFORMATION

ORAL next INFORMATION

FACILITATOR*

ACADEMIC next DETAILING

CONSENSUS next CONFERENCE

PRACTICE next GUIDELINE*

FEEDBACK*1:ME

(FEEDBACK:TI or FEEDBACK:AB)

(COMPLIANCE:TI or COMPLIANCE:AB)

(MARKETING:TI or MARKETING:AB)

(REMINDER*:TI or REMINDER*:AB)

(ALGORITHM*:TI or ALGORITHM*:AB)

(OUTREACH:TI or OUTREACH:AB)

OPINION next LEADER*

EDUCATION* next LEADER*

INFLUENTIAL next LEADER*

CHART next REVIEW*

COUNSEL*:TI OR COUNSEL*:AB

REMINDER-SYSTEMS:ME

PATIENT-EDUCATION:ME

INFORMATION* near CAMPAIGN
EFFECT* near AUDIT
IMPACT near AUDIT
RECORDS near AUDIT
CHART* near AUDIT
PROMPTER* OR PROMPTING
RECALL near SYSTEM*
TRAINING next PROGRAM*
GUIDELINE* near INTRODUC*
GUIDELINE* near ISSU*
GUIDELINE* near IMPACT
GUIDELINE* near EFFECT*
GUIDELINE* near DISSEMINAT*
GUIDELINE* near DISTRIBUT* **professional oriented interventions**

REIMBURSEMENT-MECHANISMS*:ME
"FEE FOR SERVICE"
CAPITATION-FEE:ME
DEDUCTIBLES-AND-COINSURANCE:ME
COST next SHAR*
COPAYMENT*
CO next PAYMENT*
PREPAY
PREPAID
PROSPECTIVE NEXT PAYMENT*
HOSPITAL-CHARGES:ME
FORMULAR*
FUNDHOLD*
MEDICAID:ME
MEDICARE:ME
BLUE next CROSS **financial interventions**

NURSE-CLINICIANS:ME
NURSE-MIDWIVES:ME
NURSE-PRACTITIONERS:ME
NURSE next REHABILITATOR*
NURSE next CLINICIAN*
NURSE next PRACTITIONER*
NURSE next MIDWI*
PHARMACISTS:ME
CLINICAL next PHARMACIST*
PARAMEDIC*
PATIENT-CARE-TEAM:ME
TEAM near CARE
TEAM near TREATMENT

INTEGRAT* near CARE
INTEGRAT* near SERVICE*
CASE next MANAGEMENT
CARE near COORDINAT*
CARE near PROGRAM*
CARE near CONTINUITY
AMBULATORY-CARE-FACILITIES*:ME
AMBULATORY-CARE:ME **organizational oriented interventions**

HOME-CARE-SERVICES:ME
HOSPICES:ME
NURSING-HOMES:ME
OFFICE-VISITS:ME
DAY-CARE:ME
AFTERCARE:ME
COMMUNITY-HEALTH-NURSING:ME
CHANG* next LOCATION*
DOMICILIARY
HOME next TREAT*
DAY next SURGERY
MEDICAL-RECORDS:ME
MEDICAL-RECORDS-SYSTEMS-COMPUTERIZED:ME
INFORMATION near MANAGEMENT
INFORMATION near SYSTEM*
UTILIZATION-REVIEW:ME **structural oriented interventions**

PHYSICIAN'S-PRACTICE-PATTERNS:ME
QUALITY next ASSURANCE
PROCESS-ASSESSMENT-(HEALTH-CARE):ME
PROGRAM-EVALUATION:ME
LENGTH-OF-STAY:ME
EARLY next DISCHARGE
OFFSET
TRIAGE
MEDICAL-HISTORY-TAKING:ME
TELEPHONE:ME
HEALTH-MAINTENANCE-ORGANIZATIONS:ME
MANAGED next CARE
PHYSICIAN next PATIENT **structural oriented interventions**

STANDARD near CARE
USUAL near CARE
ROUTINE near CARE
REGULAR near CARE
TRADITIONAL near CARE

CONVENTIONAL near CARE
PATTERN near CARE
INTRODUC* near PROTOCOL*
IMPACT near PROTOCOL*
EFFECT* near PROTOCOL*
IMPLEMENT* near PROTOCOL*
COMPUTER* near PROTOCOL*
COMPUTER near DOSAGE
COMPUTER near DOSING
COMPUTER near DIAGNOSIS
COMPUTER near DECISION*
PROGRAM* near TREATMENT
PROGRAM* near CARE
PROGRAM* near SCREENING
PROGRAM* near PREVENTION
PROGRAM* near HEALTH
PROGRAM* near INTERVENTION*
LEGISLATION
REGULATIONS (**improving health care**)

Adding theme specific search terms:

2. ((alcohol next (drink* or consumption or intoxication)) not (dependence or dependent)) OR ((alcohol next (abuse or hazardous or harmful)) not (dependence or dependent)) OR (Exp Alcohol drinking) **Alcohol consumption and related terms**

3. (Exp Physicians-Family) OR (Exp Family-Medicine) OR (Exp Primary-Health-Care) OR (Exp Family-Practice) OR (Exp Rural-Health) OR (Exp Rural-Health-Services) OR (Exp Community-Health-Services) OR (Exp Comprehensive-Health-Care) OR (physicians family or family medicine or primary health care or family practice or rural health or rural health services or community health services or comprehensive health care) **Setting**

4. #2 AND #3 **Combining these terms**

5. #1 AND #4 **Combining CENTRAL dissemination and implementation strategies with theme specific of systematic review**

OVID- CINAHL EPOC Search Strategy:

1. exp *education,continuing/ or *education,interdisciplinary/
2. (education\$ adj2 (program\$ or intervention? or meeting? or session? or strateg\$ or workshop? or visit?)).tw.
3. (behavio?r\$ adj2 intervention?).tw.
4. *pamphlets/
5. (leaflet? or booklet? or poster or posters).tw.
6. ((written or printed or oral) adj information).tw.
7. (information\$ adj2 campaign).tw.
8. (education\$ adj1 (method? or material?)).tw.

9. *advance directives/ or *living wills/
10. outreach.tw.
11. ((opinion or educational\$ or influential) adj1 leader?).tw.
12. facilitator?.tw.
13. academic detailing.tw.
14. consensus conference?.tw.
15. practice guideline?.tw.
16. (guideline? adj2 (introduc\$ or issu\$ or impact or effect? or disseminat\$ or distribut\$)).tw.
17. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 training program\$).tw.
18. *reminder systems/
19. reminder?.tw.
20. (recall adj2 system\$).tw.
21. (prompter? or prompting).tw.
22. algorithm?.tw.
23. *feedback/ or feedback.tw.
24. chart review\$.tw.
25. ((effect? or impact or records or chart?) adj2 audit).tw.
26. compliance.tw.
27. marketing.tw.
28. or/1-27 **Professional oriented interventions**

29. exp *reimbursement mechanisms/
30. fee for service.tw.
31. exp *"fees and charges"/
32. cost shar\$.tw.
33. (copayment? or co payment?).tw.
34. (prepay\$ or prepaid or prospective payment?).tw.
35. exp *managed care programs/
36. formular\$.tw.
37. fundhold\$.tw.
38. *medicaid/
39. *medicare/
40. blue cross.tw.
41. or/29-40 **financial interventions**

42. exp *advanced practice nurses/
43. *nurse consultants/
44. (nurse adj (rehabilitator? or clinician? or practitioner? or midwi\$)).tw.
45. *pharmacists/
46. clinical pharmacist?.tw.
47. paramedic?.tw.
48. *multidisciplinary care team/
49. exp *protocols/
50. (team? adj2 (care or treatment or assessment or consultation)).tw.
51. (integrat\$ adj2 (care or service?)).tw.
52. *health care delivery, integrated/
53. (care adj2 (coordinat\$ or program\$ or continuity)).tw.
54. exp *continuity of patient care/
55. *case managers/
56. (case adj1 management).tw.
57. or/42-56 **organisational oriented interventions**

- 58. exp *ambulatory care facilities/
- 59. *ambulatory care/
- 60. exp *home health care/
- 61. *hospices/
- 62. exp *nursing homes/
- 63. *office visits/
- 64. *office nursing/
- 65. *home visits/
- 66. *day care/
- 67. *after care/
- 68. exp *community health nursing/
- 69. (chang\$ adj1 location?).tw.
- 70. domiciliary.tw.
- 71. (home adj1 treat\$).tw.
- 72. day surgery.tw.
- 73. or/58-72 **structural interventions**

- 74. *medical records/
- 75. exp *decision making, computer assisted/
- 76. *computerized patient record/
- 77. *nursing records/
- 78. *problem oriented records/
- 79. (information adj2 (management or system?)).tw.
- 80. *health service misuse/
- 81. exp *quality assessment/
- 82. quality assurance.tw.
- 83. *length of stay/
- 84. (early adj1 discharg\$).tw.
- 85. discharge planning.tw.
- 86. offset.tw.
- 87. triage.tw.
- 88. exp *"Referral and consultation"/
- 89. gatekeep\$.tw.
- 90. *drug therapy,computer assisted/
- 91. near patient test\$.tw.
- 92. exp *patient history taking/
- 93. *telephone/
- 94. exp *telehealth/
- 95. (physician patient adj (interaction? or relationship?)).tw.
- 96. *health maintenance organizations/
- 97. managed care.tw.
- 98. (hospital? adj1 merg\$).tw.
- 99. or/74-98 **structural interventions**

- 100. ((standard or usual or routine or regular or traditional or conventional or pattern) adj2 care).tw.
- 101. (program\$ adj2 (reduc\$ or increas\$ or decreas\$ or chang\$ or improv\$ or modify\$ or monitor\$ or care)).tw.
- 102. (program\$ adj1 (health or care or intervention?)).tw.
- 103. ((effect? or impact or introduc\$) adj2 (legislation or regulations or policy)).tw.
- 104. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 treatment program\$).tw.
- 105. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 care program\$).tw.

- 106. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 screening program\$).tw.
- 107. ((effect? or impact or evaluat\$ or introduc\$ or compar\$) adj2 prevent\$ program\$).tw.
- 108. (computer\$ adj2 (dosage or dosing or diagnosis or therapy or decision?)).tw.
- 109. ((introduc\$ or impact or effect? or implement\$ or computer\$) adj2 protocol?).tw.
- 110. or/100-109 **improving health care**

111. 28 or 41 or 57 or 73 or 99 or 110 **combining above**

- 112. clinical trials/
- 113. control\$.tw.
- 114. random\$.tw.
- 115. comparative studies/
- 116. experiment\$.tw.
- 117. (time adj series).tw
- 118. impact.tw.
- 119. intervention?.tw.
- 120. evaluat\$.tw.
- 121. effect?.tw.
- 122. exp pretest-posttest design/
- 123. exp quasi-experimental studies/
- 124. or/112-123 **study design**
- 125. 111 and 124
- 126. "cochrane database of systematic reviews".jn.
- 127. 125 not 126 **study design**

Adding theme specific search terms:

- 128. ((alcohol adj1 (drink* or consumption or intoxication)) not (dependence or dependent)).mp
- 129. ((alcohol adj1 (abuse or hazardous or harmful)) not (dependence or dependent)).mp
- 130. Exp Alcohol drinking/
- 131. 121 or 122 or 123
- 132. limit 131 to "all adult (19 plus years)" **Alcohol consumption and related terms**

- 133. Exp Physicians-Family /
- 134. Exp Family-Medicine /
- 135. Exp Primary-Health-Care /
- 136. Exp Family-Practice /
- 137. Exp Rural-Health /
- 138. Exp Rural-Health-Services /
- 139. Exp Community-Health-Services /
- 140. Exp Comprehensive-Health-Care
- 141. 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 **Setting**

142. 132 and 141 **Combining these terms**

143. 142 and 127 **Combining CINAHL dissemination and implementation strategies with theme of systematic review**

Time schedule: 24 months

Month 1-2: Writing concept protocol for systematic reviews, development of optimal search strategy.

- Month 3: Discussion kick-off meeting: approval of the protocol
If necessary, adjustment of protocol for systematic reviews and establishment of a definitive protocol for systematic reviews
Searches computerized databases
Reference management
- Month 4-5: Inclusion of papers (1st selection/screening) by 2 independent reviewers
Obtaining full text papers
Development of concept data-extraction form to be discussed (involved partners; 'core team') and establishment of a definitive data-extraction form
- Month 6 - 10: Data-extraction by 2 independent reviewers, starting with:
- Reimbursement strategies
 - Educational strategies
 - E-health strategies
 - Etc.
- Reference lists, identification relevant papers
Comparison data-extraction, followed by discussion if necessary.
- Month 11 -12: Preliminary analysis of relevant strategies (to be used in WP5 – RCT)
Presentation of preliminary analysis [ODHIN meeting]
- Month 13-15: Hand searching relevant journals
Searching databases ongoing studies (e.g. clinical trial.gov, trial.nl)
Expert contact ODHIN partners (and others, to be decided)
Inclusion of papers (1st selection/screening) by 2 independent reviewers
Obtaining full text papers
Continuation data-extraction
Reference lists, identification relevant papers
Comparison data-extraction, followed by discussion if necessary.
- Month 16-18: If necessary continuation data-extraction; reference lists, identification relevant papers; comparison data-extraction, followed by discussion if necessary.
Data-analysis
- Month 18: Presentation of (preliminary) results [ODHIN meeting]
- Month 18-24: Writing a series of scientific papers
Writing a guide for dissemination and implementation.
- >>> Month 24: Finishing up series of scientific papers
Presentations at conferences and meetings.

Milestones

- 1) Finalized protocol WP2 (month 3)

Deliverables

- 1) Report summarizing the methods, results and policy implication of series of reviews, including a theory framework to explain why some interventions work or not and that qualitative studies could be taken into account. (month 24)
- 2) Series of scientific papers (>>> month 24)

ⁱ University of Sheffield (2009a) Guidance Title: Prevention and early identification of alcohol use disorders in adults and young people. Final draft of Report 2 to the National Institute for Health & Clinical Excellence. Sheffield: The University of Sheffield, School of Health and Related Research (SCHARR)

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