Table F-5. Key Question 2 studies, first outcome

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Bahrami et al., 20041 | G1: Mailed guideline (increase reach)G2: Guideline + AF (not abstracted)G3: CAL (increase ability)G4: CAL + AF (not abstracted) | Behavior (applicable for clinicians) Proportion of patients whose treatment complied with the guideline. Assessed by two independent researchers and any disagreements were resolved by discussion. | 4 month period in 1999 (preintervention) 4 month period in 2000 (postintervention)Clinical records | PatientsPre: 3342Post: 1934DentistsG1: 11G3: 11 | Preintervention% (95%CI)G1: 77% (70/85%)G3: 70% (56/84%)PostinterventionG1:81% (70-92%)G3: 73% (59-88%) | NR | Pericoronitis, caries and pulpal pathologyWeighted t-test |
| Banait et al., 20032 | G1: Mailed guidelines (increase reach)G2: Educational outreach (Multicomponent)  | Behavior (applicable for clinicians) Appropriateness of referrals for open access endoscopy. Proportion of appropriate referrals. Referrals for open access endoscopy were included if the GP had requested the procedure without a prior hospital consultation. The characteristics of each referral made in the 7 months following the initial outreach visit were appraised using predefined medical review criteria based on the guidelines. | 7 months following outreach visitChart | G1: 36G2 (ITT): 44G2 (only those that accepted invitation to participate in intervention): 27 | Median percentage of appropriate referrals per practice (IQR)G1: 50.0 (221./72.4)G2 (ITT): 63.9 (50.0/100.00)G2: 72.7 (50.0/100.0) | Difference between control and intervention practices: Mann-Whitney z: -2.235, 1 df, p=0.025 | Used when appropriate”, but doesn’t provide more details. Non-parametric tests |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Beaulieu et al., 20043 | G1: Control (not abstracted)G2: Guideline (increase reach)G3: Guideline + reminder notice and stickers for patients’ charts (multicomponent) | Behavior (applicable for clinicians) Treatment of stable angina in line with guideline. Measured by looking at the prescription of 3 cardiovascular medications in 1999. Data are odds ratios (95%CI) for receiving a prescription for the class of drug | 6 months post interventionComputerized database of the Quebec health insurance board | Total: 2326G2: 766G3: 793 | β-BlockerG2: 1.00 (0.88/1.13)G3: 1.04 (0.92/1.18)AntiplateletG2: 1.05 (0.94/1.18)G3: 1.07 (0.95/1.20)HypolipaemicsG2: 1.02 (0.90/1.16)G3: 0.95 (0.83/1.08) | β-BlockerG2 vs. G3: 0.04p=NRAntiplateletG2 vs. G3: 0.02p=NRHypolipaemicsG2 vs. G3: 0.07p=NR | Took into account covariance between observations sharing the same hierarchical structuremultilevel logistic regression |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Becker et al., 20084 | G1: Mailed guideline (Increase clinician reach)G2: Guideline implementation (multicomponent, clinicians only)G3: Guideline implementation and motivational counseling directed at patient (multicomponent, clinicians and patients) | Clinical outcomes (applicable for general public/patients)Functional capacityHannover Functional Ability Questionnaire for Measuring Back Pain-Related Functional Limitations. Normal function shows scores of 80% to 100%, scores around 70% equal a moderately, scores below 60% a severely limited function.Days in Pain  | Baseline and at 6 months and at 12 monthsSelf-administered questionnaire | PatientN baseline = 1378G1: 479G2: 489G3: 410N 6 months=1261G1: 450G2: 435G3: 376N 12 months=1211G1: 425G2: 421G3: 365 | Functional capacity: 6 monthsG1: M=70.29G2: M=72.94G3: M=73.9412 monthsG1: M=71.56G2: M=72.96G3: M=74.64Days in pain6 monthsG1: M=80.78G2: M=63.35G3: M=62.9112 monthsG1: M=71.32G2: M=58.48G3: M=61.57 | Functional capacity (odds ratios for groups compared with control only)6 monthsMean diff (95% CI)G1 vs. G2: 2.65 (-0.70/6.01)G1 vs. G3: 3.65 (0.32/6.98)G2 vs. G3: 0.999\* p=NR12 monthsMean diff (95% CI)G1 vs. G2: 1.40 (-2.24/5.02)G1 vs. G3: 3.11 (-0.47/6.70)G2 vs. G3: 1.681\* p=NRDays in Pain | Sex, age, fear avoidance, physical activity, and number of days in pain during previous 6 monthsMultilevel mixed modeling accounting for clustering of data on practice level |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Becker et al., 20084 (continued) |  |  |  |  |  | 6 monthsG1 vs. G2: -16.43 (-26.83/-6.03)G1 vs. G3: -17.87 (-28.18/-7.55)G2 vs. G3: 0.434\* p=NR12 monthsG1 vs. G2: -12.84 (-23.38/-2.30)G1 vs. G3: -9.76 (-20.20/-0.69)G2 vs. G3: 3.085\* p=NR |  |
| Bekkering et al., 20055,6 | G1: Received guidelines by mail (increase reach)G2: Received guidelines + active training strategy (multicomponent) | Behavior (applicable for clinicians) Adherence to 4 recommendations. Proportion of patients for whom each and all 4 were fulfilled. | Baseline and followup (exact time not specified)Chart | physiotherapists G1: 48 G2: 37PatientsG1: 253G2: 247 | Limit # of sessions in normal course: G1: 13%G2: 27%Set functional treatment goalsG1: 71%G2: 79%Use mainly active interventionsG1: 605G2:77%Give adequate informationG1: 87%G2: 96%All four recommendationsG1: 30%G2: 42% | Effect of strategy OR (95%CI)Limit # of sessions:2.39 (1.12/5.12)Set functional treatment goals1.99 (1.06/3.72)Use mainly active interventions2.79 (1.19/6.55)Give adequate interventions3.59 (1.35/9.55)All four2.05 (1.15/3.65) | Postgraduate education in low back painlogistical multilevel analyses |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Bishop and Wing, 200641 | G1: Control (not abstracted)G2: Physician only (increase reach)G3: Physician and patient (multicomponent) | Behavior (applicable for clinicians) Guideline-concordant treatment advice for 0-4 week post onset. The compulsoryWCB physician report forms were collected and scored. Dichotomous measure of 1 = presence of concordant/discordant behavior. | Once at 0-4 weeksWCB reports | 0-4 weeksOverall=462G2: 162G3: 151 | Concordant Behavior: Education & ReassuranceG2: 10%G3: 6%Exercise: G2: 38%G3: 53%Appropriate Medication=G2: 85%G3: 81%Spinal ManipulationG2: 2.5%G3: 5%Discordant Behavior:Bedrest:G2: 10%G3: 18%NOTE: Authors did not provide any figures, tables, or data for the >12 week measures. Only state no change seen in the recommended use of ongoing supervised exercise programs.  | Percentage difference (authors only compared groups with control)Education & Reassurance: G2 vs. G3: 4%\*, p=NRExercise: G2 vs. G3: 15%\* p=NRG1 vs. G3: 10% difference, p=0.05Appropriate MedicationG2 vs. G3: 4%\*, p=NRSpinal ManipulationG2 vs. G3: 2.5%\*, p=NRBedrestG2 vs. G3: 8%\*, p=NRControl vs. G2: p=0.05NOTE: Authors did not analyze between groups difference from each other. Only state no change seen in the recommended use of ongoing supervised exercise programs.  | NoneChi-square |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Bishop and Wing, 200641 (continued) |  |  |  |  |  | Appears all p-values apply to comparisons with the control group, not among G2 and G3. Bedrest data are for 5-12 weeks, while other data are for 0-4 weeks. |  |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Campbell et al., 20047 | G1: Control (not abstracted)G2: LHA (increase motivation)G3: TPV (multicomponent)G4: TPV and LHA (multicomponent) | Health-related decisions or behavior (applicable for general public/patients) Diet. Dietary fruit and vegetable consumption were measured with the 60-item version of the National cancer health habits and history food frequency questionnaire. The questionnaire assesses frequency of consumption and portion size. The Block database was then used to determine fat consumption, percentage of calories from fat, and number of daily servings of fruits and vegetables. Results shown as servings per day (Mean, Standard Error) | Baseline and 1 yr followupSelf-report | N=587G2: 123G3: 159G4: 176 | Fruit and vegetable servings/dayBaselineG2: 3.5 (0.18)G3: 3.3 (0.16)G4: 3.4 (0.15)FollowupG2: 3.5 (0.18)G3: 3.9 (0.16)G4: 3.7 (0.15)% meeting 5-a-day recommendationsbaselineG2: 16.0G3: 18.9G4: 19.5FollowupG2: 15.4G3: 21.7G4: 26.4  | G2 vs. G3: 0.2G2 vs. G4:0.1G3 vs. G4: 0.1ns p=0.87FollowupG2 vs. G3: 0.4G2 vs. G4:0.2G3 vs. G4: 0.2p=0 .02 for the TPV “intervention main effect” (NOTE: believe meaning the main effect from the TPV/LHA interaction term, but the main effect is compared to control group in all cases in this study)% meeting 5-a-day recommendationsbaselineG2 vs. G3: 2.9G2 vs. G4: 3.5G3 vs. G4: 0.6ns, p=0 .34followupG2 vs. G3: 6.3G2 vs. G4: 11.0G3 vs. G4: 4.7p=0.04 for the TPV “intervention main effect” (see above) | DemographicsRegression models |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Carney et al., 20058 | G1: Mailed health information (increase reach)G2: Telephone counseling (increase motivation) | Health-related decisions or behavior (applicable for general public/patients) Adherence to screening. To determine participants’ levels of adherence to screening, the dates of all mammographic encounters that occurred among women in the study were entered into the analysis database. Coded as dichotomy | Over the span of a yearObjective measurement; NIH mammography registry | Overall N=258G1: 126G2: 132 | Between 1st and 2nd intervention=G1: 47.7%G2: 60.3%Between 15 months and after 2nd intervention=G1: 34.8%G2: 41.3% | Difference in groups between 1st and 2nd intervention=12.6%, p=0.04Difference in groups between 15 months and after 2nd intervention=6.5%,p=0.29 | NRChi-square |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Christakis et al., 20069 | G1: Usual care (not abstracted)G2: Parental content Alone (increase reach)G3: Provider notification alone (not abstracted)G4: Parental content and provider notification (multicomponent) | Discussions about the evidence“At your child’s most recent checkup on [date of last visit], did you and your child’s doctor discuss [each topic]?” All parents were asked about all of the relevant prevention topics targeted by MyHealthyChild, regardless if they had expressed interest. | 2 to 4 weeks after scheduled well-child visit, participants completed a telephone interviewSelf-report | Unclear | IRR (95%CI) G2: 1.05 (0.97-1.13)G4: 1.09 (1.00-1.20) | G2 vs. G4: 0.04\* | NRPoisson analysis |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Davis et al., 200410 | G1: Control - guidelines by mail (increase reach)G2: Intermediate (multicomponent)G3: High intervention (multicomponent) | Clinical outcomes (applicable for general public/patients) SF-36 general health-related quality of life instrument. Mean composite scores range from 0-100. Higher scores represent better patient-perceived health related QOL. | baseline and 12 month followupSelf-report | Patients atBaseline: Overall:1,133 G1: 370G2: 364G3: 399Patients at followupOverall=811G1: 255G2: 269G3: 287 | Baseline scores with 95% CIMental component summaryG1: 47.7 (45.2/50.2)G2: 49.7 (48.1/51.3)G3: 49.8 (47.9/51.7)Physical component summaryG1: 44.4 (42.5/46.2)G2: 45.8 (43.2/48.4)G3: 43.6 (41.5/45.6)General health profileG1: 63.7 (58.3/69.2)G2: 67.6 (64.9/70.3)G3: 62.1 (59.1/65.1)12 month followup score with 95% CIMental component summary: G1: 48 (46.0/50.0)G2: 50.2 (48.6/51.9)G3: 49.0 (46.5/51.4)Physical component summary: G1: 43.2 (39.4/47.1)G2: 45.1 (42.7/47.4)G3: 44.0 (41.8/46.1)General health profile: G1: 63.4 (53.8/68.5)G2: 66.8 (63.5/70.2)G3: 62.0 (57.9/66.0) | No significant differences in scale scores were seen across the arms at baseline or after the interventionMental summary: G1 vs. G2: 2.0\*G1 vs. G3: 2.1\*G2 vs. G3: 0.1\*p=NRPhysical summaryG1 vs. G2: 1.4\*G1 vs. G3: 0.8\*G2 vs. G3: 2.2\*p=NR General health:G1 vs. G2: 3.9\*G1 vs. G3: 1.6\*G2 vs. G3: 5.5\*p=NR 12 month followupMental summary:G1 vs. G2: 2.2\*G1 vs. G3: 1.0\*G2 vs. G3: 1.2\*p=NRPhysical summaryG1 vs. G2: 1.9\*G1 vs. G3: 0.8\*G2 vs. G3: 1.1\*p=NRGeneral health:G1 vs. G2: 3.4\*G1 vs. G3: 1.4\*G2 vs. G3: 4.8\*p=NR | deprivation, age, sex, and the training status of the practicet tests |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Eaton et al., 201111 | G1: 1-hour academic detailing (increase clinician ability)G2: Academic detailing plus a patient education toolkit, a computer kiosk with patient activation software, and a PDA-based decision support tool (multicomponent) | Clinical outcomes (applicable for general public/patients) Percentage of patients screened for hyperlipidemia and treated to their LDL and non–HDL cholesterol goals | Baseline and one year postinterventionObjective measurement (medical records) and self-report (by physicians ) | 4,105 patientsG1: 2,000G2: 2,105 | Both groups improved screening (89%) and the percentage of patients at their LDL (74%) and non-HDL cholesterol goals (74%), p<.001. Results by group, p=NR | No significant difference between groups for primary outcome.Post hoc analysis:G2:Difference: Practices with above-median use of the patient activation kiosk were more likely to have patients screened with a full lipid profileOR: 2.5495% CI: 1.97 to 3.27p=NRDifference: Physicians who were more frequent users of the PDA decision support tool were more likely to have their patients at LDL cholesterol goals (16%)OR = 1.1695% CI: 0.98 to 1.36Difference: Physicians who were more frequent users of the PDA decision support tool were more likely to have their patients at LDL cholesterol  | NoneGeneralized linear mixed model |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Eaton et al., 201111 (continued) |  |  |  |  |  | goals (16%) OR:1.27; 95% CI, 1.07-1.50 and non-HDL cholesterol goals (12%)OR: 1.1295% CI: 0.95-1.32 |  |
| Elder et al., 2005;12 200642 | G1: Culturally targeted print-materials + activity inserts (increase reach)G2: Tailored print materials + activity inserts + supporting materials (multicomponent). G3: Tailored print materials + in-person promotora (multicomponent) | Clinical outcomes (applicable for general public/patients) % calories from fat | Baseline, 12 week followup, and 12 month followupSelf-report face-to-face interview | BaselineN=357G1: 119G2: 118G3: 120FollowupsN=313G1: 107G2: 99G3: 107 | Adjusted Mean at Time 212 weeks% calories from fat: G1: 30%G2: 30.4%G3: 29.3%12 monthsNR | 12 weeksG1 vs. G2: 0.4%\*G2 vs. G3: 1.1%\*G1 vs. G3: 0.7%\*p=NR, but it was not significant. 12 monthsNR | Baseline measureTukey-Kramer multiple comparison testMixed effects regression |

Table F-5. Key question 2 studies first outcome (continued)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Feldstein et al., 200613 | G1: Usual care (not abstracted)G2: EMR reminder (increase reach for clinicians)G3: EMR reminder and patient reminder (via letter with educational materials (multicomponent) | Health-related decisions or behavior (applicable for general public/patients) Percent receiving pharmacological treatment defined as drugs dispensed to patient from outpatient pharmacy system | Within 6 months of interventionObjective measure from pharmacy system | G1: 101G2: 101G3: 109 | G1: 4.0%G2: 11.9%G3: 10.1% | Difference: G2 vs. G1: 7.9 95% CI: .47 (.35-.59)p=NRG3 vs. G1 6.195% CI: .38 (.26-.50)p=NRG3 vs. G2: -2.295% CI:NR | Fracture type, age, weight less than 127 pounds, osteoporosis diagnosis, and Charlson co-morbidity index.General linear modeling using treatment group, fracture type, age, weight, osteoporosis diagnosis and Charlson Comorbidity Index indicators. Models include independent variables significant in univariate analyses at p<0.10. Continuous outcome measures change scores regressed on the baseline values and indicators of treatment groups. Logistic regression used for unadjusted results. |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Gattellari et al., 200514 | G1: Leaflet (increase reach)G2: Video (increase reach)G3: Booklet (increase reach) | Knowledge about the evidence14-item measure comprised of 10 T/F questions and 4 multiple choice questions administered at pre and posttest - 2 items on efficacy of PSA screening; 3 on test accuracy; 1 on controversy about PSA screening; 4 on nature of prostate cancer; 2 on risk factors for prostate cancer, and 2 on treatment-related issues; scores were summed and multiplied by 100 for % of items correctly answered | Mean 21 days after receiving information (range 15 to 31)Self-report | N=405 | Pretest:G1: 30.1%G2: 28.7%G3: 29.8%Posttest:G1: 42.2%G2: 45.8%G3: 57.2% | Absolute differences within arms (prepost): G1: 12.1%\*, CI and p<0.001G2: 17.1%\*, CI and p<0.001G3: 27.9%\*, CI and p<0.001Absolute difference in changes between arms:G2-G1: 5.0%\*, CI and p=NRG3-G1: 15.8%\*, CI and p=NRG3-G2: 10.8%\*, CI and p=NRPosttest G2-G1: 3.6%\*Posttest G3-G1: 15.0%\*Posttest G3-G2: 11.4%\*Overall p<0.001 | NoneWilcoxon signed rank test and ANOVA |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Hagmolen et al., 200815 | G1: Guideline dissemination (increase reach)G2: Guideline dissemination + educational program (increase ability)G3: Guideline dissemination + educational program + individualized treatment advice based on airway responsiveness and symptoms (multicomponent) | Clinical outcomes (applicable for general public/patients) Change in AHR: reflects severity of the asthma. A single concentration methacholine challenge test was performed when FEV% predicted was greater than or equal to 75%. The degree of AHR was expressed as a PD20. Moderate to severe AHR was defined as a PD20 of less than or equal to 300 mcg. | Baseline and one year followup; one year between measuresObjective measurement | Overall N=362G1: 98G2: 133G3: 131Also conducted post-hoc analysis where Groups 1 and 2 were combined | G1: M=8.3 (SE = 0.2) G2: M=8.2 (SE = 0.2) G3: M=8.7 (SE = 0.2) Post-hoc analysis: G1&G2: M=8.3 (SE=0.2)G3: M=8.7 (SE=0.2) | Difference: G1 vs. G2: 0.1\*G1 vs. G3: 0.4\*G2 vs. G3: 0.5\*No significant differences between all 3 groupsp=0.09Significant difference between baseline and end of study for G3: 0.7, p=0.001Post-hoc analysis (aggregated groups 1 & 2): G1&G2 vs. G3: 0.4\*Significant difference between groupsp=0.03Significant difference between baseline and end of study for G1&G2 combined: 0.27, p=0.05 and G3: .7, p<0.001. | NRMixed model ANOVA analyses |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Jain et al., 200616 | G1: Passive intervention- guidelines by mail (increase reach)G2: Active intervention (multicomponent) | Behavior (applicable for clinicians) Nutritional adequacy of EN. Defined as the calories received from EN divided by the maximum total daily calories prescribed (recommended by the dietitian) for each individual patient during the first 12 days of ICU stay. | Baseline, 12 month followupChart | PracticeOverall=58 ICUs randomized as 50 clustersG1: 25 clustersG2: 25 clustersPatientsBaselineOverall=623G1: 298G2: 325FollowupOverall=612G1: 305G2: 307Note: the patients were not the same at baseline and followup. The authors took a cross-sectional survey at both time points.  | BaselineMean ± SE G1: 45.2 ± 2.5G2: 40.7 ± 2.5FollowupG1: 51.3 ± 2.6 (change from baseline: 6.2 ± 2.2, p=0.005)G2: 48.7 ± 2.6 (change from baseline 8.0 ± 2.1, p<0.001) | Baseline Difference (G1- G2) Mean ± SE- 4.5 ± 3.5Followup Difference (G1- G2) Mean ± SE- 2.6 ± 3.5Change1.9 ± 3.1, p=0.541In Subgroup analysis of medical patients only, the difference was significant. Difference in change from baseline to followup between groups: 8.1 ± 3.9, p=0.036  | ICU length of stayTwo-level hierarchical model as implemented in HLM |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Jousimaa et al., 200217 | G1: Computerized version of guidelines (increase ability)G2: Textbook-based version of guidelines (increase reach) | Behavior (applicable for clinicians) Number (and percent) of relevant consultations compliant withguidelines | One month postinterventionObjective and self-report | Laboratory examinations:Overall N=G1: 1640G2: 1529Radiological examinations:Overall N=G1: 1604G2: 1518Physical examinations:Overall N=G1: 1610G2: 1545Other examinations:Overall N=G1: 314G2: 307Procedures:Overall N=G1: 196G2: 171Nonpharma-cologic treatment:Overall N=G1: 92G2: 122Pharmacologic treatments:Overall N=G1: 1654G2: 1568 | Laboratory examinations:G1: 1481 (90.3%)G2: 1372 (89.7%)Radiological examinations:G1: 1504 (93.8%)G2: 1416 (93.3%)Physical examinations:G1: 1494 (92.8%)G2: 1461 (94.6%)Other examinations:G1: 235 (74.8%)G2: 248 (80.8%)Procedures:G1: 152 (77.6%)G2: 140 (81.9%)Nonpharmacologic treatment:G1: 80 (87.0%)G2: 110 (90.2%)Pharmacologic treatments:G1: 1391 (84.1%)G2: 1350 (86.1%)Physiotherapy:G1: 77 (78.6%)G2: 83 (80.6%)Referrals:G1: 1619 (96.1%)G2: 1508 (95.6%) | Proportion of noncompliant decisions considered to be clinically important (major or serious) similar in the two groups: 47.4% (407/859) in G1 compared with 46.3% (349/753) G2. No statistically significant differences between groups in terms of compliance.Outcome, OR (95% CI)Laboratory exams:G1 vs. G2: 109Difference: OR=1.07 (0.79-1.44)ICC: 0.015 Radiological exams:G1 vs. G2: 88Difference: OR=1.09 (0.81-1.46)ICC: 0Physical examinations:G1 vs. G2: 33Difference: OR=0.74 (0.51-1.06)ICC: 0.015 | NRChi-squared tests; a retrospective power calculation, adjusting for clustering using an ICC of 0.015 and an average cluster size of 27 |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Jousimaa et al., 200217 (continued) |  |  |  | Physio-therapy:Overall N=G1: 98G2: 103Referrals:Overall N=G1: 1684G2: 1578 |  | Other examinations:G1 vs. G2: 13Difference: OR=0.71 (0.43-1.17)ICC: 0.021Procedures:G1 vs. G2: 12Difference: OR=0.77 (0.43-1.36)ICC: 0Nonpharmacologic treatment:G1 vs. G2: 30Difference: OR=0.73 (0.22-2.41)ICC: 0.058Pharmacologic treatments:G1 vs. G2: 41Difference: OR=0.85 (0.67-1.09)ICC: 0.010 Physiotherapy:G1 vs. G2: 6Difference: OR=0.88 (0.34-2.32)ICC: 0.195Referrals:G1 vs. G2: 111Difference: OR=1.13 (0.79-1.63)ICC: 0.002 |  |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Junghans et al., 200718 | G1: Conventional guideline (increase reach)G2: Ratings about specific patients in vignettes (increase motivation) | Behavior (applicable for clinicians) Agreement of physicians’ recommendations with those made by 2 independent expert panels. Agreement was defined by a physician recommending definitely or probably doing a test ratedappropriate by the panels or by recommending definitely or probably not doing a test rated inappropriate. An unsure recommendation was interpreted as disagreement | Baseline and immediate posttestSelf-reported decision | N=292G1: 147G2: 145 | % that had an appropriate Baseline Exercise ECGG1: 42.7%G2: 43.5%AngiographyG1: 64.9%G2: 64%PostinterventionExercise ECG decisionG1: 43.5%G2: 54.9%AngiographyG1: 64%G2: 79.9% | Between-arm comparisons Odds Ratio (95%CI), P valuePatient-specific ratingsExercise ECGOR: 1.57 (1.36,1.82), P<0.001AngiographyOR: 2.24 (1.90,2.62), P<0.001Convential guidelinesExercise ECGOR: 0.96 (0.83,1.11), P<0.001AngiographyOR: 1.05 (0.87,1.26), P<0.001 | NRRandom-effects logistic regression analysis allowing for intracluster correlation |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Kennedy et al., 200319 | G1: Control (not abstracted)G2: Information (increase reach)G3: Interview (increase motivation) | Clinical outcomes (applicable for general public/patients) Health Status. Measured using the 36-item short-form general health survey (SF-36) instrument  | 6 and 12 month data merged together to for a “short-term” followup dataset. 24 months is labeled “long-term”Self-report | Overall=595G2: 198 (97% completed)G3: 208 (94% completed) | NR | Adjusted mean between-group difference (G2 vs. G3) at short-term followup (95% CI)Physical function:0.0 (-3.5/3.5)Social function:-2.7 (-7.7/2.2)Role physical: -2.5 (-10.3/5.2)Role emotional: -4.6 (-13.9/13.7)Mental health: -2.5 (-6.6/1.6)Energy: -2.5 (-6.9/2.0)Pain=-1.3 (-6.4/3.9)General health perception:-0.8 (-5.2/3.5)Adjusted mean between-group difference (G2 vs. G3) at long-term followup (95% CI)PF: -1.5 (-5.2/2.3)SF: 3.2 (-1.6/8.1)RP: 5.7 (-2.1/13.6)RE: 7.1 (-2.0/16.4)MH: 1.1 (-2.8/4.9)Energy: 0.4 (-5.0/5.7)Pain: 0.3(-5.2/5.7)GHP: -0.1 (-4.0/3.7) | Consultant sex; Consultant year of qualification; Age; Baseline health status score; Baseline menorrhagia severity; Baseline knowledge; Duration of problem; Length of followupMultiple regression |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| King et al., 200720 | G1: Attention control (not abstracted)G2: Counselor via phone (increase motivation)G3: Automated counselor via phone (increase reach) | Clinical outcomes (applicable for general public/patients) Physical activity behavior. Assessed using the Stanford 7-Day PAR. The PAR-based mean daily energy expenditure estimates from MOD activity was the primary study outcome measure (#1 below).Measures: (1) PAR energy expenditures in moderate-intensity or more vigorous (MOD+) activity, kcal/kg-1/day-1(SD)(2) PAR minutes of MOD+ activity/wk, Mean (SD)(3) PAR days/wk engaged in ≥ 30 min of MOD+ activity, Mean(SD) | Baseline, 6, 12 monthsSelf report | N=189G2: 66G3: 61 | PAR kcal/kg-1/day-1 (SD)BaselineG2: 0.85 (1.0)G3: 0.80(1.2)6 monthsG2: 1.69 (1.1)G3: 1.53 (1.3)12 monthsG2: 1.64 (1.3)G3: 1.56 (1.4)PAR min. of MOD+ activity/wkBaselineG2: 99.7 (147.6)G3: 78.4 (113.3)6 monthsG2: 170.7 (104.4)G3: 180.0 (230.6)12 monthsG2: 177.8 (133.6)G3: 157.3 (142.9)PAR days/wk engaged in ≥ 30 min of MOD+BaselineG2: 1.4(1.5)G3: 1.1 (1.6)6 monthsG2: 3.2 (2.0)G3: 2.6 (2.3)12 monthsG2: 3.1 (2.0)G3: 2.8 (2.5) | Changes across 6 months PAR kcal/kg-1/day-1G2 vs. G3: 0.11\*p=0.73PAR min. of MOD+ activity/weekG2 vs. G3: 9.3\*, p=0.65PAR days/week engaged in ≥ 30 min of MOD+G2 vs. G3: 0.3\*, p=NR but it was nsChanges across 12 monthskcal/kg-1/day-1 (SD)G2 vs. G3=0.08\*, p=0.60PAR min. of MOD+ activity/weekG2 vs. G3: 20.5\*, p=0.66PAR days/week engaged in ≥ 30 min of MOD+G2 vs. G3: 0.3\*, p=NR but it was ns | Baseline levels of dependent variablesGenderANCOVA |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Laprise et al., 200921 | G1: CME (increase ability)G2: CME + practice enablers and reinforcers (multicomponent) | Behavior (applicable for clinicians) Adherence to guidelines. Proportion of patients, undermanaged at baseline for at least 1 recommendation, for which study physicians undertook at least 1 preventive-care action in the first visit following patients’ recruitment in the study. A binary outcome was used. | Baseline and followup (exact time not specified)Retrospective audit information | G1: 948G2: 1396 | Baseline # of undermanaged rec/patient, n (%)NoneG1: 172 (18.1%)G2: 263 (18.8%)1G1: 313 (33.0%)G2: 452 (32.4%)2G1: 282 (29.7%)G2: 339 (32.2%)3-5G1: 181 (19.1%)G2: 232 (16.6%)FollowupImplementation of at least 1 of the secondary outcomes G1: 225 (29.0%)G2: 474(41.8%) | Odds Ratio (95% CI)1.78 (1.32-2.41) | NRLogistic regression |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Lien et al., 2007,22Svetkey et al., 2003,23Young et al., 200924 | G1: Advice only (increase reach)G2: Advice + behavioral counseling using established intervention (multicomponent)G3: Established intervention + DASH dietary recommendations (multicomponent) | Clinical outcomes (applicable for general public/patients) Change in BP. SBP was the appearance of the first Korotkoff sound; DBP was the disappearance of Korotkoff sounds. At each assessment point, BP was the mean of all of the available measurements.Per criteria: good levels of BP are ≥130/≥85 mm Hg | Baseline and at 6-month followup. 2 BP measurements separated by 30 seconds were obtained and averaged/Objective measurement | Overall N=671G1: 273G2: 188 (71% of randomized participants)G3: 210 (78% of randomized participants) | Reduction from baseline to 6 month followup for SBPG1: 6.6 (9.2) mm HgG2: 10.5 (10.1) mm HgG3: 11.1 (9.9) mm HgReduction from baseline to 6 month followup for DBPG1: 3.8 (6.3) mm HgG2: 5.5 (6.7) mm HgG3: 6.4 (6.8) mm Hg | On Treatment AnalysisChange (Δ) in BP between-group differences(Mean and CI)Δ in G2 minus Δ in G1: -4.9 (-6.6 to -3.3)P<0.001Δ in G3 minus Δ in G1: -5.7 (-7.2 to -4.1)p<0.001Δ in G3 minus Δ in G2: -0.7 (-2.5 to 1.0)p=0 .41Change(Δ) in Diastolic BP between-group differences(Mean and CI)ΔG2-ΔG1: -2.5 (-3.7 to -1.3), p<.001ΔG3 - ΔG1:: -3.2 (-4.3 to -2.0), p<.001ΔG3-ΔG2: -0.7 (-1.9 to 0.6), p=0.29 | Age, gender, raceGeneral linear modeling |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Lien et al., 2007,22Svetkey et al., 2003,23Young et al., 200924 (continued) |  |  |  |  |  | Intention to Treat AnalysisSBPΔG2-ΔG1: -3.7 (-5.3 to -2.1), P<0.001ΔG3-ΔG1: -4.3 (-5.9 to -2.8)P<0.001ΔG3-ΔG2: -0.6 (-2.2 to 0.9)p=0.43DBPΔG2-ΔG1: -1.7 (-2.8 to -.06), P<0.01ΔG3-ΔG1: -2.6 (-3.7 to -1.5), P<0.001ΔG3-ΔG2: -0.9 (-2.0 to 0.2), p=0.11 |  |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Marcus et al., 200925 | G1: Contact control treatment delayed group (not abstracted)G2: Telephone-based individualized feedback (increase motivation)G3: Print-based individualized feedback (increase reach) | Behavioral intentions to use or apply the evidenceInstrument developed for behavioral processes of change for exercise by Marcus, et al. | Baseline, 6 and 12 monthsSelf-report | NR | G1: 6 Months: 2.43; 12 Months: 2.41G2: 6 Months: 3.08; 12 Months: 2.82 G3: 6 Months: 2.95; 12 Months: 2.91 | Difference: 6 Months: F=24.01; 12 Months: 13.7395% CI: NR6 Months: p<0.000112 Months: p<0.0001 | YesAnalysis of covariance, adjusted for treatment effects for gender and seasonal differences. When overall test of between-groups differences was significant at the >05 level, the source of these differences was examined further using single-degree-of-freedom contrasts that compared the active treatment arms with each other as well as with the treatment delayed group. |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Maxwell et al.,201026 | G1: Control (not abstracted)G2: Educational session + letter to provider (multicomponent) G3: Educational session + letter to provider + FOBT kit (multicomponent)  | Clinical outcomes (applicable for general public/patients) Self-reported screeningNOTE: participants w/out outcome data were classified as not-screened | 6 monthsSelf-reportNOTE: subsample validated by physician report for 141 patients | 542, but imputed information on 110 of them (20%) | G1: 14 (9%)G2: 45 (25%)G3: 61 (30%) | G2 v. G3 Difference: 5% 95% CI: NRp=NROR G2 to G1 (95% CI): 3.7 (1.8, 7.5)P<0.001OR G3 to G1 (95% CI): 4.9 (2.4, 9.9)P<0.001 | Adjusted for baseline imbalance (e.g. language of baseline interview) and clustering within organization and sessionMixed effects model w/random intercepts for organizations and session within organization |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Murtaugh et al.,200527 | G1: Usual care (not abstracted)G2: Basic intervention email reminder (increase reach)G3: Augmented intervention of email reminder + package of supporting materials (multicomponent) | Discussions about the evidence% giving patients global instructions about signs and symptoms of CHF | Chart-review of subsequent RN visit, within 45 days of initial intakechart | 354 | Overall N=354G1: 42.1%G2: 53.9%G3: 59.5% | Difference G2-G1: 11.8%, p=0.070 Difference G3-G1: 17.4%, p=0.007Difference G3-G2: 5.6%\*, CI and p=NR | Sociodemo-graphic variables of the RN (age, gender, race/ethnicity), Rn employment status, educational level and caseload; average baseline characteristics of patients care for by each RN including health, functional status; geographic area where nurse provided carePredictive multivariate modeling |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Paradis et al.,201128 | G1: Paper handouts (increase reach)G2: Educational DVD (increase reach) | Knowledge about the evidenceKnowledge of infant development; measured using a subset of 14 questions from the 58-item Knowledge of Infant Development.Inventory that pertained most to newborns. Answers were scored as correct or incorrect. Parents could answer each statement with “agree,” “disagree,” or “not sure,” with uncertain answers considered incorrect. | 2 weeks postinterventionSelf-report | Overall N=137G1: 67G2: 70 | Mean change in Knowledge (from baseline):G1: -0.06 (S =2.99)G2: 0.00 (SD=2.53)NOTE: baseline scoresG1: 10.2G2: 9.4 | G2-G1: -0.06p=0.90 | Hispanic ethnicity, babies born at outside hospital, #exclusively breast fedmultivariate regression analysis |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Partin et al., 200429 | G1: Usual care (not abstracted)G2: Pamphlet (increase reach)G3: Video (increase reach) | Knowledge about the evidenceCaP screening knowledge, as assessed from a 10-item index. The index score is calculated as the summative number of correct responses to 10 knowledge questions. “Don’t know” responses are treated as incorrect. Index scores range from 0 to 10 | 1 week post target appointmentSelf-report | N=893G2: 295G3: 308 | CaP knowledge index: mean scores:G2: 7.3G3: 7.4Other CaP screening knowledge items (Unadjusted)PSA predictive valueG2: 0.22G3: 0.28Natural HistoryG2: 0.61G3: 0.62Treatment efficacyG2: 0.20G3: 0.19Expert disagreementG2: 0.18G3: 0.29 | CaP Index: G2 vs. G3: 0.1\*, p=NROther CaP knowledge items:PSA predictive valueG2 vs. G3: 0.06\*, nsNatural HistoryG2 vs. G3: 0.01\*, nsTreatment efficacyG2 vs. G3: 0.01\*, nsExpert disagreementG2 vs. G3: .11\*, p=0.009 | Baseline characteristicsLogistic regression and standard linear regression |

Table F-5. Key question 2 studies first outcome (continued)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Rahme et al., 200530 | G1: No treatment control (not abstracted)G2: Decision tree (increase ability)G3: Workshop (increase ability)G4: Workshop + decision tree (multicomponent) | Behavior (applicable for clinicians) Retrospective assessment of prescribing. A score of zero or 1 was given to every prescription that was judged as adequate according to the decision tree. | 5-months prior to intervention/5-months postinterventionObjective measurement: Data were obtained from the Provincial Health Care Funddatabase | N of prescriptionsPreinterventionTotal: 5318G2: 1569G3:536G4: 1776PostinterventionTotal: 4610G2: 1317G3: 450G4: 1634 | PreinterventionG2: 51%G3: 51%G4: 58%PostinterventionG2: 54%G3: 56%G4: 62% | Only compared groups to control:Ratio of OR (95%CI)G2 vs. CRL: 1.0 (0.6/1.7)G3 vs. CTRL: 5.7 (0.4/26.9)G4 vs. Ctrl: 1.9 (0.9/3.8)Within-group differences (post vs. pre)G2: 1.3 (0.9-1.8)G3: 1.6 (0.9-1.8)G4: 1.8 (1.3-2.4) | Risk of gastrointestinal even. Additional analyses: Per protocol analysis excluding physicians in the workshop and workshop and tree group who did not attend theworkshopMultilevel Bayesian hierarchical model |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Rebbeck et al., 200631 | G1: Dissemination of guidelines by mail (increase reach)G2: Implementation group (multicomponent) | Clinical outcomes (applicable for general public/patients) Disability - measured using the Functional Rating Index whichmeasures disability due to back and neck pain. It is a 10-item questionnaire with a 5-point response scale for each item. Summation of the 10 items yields a score ranging from 0 to 40, with higher scores indicating greaterperceived disability. | Baseline, month 1.5, month 3, month 6, month 12Self-report | Baseline:G1: 28G2: 71Month 1.5G1: 24G2: 64Month 3G1: 23G2: 59Month 6G1: 19G2: 56Month 12G1: 26G2: 67 | Baseline:G1: M=23.9, SD=8.6G2: 22.8, SD=8.2Month 1.5G1: 14.8, SD=8.8G2: 15.8, SD=8.7Month 3G1: 12.8, SD=8.5G2: 12.7, SD=8.5Month 6G1: 11.3, SD=9.3G2: 11.5, SD=9.0Month 12G1: 12.0, SD=10.4G2: 11.4, SD=8.9 | BaselineDifference (G1 vs. G2): 1.0\*95% CI: -6.1 to 4.1p=0.68Month 1.5Difference (G1 vs. G2): 1.0\*95% CI: -5.1 to 7.1p=0.74Month 3Difference (G1 vs. G2): 0.1\*95% CI: -5.8 to 5.7p=0.99Month 6Difference (G1 vs. G2): 0.1\*95% CI: -6.4 to 6.7p=0.97Month 12Difference (G1 vs. G2): 0.6\* 95% CI: -7.8 to 6.6p=0.87 | NRT-test, adjusted using methods for cluster-randomized trials |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Rimer et al., 200132 | G1: No treatment control/usual care (not abstracted) G2: Tailored print (increase reach)G3: Tailored print + telephone counseling (multicomponent) | Health-related decisions or behavior (applicable for general public/patients) Receipt of a mammogram yearly | Interview 15 months after receiving interventionSelf-report | Overall N=1127G1: 412G2: 392G3: 323 | Baseline- percent up-to-date NRFollowup mammogram in 15 months:G1: 260\*, 63%G2: 239\*, 61%G3: 223\*, 69% | Overall p=0.066G2-G1:- 2%\*, NSG3-G1: 6%\*, NSG3-G2: 8%\*, NS | NonePearson chi-squared; F-test |
| Rycroft-Malone201233 | G1: Standard dissemination via postal mail (increase reach)G2: Standard dissemination + a Web-based education package championed by an opinion leader (Multicomponent)G3: Standard dissemination + plan-do-study-act (Multicomponent) | Clinical:Duration of fluid fast prior to induction of anaesthesia— Asked patients preoperatively when they last drank and postoperatively when they had a first drink. This information was also checked against reported information in their notes. | Data were collected 4 times preintervention and 4 times postintervention; up to 2 months interval between data collection pointsSelf-report and objective measurement | Preintervention timepoints: N=1,440Postintervention timepoints: N=1,761 | Preintervention=G1: M=10.1 hours (95% CI: 7.74, 12.5)G2: M=8.83 hours (95% CI: 7.27, 10.4)G3: M=9.86 hours (95% CI: 8.02, 11.7)Postintervention=G1: M=8.97 hrs. (95% CI: 6.77, 11.2)G2: M=8.25 hrs. (95% CI: 6.92, 9.58)G3: M=8.90 hrs. (95% CI: 7.28, 10.5) | Postintervention=G1: p=0.160G2: p=0.814G3: p=0.714Postintervention DifferencesG2-G1: -0.72\*G3-G1: -0.07\*G3-G2: 0.65\*No significant difference in the mean fluid fast time in the postintervention period between the intervention groups (p=0.751).Effect size: G2 vs. G1: 0.33 (95% CI −0.78, 1.42); Effect size: G3 vs. G1: 0.12 (95% CI −0.97, 1.21). No effect size reported for G3 vs. G2. | NRANOVA |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Simon et al., 200534 | G1: Mailed educational materials (increase reach)G2: Individual academic detailing (increase ability)G3: Group academic detailing (increase ability)  | Behavior (applicable for clinicians) Change in guideline adherence - A patient was considered to have received a diuretic or beta blocker if he or she received at least one prescription for either drug during the specified time frame. | Baseline, 1-year followup, 2-year followupObjective measurement (prescription via claims) | Baseline: 3692Year 1: 3556Year 2: 2572 | Percent increaseYear 1G1: 6.2%G2: 12.5%G3: 13.2%Year 2G1: 10.1%G2: 14.7%G3: 11.3% | Year 1G1 vs. G3: 7%\*Difference: Diuretic or beta blocker use was more likely in G3 than G1 (OR, 1.40)95% CI: 1.11-1.76p=NRG1 vs. G2: 6%\*Difference: Diuretic or beta blocker use was more likely in G2 than G1 (OR, 1.30)95% CI: 0.95-1.79p=NRYear 2G1 vs. G2: 4.6%Difference: Diuretic or beta blocker use was more likely in G2 than G1 (OR, 1.22)95% CI: 0.92-1.62p=NSG1 vs. G3: 1.2%Difference: Diuretic or beta blocker use was not more likely in G3 than G1 (OR, 1.06)95% CI: 0.80-1.39p=NR | Differences among individual patientsLogistic regression |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Soler et al., 201035 | G1: Control (not abstracted)G2: Training session on the SEPAR guidelines (increase ability)G3: G2 + portable-device for spirometry (multicomponent) | Clinical outcomes (applicable for general public/patients) Changes in COPD stratification and diagnostic testing according to SEPAR guidelines | Adequate COPD classification according to SEPAR guidelinesChart | G1: 1481,G2: 2119, G3: 5556 (Phase II) | G1: 60.1% G2: 69% G3: 88.5%  | Absolute difference in accurate stratification:G2-G1: 8.9%, p=NRG3-G1: 28.4%, p=NR | Baseline variableWithin group changes in the three groups assessed by ANCOVA; b/t group p-values NR |
| Sullivan et al., 201036 | G1: VA guidelines (increase reach)G2: COPE: web-based education program (increase ability) | Knowledge about the evidenceKnowledge of the role of opioids in CNCP was assessed with 9 multiple choice board-style questions developed by the authors covering opioid pharmacology, controlled substance regulations, and diagnostic challenges (range 0-9) | Pretraining and immediately posttrainingSelf-report | N=159 | G1: Pretest: M=5.7, SD=1.3Posttest: M=6.1, SD=1.3G2:Pretest: M=5.9, SD=1.4Posttest: M=8.4, SD=0.8  | G1 vs. G2 (posttest): 2.3\*Difference: t = 12.41, p<0.001Difference: Significant time by group interaction (different rates of change over time)(Wald χ2 = 72.06, df = 1, p<0.00001) | Gender; year of residency (no effects observed for these variables)Independent group t tests; intention-to-treat analyses using the GEE |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Watson et al., 200237 | G1: Guideline materials by postal mail (increase reach)G2: EO session and guidelines (increase ability)G3: CPE session and guidelines (increase ability)G4: Guidelines + EO and CPE (multicomponent) | Behavior (applicable for clinicians) Appropriateness of OTC management of vulvovaginal candidiasis by community pharmacy staff: measured by the proportion of visits resulting in an appropriate sale or non-sale of an anti-fungal product (based upon the guideline recommendations) | Ten local amateur actors conducted simulated patient visits with 7 scenarios. Each pharmacy was visited 7 times; twice before the intervention between March and April 2000 and five times after the intervention between July and November 2000. No pharmacy received more than one visit per month. Following each visit, the actor completed an assessment form, recording details of their visit, including sale/no sale, product details and the number of staff involved in the interaction.Direct observation and assessment | Baseline: G1: 27 visits;G2: 27 visits; G3: 27 visits; G4: 27 visits Followup: G1: 69 visits G2:69 visits G3: 69 visitsG4: 69 visits | Baseline: Appropriate Outcome: G1: 10 (37%);G2: 11 (41%); G3: 10 (37%)G4: 10 (37%) Followup: Appropriate Outcome: G1: 24 (35%); G2: 32 (46%); G3: 25 (36%);G4: 24 (35%)  | Difference:G2 EO vs. G1 no EO (41% vs. 36%) G3 CPE compared with G1 no CPE (36% vs. 41%) No statistically significant effect of G2 EO (OR = 1.13) nor CPE (OR=0.88) on appropriateness95% CI: EO: 0.52-2.45; CPE: 0.41-1.91p=NR | Clustering of visits and baseline appropriatenessGEE model |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Wetter et al., 200638 | G1: Single standard telephone-counseling session (increase reach)G2: Multiple enhanced telephone counseling sessions (multicomponent) | Health-related decisions or behavior (applicable for general public/patients) Smoking abstinence: self-report of no smoking during the previous 7 days | 5- and 12-week followup assessmentsSelf-report | NR | % abstinentWeek 5:G1: 11.7% G2: 20.3%Week 12:G1: 20.5%G2: 27.4% | Treatment effect was significant Difference: OR = 3.895% CI: NRp=0.048G1 vs. G2Week 5:8.6%Week 12:6.9% | Time; demographic and tobacco-related variablesGeneralized linear mixed model regression |
| Wolters et al., 200539 | G1: Control mailed guidelines (increase reach)G2: Intervention involving package for learning, supporting materials, decision tree, and information leaflets for patients (multicomponent) | Behavior (applicable for clinicians) Adherence to guidelines. Appropriate request of PSA. Classified patients in terms of those that met certain indications. Number of PSA ordered in patients with and without indications  | Up to 1 year postinterventionProspective recording of patient data and management immediately after consultation with eligible patient | Patient With IndicationsN=69G1: 39G2: 30Patients Without IndicationsN=118(n not reported by groups) | Patient With Indications who had PSA’s ordered ( in line with guideline)G1: 22, 66.7%G2: 15, 50%Patient w/o indications who had PSA’s ordered (non-adherence with guideline)G1: 53.6%G2: 37.1% | Patients with no indicationsG1 vs. G2: 16.7%Chi sq p=00.16People w/o indicationsG1 vs. G2: 16.5%Chi-sq p=00.07 | Age, group allocation, IPSS and BSChi square |

Table F-5. Key question 2 studies first outcome (continued)

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| **Author,****Year** | **Groups**  | **Outcome #1, Exact Measure Used**  | **Timing of Measurement,****Data Source**  | **N analyzed for This Outcome**  | **Results by Group** | **Differences in Groups**  | **Covariates Controlled for in Analysis,****Statistical Methods Used** |
| Wright et al., 200840 | G1: Standardized lecture by expert opinion leader (increase motivation)G2: Standardized lecture by expert opinion leader + academic detailing and a toolkit (multicomponent) | Clinical outcomes (applicable for general public/patients) Mean # of lymph nodes assessed in patients with stage II colon cancer | 360 days before intervention, 360 days after interventionNR | NR | G1: Mean # of nodes assessed: 14.9G2: Mean # of nodes assessed: 18.1 | Difference between G1 and G2 in mean # of nodes: 3.2Difference: Significant increase in the mean # of lymph nodes assessed and the proportion of cases with 12 or more lymph nodes retrieved for G1 and G295% CI: NRp=0.001No additional increase was found when the opinion leader received academic detailing and the toolkit (G2) | NRLogistic regression |

\* calculated by reviewer
**Abbreviations:** AF = audit and feedback; AHR = airway hyper-responsiveness; ANCOVA = Analysis of covariance; ANOVA = ANalysis Of Variance; b/t = between; BP = blood pressure; BS=Bother score; CAL = computer-assisted learning; CaP = Cancer of the Prostate; CHF = congestive heart failure; CI = confidence interval; CME = continuing medical education; COPE = Compassionate Options for Progressive Eldercare; CPE = continuing professional education; CRL = control; Ctrl = control; d.f. = degrees of freedom; DASH = Dietary Approaches to Stop Hypertension; DBP = diastolic blood pressure; DVD = optical disc storage format; ECG = electrocardiogram; EMR = electronic medical record; EN=enteral nutrition; EO = Education Outreach; FEV% = Forced Percentual Expiratory Volume; FOBT = fecal occult blood test; G = group; GEE = generalized estimating equations method; GHP = ;GP = general practitioner; HDL = high-density lipoprotein; HLM=Hierarchical Linear Modeling version 5.04, Scientific Software International; ICC = intracluster correlation coefficient; ICU = intensive care unit; IPSS=International Prostate Symptom Score; IQR = interquartile ratio; IRR = \_ incidence rate ratio; ITT = intention to treat; kcal/kg-1 = kilocalorie/kilogram; LDL = low-density lipoprotein; LHA = lay health advisor; LUTS=lower urinary tract symptoms; M=Mean; mcg = micrograms; MH = \_; mm Hg = millimeter of mercury; MOD = more of moderate or more vigorous; NR = not reported; OR = odds ratio; OTC = Over the counter; PAR = Stanford 7-Day Physical Activity Recall; PD20 = Bronchial responsiveness; PDA = personal digital assistant; PF = \_; PSA = prostate-specific antigen; RE = \_; RN=registered nurse; RP = \_; SBP = systolic blood pressure; SD = standard deviation; SE = standard error; SEPAR = Spanish Society of Pulmonology; SF-36 = Short Form (36) Health Survey; T/F = true/false; TPV = tailored and targeted print and video; VA = Veterans Administration; vs. = versus; WCB = Workers Compensation Board.