

APPENDIX A. SEARCH STRATEGIES

KEY QUESTION 1

Database: MEDLINE (via Ovid)

Search date: 10/8/2019

1	((coach or coaches or coaching or mentor or mentors or mentorship or leader or leaders or leadership) and transformational).ti,ab.	953
2	((coach or coaches or coaching) adj3 (practice or unit or "health system" or "health systems" OR clinical OR QI OR "quality improvement" OR interprofessional OR "practice enhancement")).ti,ab.	402
3	((advisor or advisors) adj4 (practice or "health system" or "health systems" or unit or "practice enhancement")).ti,ab.	37
4	((assistant or assistants) adj4 "practice enhancement").ti,ab.	6
5	(external adj4 internal adj4 (facilitator or facilitators or facilitation)).ti,ab.	46
6	("practice champion" or "practice champions" or "practice moderator" or "practice moderators" or "coach strategy" or "coaching strategy" or "coach strategies" or "coaching strategies" or "practice facilitator" or "practice facilitators" or "practice facilitation" or "project facilitator" or "project facilitators" or "project facilitation" or "change agent" or "change agents" or "facilitation intervention" OR "implementation facilitator" OR "implementation facilitators" OR "implementation facilitation" OR "nurse facilitator" OR "nurse facilitators" OR "nurse facilitation").ab,ti.	1359
7	1 or 2 or 3 or 4 or 5 or 6	2769
8	exp Evaluation Studies as Topic/	1016800
9	exp Cohort Studies/	1906026
10	exp Longitudinal Studies/	127276
11	randomized controlled trial.pt.	491034
12	controlled clinical trial.pt.	93308
13	comparative study.pt.	1841804
14	clinical trial.pt.	518304
15	evaluation studies.pt.	246280
16	(randomized or randomised or randomization or randomisation or placebo or randomly or trial or groups or "clinical trial" or "clinical trials" or "evaluation study" or "evaluation studies" or "intervention study" or "intervention studies" or cohort or longitudinal or longitudinally or prospective or prospectively or "follow up" or "comparative study" or "comparative studies" or nonrandom or "non-random" or nonrandomized or "non-randomized" or nonrandomised or "non-randomised").ti,ab.	4415642
17	(quasi-experiment* or quasiexperiment* or quasirandom* or quasi-random* or quasi-control* or quasicontrol*).ti,ab.	17600
18	("pre-post" or posttest or "post-test" or pretest or "pre-test" or "repeated measure" or "repeated measures").ti,ab.	68961
19	(before and after).ti,ab.	712412
20	(before and during).ti,ab.	373111
21	("time series" and interrupt*).ti,ab.	2792
22	("time points" and (multiple or one or two or three or four or five or six or seven or eight or nine or ten or month or monthly or day or daily or week or weekly or hour or hourly)).ti,ab.	60555
23	8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22	7628476
24	7 and 23	944

Database: EMBASE (via Elsevier)**Search date: 10/8/2019**

1	((coach:ab,ti or coaches:ab,ti or coaching:ab,ti or mentor:ab,ti or mentors:ab,ti or mentorship:ab,ti or leader:ab,ti or leaders:ab,ti or leadership:ab,ti) and transformational:ab,ti)	1002
2	((coach or coaches or coaching) NEAR/4 (practice or unit or 'health system' or 'health systems' OR clinical OR QI OR 'quality improvement' OR interprofessional OR 'practice enhancement')):ab,ti	698
3	((advisor or advisors) NEAR/4 (practice or 'health system' or 'health systems' or unit or 'practice enhancement')):ab,ti	53
4	((assistant or assistants) NEAR/4 'practice enhancement'):ab,ti	6
5	(external NEAR/4 internal NEAR/4 (facilitator or facilitators or facilitation)):ab,ti	53
6	('practice champion' or 'practice champions' or 'practice moderator' or 'practice moderators' or 'coach strategy' or 'coaching strategy' or 'coach strategies' or 'coaching strategies' or 'practice facilitator' or 'practice facilitators' or 'practice facilitation' or 'project facilitator' or 'project facilitators' or 'project facilitation' or 'change agent' or 'change agents' or 'facilitation intervention' OR 'implementation facilitator' OR 'implementation facilitators' OR 'implementation facilitation' OR 'nurse facilitator' OR 'nurse facilitators' OR 'nurse facilitation'):ab,ti	1592
7	1 or 2 or 3 or 4 or 5 or 6	3358
8	'randomized controlled trial'/exp OR 'crossover procedure'/exp OR 'double blind procedure'/exp OR 'single blind procedure'/exp OR randomization:ti,ab OR randomisation:ti,ab OR randomized:ti,ab OR randomised:ti,ab OR randomly:ti,ab OR crossover:ti,ab OR 'cross over':ti,ab OR placebo:ti,ab OR 'double blind':ti,ab OR 'double blinded':ti,ab OR 'single blind':ti,ab OR 'single blinded':ti,ab OR 'clinical study'/exp OR 'clinical trial':ti,ab OR 'clinical trials':ti,ab OR 'controlled study'/exp OR 'evaluation study'/exp OR 'evaluation study':ti,ab OR 'evaluation studies':ti,ab OR 'intervention study'/exp OR 'intervention study':ti,ab OR 'intervention studies':ti,ab OR 'case control study'/exp OR 'case control':ti,ab OR 'cohort analysis'/exp OR cohort:ti,ab OR cohorts:ti,ab OR longitudinal:ti,ab OR longitudinally:ti,ab OR prospective:ti,ab OR prospectively:ti,ab OR retrospective:ti,ab OR 'follow up'/exp OR 'follow up':ti,ab OR 'comparative effectiveness'/exp OR 'comparative study'/exp OR 'comparative study':ti,ab OR 'comparative studies':ti,ab	15801633
9	'pre post':ti,ab OR prepost:ti,ab OR 'post test':ti,ab OR posttest:ti,ab OR pretest:ti,ab OR 'pre test':ti,ab OR 'quasi experiment':ti,ab OR quasiexperiment:ti,ab OR 'quasi experimental':ti,ab OR quasiexperimental:ti,ab OR quasirandom:ti,ab OR 'quasi random':ti,ab OR 'quasi control':ti,ab OR quasicontrol:ti,ab OR 'repeated measure':ti,ab OR 'repeated measures':ti,ab	114686
10	('time series':ti,ab AND interrupt:ti,ab) OR (before:ti,ab AND after:ti,ab) OR (before:ti,ab AND during:ti,ab)	1250928
11	'time points':ti,ab AND (multiple:ti,ab OR one:ti,ab OR two:ti,ab OR three:ti,ab OR four:ti,ab OR five:ti,ab OR six:ti,ab OR seven:ti,ab OR eight:ti,ab OR nine:ti,ab OR ten:ti,ab OR month:ti,ab OR monthly:ti,ab OR day:ti,ab OR days:ti,ab OR daily:ti,ab OR week:ti,ab OR weekly:ti,ab OR hour:ti,ab OR hourly:ti,ab)	102813
12	8 OR 9 OR 10 OR 11	16230359
13	7 AND 12	1176

Database: CINAHL Complete (via EBSCO)**Search date: 10/8/2019**

1	TI (coach or coaches or coaching or mentor or mentors or mentorship or leader or leaders or leadership) OR AB (coach or coaches or coaching or mentor or mentors or mentorship or leader or leaders or leadership)	68060
2	TI (transformational) OR AB (transformational)	1888
3	1 AND 2	1131
4	TI ("practice coach" OR "practice coaches" OR "practice coaching" OR "unit coach" OR "unit coaches" OR "unit coaching" OR "health system coach" OR "health system coaches" OR "health system coaching" OR "clinical coach" OR "clinical coaches" OR "clinical coaching" OR "QI coach" OR "QI coaches" OR "QI coaching" OR "quality improvement coach" OR "quality improvement coaches" OR "quality improvement coaching" OR "interprofessional coach" OR "interprofessional coaches" OR "interprofessional coaching" OR "practice enhancement coach" OR "practice enhancement coaches" OR "practice enhancement coaching" OR "practice enhancement coaches") OR AB TI ("practice coach" OR "practice coaches" OR "practice coaching" OR "unit coach" OR "unit coaches" OR "unit coaching" OR "health system coach" OR "health system coaches" OR "health system coaching" OR "clinical coach" OR "clinical coaches" OR "clinical coaching" OR "QI coach" OR "QI coaches" OR "QI coaching" OR "quality improvement coach" OR "quality improvement coaches" OR "quality improvement coaching" OR "interprofessional coach" OR "interprofessional coaches" OR "interprofessional coaching" OR "practice enhancement coach" OR "practice enhancement coaches")	33
5	TI (advisor OR advisors) OR AB (advisor OR advisors)	6145
6	TI (practice or "health system" or "health systems" or unit or "practice enhancement") OR AB (practice or "health system" or "health systems" or unit or "practice enhancement")	514841
7	5 AND 6	496
8	TI (assistant or assistants) OR AB (assistant OR assistants)	14849
9	TI ("practice enhancement") OR AB ("practice enhancement")	26
10	8 AND 9	4
11	TI (external AND internal) OR AB (external AND internal)	10758
12	TI (facilitator or facilitators or facilitation) OR AB (facilitator or facilitators or facilitation)	15928
13	11 AND 12	154
14	TI ("practice champion" or "practice champions" or "practice moderator" or "practice moderators" or "coach strategy" or "coaching strategy" or "coach strategies" or "coaching strategies" or "practice facilitator" or "practice facilitators" or "practice facilitation" or "project facilitator" or "project facilitators" or "project facilitation" or "change agent" or "change agents" or "facilitation intervention" OR "implementation facilitator" OR "implementation facilitators" OR "implementation facilitation" OR "nurse facilitator" OR "nurse facilitators" OR "nurse facilitation") OR AB ("practice champion" or "practice champions" or "practice moderator" or "practice moderators" or "coach strategy" or "coaching strategy" or "coach strategies" or "coaching strategies" or "practice facilitator" or "practice facilitators" or "practice facilitation" or "project facilitator" or "project facilitators" or "project facilitation" or "change agent" or "change agents" or "facilitation intervention" OR "implementation facilitator" OR "implementation facilitators" OR "implementation facilitation" OR "nurse facilitator" OR "nurse facilitators" OR "nurse facilitation")	1103
15	3 OR 4 OR 7 OR 10 OR 13 OR 14	2896
16	(MH "Randomized Controlled Trials+") OR TI ("randomized controlled trial" OR "controlled clinical trial" OR "randomized" OR "randomization" OR	775384

	"randomised" OR "randomisation" OR "randomly" OR "trial" OR "groups" OR "comparative study" OR "nonrandom" OR "non-random" OR "nonrandomized" OR "non-randomized" OR "nonrandomised" OR "non-randomised" OR quasi-experiment* OR quasiexperiment* OR quasirandom* OR quasi-random* OR quasi-control* OR quasicontrol* OR (controlled AND (trial OR study)) OR "pre-post" OR "posttest" OR "post-test" OR "pretest" OR "pre-test" OR "repeated measure" OR "repeated measures" OR ("time series" AND "interrupt") OR ("time points" AND (multiple OR one OR two OR three OR four OR five OR six OR seven OR eight OR nine OR ten OR month OR monthly OR day OR daily OR week OR weekly OR hour OR hourly)) OR (before AND after) OR (before AND during)) OR AB ("randomized controlled trial" OR "controlled clinical trial" OR "randomized" OR "randomization" OR "randomised" OR "randomisation" OR "randomly" OR "trial" OR "groups" OR "comparative study" OR "nonrandom" OR "non-random" OR "nonrandomized" OR "non-randomized" OR "nonrandomised" OR "non-randomised" OR quasi-experiment* OR quasiexperiment* OR quasirandom* OR quasi-random* OR quasi-control* OR quasicontrol* OR (controlled AND (trial OR study)) OR "pre-post" OR "posttest" OR "post-test" OR "pretest" OR "pre-test" OR "repeated measure" OR "repeated measures" OR ("time series" AND "interrupt") OR ("time points" AND (multiple OR one OR two OR three OR four OR five OR six OR seven OR eight OR nine OR ten OR month OR monthly OR day OR daily OR week OR weekly OR hour OR hourly)) OR (before AND after) OR (before AND during))	
17	15 AND 16	489

KEY QUESTION 2

Database: MEDLINE (via Ovid)

Search date: 10/8/2019

1	((coach or coaches or coaching or mentor or mentors or mentorship or leader or leaders or leadership) and transformational).ti,ab.	953
2	((coach or coaches or coaching) adj3 (practice or unit or "health system" or "health systems" OR clinical OR QI OR "quality improvement" OR interprofessional OR "practice enhancement")).ti,ab.	402
3	((advisor or advisors) adj4 (practice or "health system" or "health systems" or unit or "practice enhancement")).ti,ab.	37
4	((assistant or assistants) adj4 "practice enhancement").ti,ab.	6
5	(external adj4 internal adj4 (facilitator or facilitators or facilitation)).ti,ab.	46
6	("practice champion" or "practice champions" or "practice moderator" or "practice moderators" or "coach strategy" or "coaching strategy" or "coach strategies" or "coaching strategies" or "practice facilitator" or "practice facilitators" or "practice facilitation" or "project facilitator" or "project facilitators" or "project facilitation" or "change agent" or "change agents" or "facilitation intervention" OR "implementation facilitator" OR "implementation facilitators" OR "implementation facilitation" OR "nurse facilitator" OR "nurse facilitators" OR "nurse facilitation").ab,ti.	1359
7	1 or 2 or 3 or 4 or 5 or 6	2769
8	exp qualitative research/	49182
9	exp Focus Groups/	27720
10	exp Interviews as Topic/	58980
11	"Surveys and Questionnaires"/	438043
12	exp Health Care Surveys/	35787

13	(qualitative or qualitatively or interview or interviewed or interviews or interviewing or interviewer or interviewers or survey or surveys or surveyed or surveying or questionnaire or questionnaires or "focus group" or "focus groups" or "mixed method" or "mixed methods" or theme or themes or thematic or "group discussion" or "group discussions").ab,ti.	1429055
14	8 or 9 or 10 or 11 or 12 or 13	1575514
15	7 AND 14	1091
16	15 NOT (case reports.pt OR editorial.pt OR letter.pt OR comment.pt)	1084

Database: EMBASE (via Elsevier)**Search date: 10/8/2019**

1	((coach:ab,ti or coaches:ab,ti or coaching:ab,ti or mentor:ab,ti or mentors:ab,ti or mentorship:ab,ti or leader:ab,ti or leaders:ab,ti or leadership:ab,ti) and transformational:ab,ti)	1002
2	((coach or coaches or coaching) NEAR/4 (practice or unit or 'health system' or 'health systems' OR clinical OR QI OR 'quality improvement' OR interprofessional OR 'practice enhancement')):ab,ti	698
3	((advisor or advisors) NEAR/4 (practice or 'health system' or 'health systems' or unit or 'practice enhancement')):ab,ti	53
4	((assistant or assistants) NEAR/4 'practice enhancement'):ab,ti	6
5	(external NEAR/4 internal NEAR/4 (facilitator or facilitators or facilitation)):ab,ti	53
6	('practice champion' or 'practice champions' or 'practice moderator' or 'practice moderators' or 'coach strategy' or 'coaching strategy' or 'coach strategies' or 'coaching strategies' or 'practice facilitator' or 'practice facilitators' or 'practice facilitation' or 'project facilitator' or 'project facilitators' or 'project facilitation' or 'change agent' or 'change agents' or 'facilitation intervention' OR 'implementation facilitator' OR 'implementation facilitators' OR 'implementation facilitation' OR 'nurse facilitator' OR 'nurse facilitators' OR 'nurse facilitation'):ab,ti	1592
7	1 or 2 or 3 or 4 or 5 or 6	3358
8	'qualitative research'/exp OR 'interview'/exp OR 'surveys'/exp OR 'questionnaire'/exp OR 'mixed methods'/exp	926104
9	(qualitative or qualitatively or interview or interviewed or interviews or interviewing or interviewer or interviewers or survey or surveys or surveyed or surveying or questionnaire or questionnaires or 'focus group' or 'focus groups' or 'mixed method' or 'mixed methods' or theme or themes or thematic or 'group discussion' or 'group discussions'):ab,ti	1930573
10	8 OR 9	2087733
11	7 AND 10	1369
12	11 NOT ('case report'/exp OR 'case study'/exp OR 'editorial'/exp OR 'letter'/exp OR 'note'/exp OR [conference abstract]/lim)	1062

Database: CINAHL Complete (via EBSCO)**Search date: 10/8/2019**

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2	TI (transformational) OR AB (transformational)	1888
3	1 AND 2	1131
4	TI ("practice coach" OR "practice coaches" OR "practice coaching" OR "unit coach" OR "unit coaches" OR "unit coaching" OR "health system coach" OR "health system coaches" OR "health system coaching" OR "clinical coach" OR	33

	"clinical coaches" OR "clinical coaching" OR "QI coach" OR "QI coaches" OR "QI coaching" OR "quality improvement coach" OR quality improvement coaches" OR "quality improvement coaching" OR "interprofessional coach" OR "interprofessional coaches" OR "interprofessional coaching" OR "practice enhancement coach" OR "practice enhancement coaching" OR "practice enhancement coaches") OR AB TI ("practice coach" OR "practice coaches" OR "practice coaching" OR "unit coach" OR "unit coaches" OR "unit coaching" OR "health system coach" OR "health system coaches" OR "health system coaching" OR "clinical coach" OR "clinical coaches" OR "clinical coaching" OR "QI coach" OR "QI coaches" OR "QI coaching" OR "quality improvement coach" OR quality improvement coaches" OR "quality improvement coaching" OR "interprofessional coach" OR "interprofessional coaches" OR "interprofessional coaching" OR "practice enhancement coach" OR "practice enhancement coaching" OR "practice enhancement coaches")	
5	TI (advisor OR advisors) OR AB (advisor OR advisors)	6145
6	TI (practice or "health system" or "health systems" or unit or "practice enhancement") OR AB (practice or "health system" or "health systems" or unit or "practice enhancement")	514841
7	5 AND 6	496
8	TI (assistant or assistants) OR AB (assistant OR assistants)	14849
9	TI ("practice enhancement") OR AB ("practice enhancement")	26
10	8 AND 9	4
11	TI (external AND internal) OR AB (external AND internal)	10758
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13	11 AND 12	154
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15	3 OR 4 OR 7 OR 10 OR 13 OR 14	2896
16	(MH "Qualitative Studies+") OR (MH "Focus Groups") OR (MH "Interviews+") OR (MH "Surveys") OR (MH "Narratives+") OR TI (qualitative OR qualitatively OR interview OR interviewed OR interviews OR interviewing OR interviewer OR interviewers OR survey OR surveys OR surveyed OR surveying OR questionnaire OR questionnaires OR "focus group" OR "focus groups" OR "mixed method" OR "mixed methods" OR theme OR themes OR thematic "group discussion" OR "group discussions") OR AB (qualitative OR qualitatively OR interview OR interviewed OR interviews OR interviewing OR interviewer OR interviewers OR survey OR surveys OR surveyed OR surveying OR questionnaire OR questionnaires OR "focus group" OR "focus groups" OR "mixed method" OR "mixed methods" OR theme OR themes OR thematic OR "group discussion" OR "group discussions")	725243
17	15 AND 16	1208

APPENDIX B. STUDY CHARACTERISTICS TABLES

For full study citations, please refer to the main report’s reference list.

KEY QUESTION 1

Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
Carroll, 2018 ³⁹ USA 42 practices 2 arms NIDDK	Non-hospital based, ambulatory primary care practices with at least 1 physician and a minimum of 2000 patients seen in past year	Duration: 36 months Coaching role: practice facilitator Practice facilitation (PF) arm received site coordination, identified a local physician champion (had an academic mentor); audit and feedback; creation of QI team; and education via academic detailing. PF delivered virtually, to assist with goal-setting, help QI teams strategize/ test/ implement change, facilitate meetings and foster continuous QI culture, liaison for data and performance feedback and share best practices and linking intervention practices.	# team members: NR Team composition: NR VA: No	Annualized loss of eGFR (protocol paper gives “patient-level score based on % of goals achieved” as primary outcome) Outcome type: process of care activities	Objective: High Self-reported: NA
Chinman, 2017 ⁴⁴ USA 69 teams 2 arms	The 3 HUD-VASH teams were selected based on their willingness to participate and	Duration: 12-23 months Coaching role: technical assistance	# team members: NR Team composition: Case manager: 100%	NR (2 outcomes noted in Abstract; Adoption and Reach of MISSION-Vet)	Objective: Unclear Self-reported:

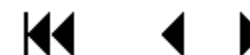


Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
VA HSR&D QUERI	similarity to each other in terms of Veteran composition. Within the 3 HUD-VASH teams, all case managers were invited to participate.	A 10-step process to build capacity for implementation of evidence-based practices was used, called Getting to Outcomes (GTO). This involved a manual, 6-hour training, and ongoing technical assistance, which consisted of bi-weekly phone calls to help sub-teams implement GTO practices. Meetings included goal-setting, tailoring of performance targets, additional training to address gaps, reviewing performance data and troubleshooting.	VA: Yes	Outcome type: process of care activities	
Dickinson, 2014 ⁴² USA 40 practices 3 arms NIDDK; NIMH	Small to midsize community health centers and independent mixed-payer primary care practices in Colorado	Duration: 6, 12, or 18 months, depending on arm Coaching role: practice facilitator Practice facilitator met with practices over 18 months an average of 9.7 times. Practices in the CQI group received practice facilitation based on the Model for Improvement. The CQI facilitators provided a structure and process for quality improvement using CQI tools that particularly focused on sequential PDSA cycles guided by quality measurement data.	# team members: NR Team composition: NR VA: No	Diabetes process of care Outcome type: process of care activities	Objective: High risk Self-reported: Unclear risk

Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
Dickinson, 2019 ³⁸ USA 36 practices 3 arms NIDDK	Family medicine or general internal medicine practices with at least 80 patients with type 2 diabetes, all clinicians agreeing to participate	Duration: NR Coaching role: practice facilitator Short-term PF by a “trained” practice facilitator; 4 meetings to assist with Connection to Health (CTH) adoption plan, followed by monthly PF calls to review data with practice on CTH use; optional booster session; control arm included self-management support education (SMS ED).	# team members: NR Team composition: <ul style="list-style-type: none"> • CTH+PF intervention clinicians: mean 6.1 (SD 4.3) • CTH intervention clinicians: mean 7.3 (SD .41) • SMS ED control clinicians: mean 7.4 (SD 3.4) VA: No	HbA1c, systolic and diastolic blood pressure, body mass index Outcome type: process of care activities	Objective: Unclear Self-reported: NA
Due, 2014 ⁴⁹ Denmark 186 practices 2 arms Danish Research Foundation; Health Insurance foundation; Research Foundation for Primary Care	Consecutively included Danish general practices that signed up for facilitation visits and completed a baseline questionnaire	Duration: 9 months Coaching role: facilitator Facilitators helped define goals and suitable means for achieving, support a process of change, demonstrate instruments, standardized visit reports	# team members: NR Team composition: NR VA: No	Change in # of annual chronic disease checkups per 100 patients affiliated with the practice Outcome type: process of care activities	Objective: Unclear Self-reported: High
Engels, 2006 ⁵⁰ Netherlands 49 practices 2 arms Netherlands Organisation for	Primary care practices that were on a list for a practice assessment using the national Dutch Visitation	Duration: 1 year Coaching role: outreach visitor After initial assessment, the practices in the intervention group	# team members: NR Team composition: NR VA: No	NR Outcome types: process of care activities; goal attainment	Objective: NA Self-reported: Low



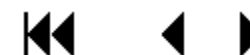
Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
Health Research and Development	Instrument for Practice management were contacted	undertook a CQI process with the help of an “outreach visitor.” Outreach visitors were all experienced practice assistants who had also participated in a 3-day training program to learn how to organize the QI meetings, guide the practice team through the steps of the CQI model and deal with group processes in general.			
Goodwin, 2001 ¹⁸ USA 79 practices 2 arms NCI; Family Practice Research Center from American Academy of Family Physicians Companion paper: Stange, 2003 ⁸³	Members of the Ohio Academy of Family Physicians practicing in northeast Ohio were invited to participate	Duration: 12 months Coaching role: nurse facilitator Nurse facilitator worked with individual practices during 1-day practice assessment to inform strategy tailoring, complete a practice environment checklist, then during 1.5 hour meetings using peer data comparison, supported strategy choices, planed generation for change, identified a practice leader, provided a manual and conducted several follow up visits.	# team members: NR Team composition: NR VA: No	Rate of patients being up to date on USPSTF recommended prevention services by medical record review = # preventive services up-to-date by age/sex eligible/total eligible Outcome type: process of care activities	Objective: Unclear Self-reported: NA
Harris, 2015 ⁵⁵ Australia 32 practices	Primary care practices with use of EHR, which could be	Duration: 6 months Coaching role: practice facilitator	# team members: NR Team composition:	Change in proportion of patients aged 40-	Objective: High



Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
2 arms National Health and Medical Research Council; Australian National Heart Foundation	audited as well as employment of a practice nurse	Facilitation included a training workshop, 3 practice visits with GP, practice nurse, and possibly office manager; 3 follow-up phone calls; clinical audit provided to practices; goal setting, local resource provision, problem solving.	<ul style="list-style-type: none"> • MD: 83 • PN: 40 VA: No	69 years with smoking status, alcohol intake, body mass index (BMI), waist circumference, blood pressure recorded, and for those aged 45-69 years with lipids, fasting blood glucose and cardiovascular risk in the medical record Outcome types: process of care activities; self- efficacy	Self- reported: Low
Hogg, 2008 ⁵³ Canada 54 practices 2 arms CIHR	Primary care practices (solo or group) in Eastern Ontario with 6 or fewer physicians	Duration: 11.5 months Coaching role: outreach facilitator One of 2 nurses would make monthly visits to a practice. Practice facilitation included feedback from an initial audit, discussion of the use of tools such as prevention flow sheets, chart flags, sticker reminders, electronic reminders, patient care	# team members: NR Team composition: <ul style="list-style-type: none"> • Intervention physicians: mean 3.5 • Control physicians: mean 2.6 VA: No	Composite index of preventive performance, defined as the number of appropriate preventive maneuvers done minus the number of inappropriate maneuvers done,	Objective: Low Self- reported: NA

Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
		records, etc, and developing a plan for improvement with physicians. Periodic follow-up visits (every 3-6 weeks) involved monitoring progress on plan and making any adjustments.		divided by the total number of eligible preventive maneuvers Outcome type: process of care activities	
Lemelin, 2001 ⁵⁴ refid: 2987 Canada 46 practices 2 arms Ontario Ministry of Health	Community primary care practices with a payment system based primarily on capitation. HSOs located in remote areas were excluded because of cost, and the HSO in which investigators worked were also excluded	Duration: 18 months Coaching role: facilitator Nursing prevention facilitators met with up to 8 practices in person and via email. They used 7 intervention strategies: audit and ongoing feedback, consensus building, opinion leaders and networking, academic detailing and education materials, reminder systems, patient-mediated activities, patient education materials.	# team members: NR Team composition: • Intervention: MD: mean 2.91; RN: mean 1.16 • Comparator MD: mean 2.70; RN: mean 1.64 VA: No	Overall index of preventive performance (calculated by subtracting the proportion of patients receiving inappropriate preventative maneuvers from the proportion of patients who received the 8 recommended preventive maneuvers) Outcome type: process of care activities	Objective: Unclear Self-reported: NA
Liddy, 2015 ⁵² Canada	Eligible practices provided general	Duration: 2 years	# team members: 182 providers	"Quality of care composite score"	Objective: Unclear

Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
<p>84 practices 3 stepped-wedge clusters</p> <p>Ontario Ministry of Health; Pfizer Canada (indirectly); CIHR; Ottawa Hospital</p> <p>Companion paper: Deri Armstrong, 2016⁸⁴</p>	<p>primary care and were in operation for at least 2 years</p>	<p>Coaching role: practice facilitator</p> <p>Practice outreach facilitation (audit and feedback, consensus building and regular meetings to focus on goal setting, planning and implementation via PDSA cycles, interactive collaborative meetings [a series of half-day]) with chronic care model (decision support, community resources, self-management support and delivery system redesign).</p>	<p>Family physicians: 100%</p> <p>VA: No</p>	<p>= patient-level score intended to reflect adherence to recommended guidelines for cardiovascular disease</p> <p>Outcome type: processes of care</p>	<p>Self-reported: NA</p>
<p>Lobo, 2002⁵¹</p> <p>Netherlands</p> <p>124 practices</p> <p>2 arms</p> <p>Netherlands Heart Foundation</p>	<p>Primary care practices with the presence of a computer system, ancillary staff present, and no major changes planned during the course of the project.</p>	<p>Duration: 21 months</p> <p>Coaching role: outreach visitor</p> <p>Coach was an "outreach visitor," met with teams for 15 visits (first 8 visits were dedicated to organization of preventive care, last 7 visits were dedicated to clinical decision making), coaching interactions followed theoretical model of change intervention allowed practice members to draw up and prioritize their own list of gaps and planned changes. The intervention focused on 6 aspects of practice organization: availability of instruments and</p>	<p># team members NR</p> <p>Team composition:</p> <ul style="list-style-type: none"> Intervention: GP: 57 (% of practices with 1 GP); practice assistants 27 (% with only one practice assistant) Comparator: GP: 55 (% of practices with 1 GP); practice assistants: 32 (% with only one practice assistant) <p>VA: No</p>	<p>Difference between the deficiency scores in each aspect of organizing preventive care before and after the intervention; this enabled consideration of the ratio of baseline score and postintervention score.</p>	<p>Objective: Low</p> <p>Self-reported: Low</p>



Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
		materials, involvement of the practice assistant in preventive tasks, presence of separate preventive clinics, teamwork within the practice, record-keeping and follow-up routines.		Outcome type: process of care activities	
Margolis, 2004 ⁴⁶ USA 44 practices 2 arms AHRQ; US Bureau of Maternal and Child Health; NC Division of Medical Assistance; NC AHEC; RWJF	Primary care practices near UNC Chapel Hill and Charlotte AHEC; sufficient newborns enrolled, not an academic affiliate or publicly funded center, annual Medicaid billing >\$50,000	Duration: 2 years Coaching role: project staff Practices form teams and review chart abstractions, academic detailing, selection of goals and strategies; project staff (coach in this case) provide tools and help with customizing; help teams run PDSA cycles, spread of positive outcomes to other staff	# team members NR Team composition: <ul style="list-style-type: none"> Intervention: clinicians: mean 5.6 (range: 1 to 12); staff: mean 17.0 (range: 1 to 56) Control: clinicians: mean 4.4 (range: 1, 12); staff: mean 14.1 (range: 3 to 31) VA: No	Change over time of proportion of children in each practice who received all 4 services (immunizations, screening for anemia, screening for lead, screening for TB) Outcome type: process of care activities	Objective: Low Self-reported: NA
Meropol, 2014 ⁴¹ USA 30 practices 2 arms Medicaid Technical Assistance and Policy Program; Center for Child	Primary care practices were identified through 2 PBRNs; practices had at least 15% of patients 10 years of age or younger and at least 20% of pediatric patients	Duration: 6 months Coaching role: practice facilitator Practice coaching and rapid-cycle feedback/change to improve delivery of recommended pediatric preventive services in 3 domains. During weekly visits, the	# team members NR Team composition: <ul style="list-style-type: none"> Intervention clinicians per practice: mean 3.5 (SD 2.34); nonclinician staff: mean 4.74 (SD 3.97) 	NR Outcome type: process of care activities	Objective: Low Self-reported: NA



Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
Health and Policy at Rainbow Babies	covered by Medicaid insurance, and agreed to provide at least 2 of 3 targeted services and participate in educational meetings and chart reviews	facilitator reviewed a small convenience sample of charts from the previous week and documented whether targeted services were performed; plotted each week's results on "run charts"; and "huddled" briefly with available practice members to review run charts, assess what had worked, brainstorm solutions for further improvement, and select new tools/procedures to implement during the coming week.	<ul style="list-style-type: none"> Control clinicians per practice: mean 3.64 (SD 2.27); nonclinician staff: mean 3.14 (SD 1.67) VA: No		
Mold, 2014 ⁴⁰ USA 45 practices 4 arms NHLBI	Primary care practices were members of 1 of 3 practice-based research networks in Oklahoma or New York	Duration: 6 months Coaching role: practice facilitator Assistance from practice facilitator during visits either half day weekly or a full day every other week to assist practice with meeting goals.	# team members: NR; # practices with mid-level practitioners: 27 (63%) VA: No	NR explicitly; appears to be adherence to 6 guideline recommendations Outcome type: process of care activities	Objective: Unclear Self-reported: NA
Ornstein, 2004 ⁴⁷ USA 20 practices 2 arms AHRQ; DHHS	Primary care practices that are community-based family or general internal medicine practices with the	Duration: 2 years Coaching role: NA (coaching by team of people)	# team members: NR Team composition: <ul style="list-style-type: none"> MD: 45 Mid-level providers: 17 VA: No	Primary practice-level outcome was the percentage of performance targets achieved; primary patient-	Objective: High risk Self-reported: NA



Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
	same electronic medical record.	Multimethod quality improvement intervention that included 6-7 site visits, audit and feedback as well as 2 network meetings. The site visits were led by one of the coauthors and included engaging clinicians and staff in the project, general education and group discussion. Teams also identified specific clinical indicators that they wished to work on.		level outcome was the percentage of patients for whom the recommended process measures had occurred or the recommended outcome measure had been achieved Outcome type: process of care activities; goal attainment	
Parchman, 2013 ⁴³ USA 40 practices 2 arms NIDDK; Audie L. Murphy Veterans Hospital, Veterans Health Administration Companion paper: Noel, 2014 ⁸⁵	Small, autonomous primary care practices in South Texas Exclusion criteria: <ul style="list-style-type: none"> • Multi-specialty practices • Practice owned by a large vertically integrated health care system 	Duration: 12 months Coaching role: practice facilitator Coach was a practice facilitator who coached practices to implement changes of delivery of care to improve diabetes care, primary care teams consisting of providers and non-providers. Practice facilitators held a minimum of 6 one-hour team meetings within each practice over a 12-month period of time.	# team members: NR Team composition: <ul style="list-style-type: none"> • MD or DO: 15.4% • NP: 3.6% • PA: 2.9% • RN/LVN: 5.4% • Medical Assistant: 31.8% • Receptionist: 12.1% • Office manager: 7.5% • Other: 21.4% 	Certified Case Manager score Outcome type: process of care activities	Objective: NA Self-reported: Low



Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
	<ul style="list-style-type: none"> Practices with 5 or more physicians 	PF efforts, baseline chart audit, and feedback, as well as interactive consensus building and goal setting, were incorporated into the intervention.	VA: No		
Rask, 2001 ⁴⁵ USA 4 practices 2 arms Aetna Inc. through the Quality Care Research Fund	Community-based clinics that are part of a larger primary care center located in Atlanta, Georgia. Clinics were selected for the study because of their high patient volume and relatively large populations of diabetes patients.	Duration: 1 year Coaching role: nurse facilitator Nurse facilitator oriented the clinics to the performance-improvement activity, conducted in-services with new office staff, attended monthly operations meetings, and visited the clinics weekly to answer questions about the study. The nurse facilitator also distributed materials and a summary of the ADA clinical practice recommendations. The facilitator also created and distributed a patient reminder form and conducted monthly medical record reviews then provided site-specific feedback to the physicians and medical directors. Control arm included feedback only.	# team members: NR Team composition: <ul style="list-style-type: none"> Internal medicine physicians: 22 Family practice physicians: 6 VA: No	NR Outcome type: process of care activities	Objective: Unclear Self-reported: NA
van Bruggen, 2008 ⁴⁸ Netherlands	Patients with diagnoses of type 2 diabetes in 1 of 30	Duration: 1 year Coaching role: nurse facilitator	# team members: NR Team composition: NR	Percentage of people with poor glycemic control	Objective: Unclear



Study Country # Enrolled # Arms Funding Source Companion Paper	Eligibility	Intervention Duration Name of coaching role Intervention Description	# Team Members Team Composition: N (%) VA-based?	Primary Outcomes Outcomes Type	Risk of Bias
1640 patients 2 arms AGIS Insurance Center	primary care clinics agreed to participate from the broader population of 70 clinics solicited. Exclusions included the inability to complete a questionnaire, severe mental illness, unwillingness to attend the practice regularly, a limited life expectancy, or current treatment in the outpatient clinic of the local hospital.	Two nurse facilitators interviewed practice staff, analyzed barriers, discussed means to overcome barriers and handed out abstracts of guidelines for diabetes care. These trained facilitators visited all intervention practices 2 times per month for approximately 3 hours. They trained the GPs, practice assistants and nurses in the guidelines, encouraged the introduction of structured diabetes care, emphasized the need for 3-monthly control and gave assistance in managing people with type 2 diabetes. Performance feedback was given at 6 months.	VA: No	at baseline that achieved an HbA1c of <8% Outcome type: process of care activities	Self-reported: Unclear

Abbreviations: ADA=American Diabetes Association; AHEC=Area Health Education Center; AHRQ=Agency for Healthcare Research and Quality; CIHR=Canadian Institutes of Health Research; CQI=continuous quality improvement; CTH=Connection to Health; DHHS=Department of Health and Human Services; DO=Doctor of Osteopathy; eGFR=estimated glomerular filtration rate; EHR=electronic health record; GP=general practitioner; GTO=Getting to Outcomes; HSO=Health Standards Organization; HSR&D=Health Services Research and Development; HUD=Housing and Urban Development; LVN=licensed vocational nurse; NA=not applicable; NCI=National Cancer Institute; NHLBI=National Heart, Lung, and Blood Institute; NIDDK=National Institute of Diabetes and Digestive and Kidney Diseases; NIMH=National Institute of Mental Health; NR=not reported; NP=nurse practitioner; PA=physician assistant; PBRN=practice-based research network; PDSA=Plan, Do, Study, Act; PF=practice facilitation; QUERI=Quality Enhancement Research Initiative; QI=quality improvement; RN=registered nurse; RWJF=Robert Wood Johnson Foundation; SD=standard deviation; SMS ED=self-management support education; USPSTF=U.S. Preventive Services Task Force; VASH=Veterans Affairs Supportive Housing



KEY QUESTION 2

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
Buscaj, 2016 ⁶⁶ USA 11 practices Qualitative VA: No Colorado Health Foundation	Individual interviews, field observation, coach reflection notes Primary data: faculty, residents, and staff members Team background: NR	11 Colorado primary care residency practices (no eligibility criteria reported)	Duration: 6 years Coaching role: practice facilitator Practice facilitators attended monthly practice QI meetings, providing training, guidance, support, and resources for practice transformation; practices were also invited to attend twice-yearly Learning Collaboratives, where residents, faculty, and staff convened to learn from national and local speakers & share lessons learned	Barriers: - Adaptability - Design Quality & Packaging - Knowledge and Beliefs about Intervention/Process - Individual and Team Stages of Change/Process - Other Personal Attributes Climate - Culture Facilitators: - Executing - Relative Advantage - Adaptability - Design Quality & Packaging - Individual and Team Stages of Change/Process - Other Personal Attributes - Culture	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Yes Research Relationship: Yes Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes
Chase, 2015 ⁶⁷ USA 6 practices Qualitative VA: No Commonwealth Fund and American Academy of Family Physicians	Individual interviews, field observation Primary data: Coach (3), Other (6 practices) Team background: NR	Family practices that completed an online application to receive support in a new, advanced PCMH model of care.	Duration: 2 years Coaching role: facilitator Three facilitators from diverse, nonclinical backgrounds help practices implement the TransforMED model of care. This model asked	Barriers: - Planning - Other Personal Attributes Facilitators: - Executing - Adaptability - Design Quality & Packaging - Other Personal Attributes	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Can't tell Data Collection: Yes Research Relationship: Can't tell Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
			practices to adopt a checklist of technological, management and care delivery components. Facilitators interviewed practice members, observed work flow and modelled new meeting styles. They also engaged in daily or weekly email and telephone contact with practice leaders and members. Depth and breadth of contact varied by facilitator.		Valuable Research: Yes
Due, 2017 ⁶¹ Denmark 13 practices Qualitative VA: No Danish Research Foundation for General Practice; Health Foundation; Research Foundation for Primary Care in the Capital Region of Denmark	Individual interviews, focus groups, field observation Primary data: Coach (7) Team background: GP (38), Nurse (14) Secretary (6) Healthcare assistant (1) GP in training (9), Temporary GP (1)	All general practices in the Capital Region of Denmark were invited to participate in the intervention, but participation was voluntary. Individual semi-structured interviews were conducted among seven facilitators who took part in the	Duration: up to 3 visits over one year Coaching role: facilitator The facilitation intervention was carried out in general practice in the Capital Region of Denmark. This was to support the implementation of chronic disease management programs for type 2 diabetes and chronic obstructive	Barriers: - Planning - Executing - Reflecting & Evaluating - Adaptability - Design Quality & Packaging - Readiness for implementation Facilitators: - Planning - Executing - Relative Advantage - Adaptability - Design Quality & Packaging	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Can't tell Data Collection: Yes Research Relationship: Yes Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
		observed facilitation.	pulmonary disease in general practice. The facilitators were 14 GPs who were hired on a consultancy basis. The facilitators' educational program consisted of a one-weekend seminar and 10 three- hour meetings over 4 months. All practices in the region were eligible to participate but this was voluntary.		
Due, 2018 ¹⁹ Denmark 13 practices Qualitative VA: No Danish Research Foundation for General Practice; Health Foundation; Research Foundation for Primary Care in the Capital Region of Denmark	Focus groups, field observation Primary data: team (20 group interviews); other (30 facilitation visits at 13 practice settings) Team background: GP (38), Nurse (14) Secretary (6) Healthcare assistant (1) GP in training (9), Temporary GP (1)	General practices were strategically sampled to ensure variation in multiple factors (eg, geography, size)	Intervention: up to 3 visits over 1 year Coaching role: practice facilitator or peer facilitator The facilitation intervention was one of the initiatives developed and implemented by the Capital Region of Denmark. Fourteen GPs were hired as facilitators who were differed concerning age, gender, and practice type. The overall aim of the intervention was to	Barriers: - Executing - Relative Advantage - Adaptability - Design Quality & Packaging - Knowledge and Beliefs about Intervention/Process - Individual and Team Stages of Change/Process - Other Personal Attributes - Implementation Climate - Readiness for implementation Facilitators: - Relative Advantage - Adaptability - Design Quality & Packaging	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Can't tell Research Relationship: Yes Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
			support the implementation of chronic disease management programs for type 2 diabetes and COPD in general practice.	<ul style="list-style-type: none"> - Individual and Team Stages of Change/Process - Readiness for implementation 	
Fernald, 2014 ⁶⁵ USA 51 primary care practices Mixed methods VA: No Office of the National Coordinator for Health Information Technology; DHHS	Individual interviews, focus groups, monthly narrative, reports from practices Primary data: Team (13), Coach (1), Leader (1) Team background: NR	Primary care practices enrolled in the Colorado Beacon Consortium in western Colorado	Duration: NR Coaching role: QI advisor The QI advisor was embedded in activities as part of a consortium. Participating primary care practices received support from the QI advisors, collaborative learning sessions, and a clinical systems advisors who helped regarding the EHR. Practice facilitation supported redesign and QI efforts around meaningful use attestation and the subsequent use of clinical data in patient care and QI.	Barriers: <ul style="list-style-type: none"> - External Policies and Incentives - Implementation Climate - External Policies and Incentives - Implementation Climate - Readiness for implementation Facilitators: <ul style="list-style-type: none"> - Planning - Relative Advantage - Adaptability - Design Quality & Packaging 	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Can't tell Research Relationship: Can't tell Ethical: Can't tell Rigorous Analysis: Can't tell Clear Findings: Yes Valuable Research: Can't tell
Godfrey, 2014 ⁶⁸ USA	Individual interviews, focus groups, survey	Not clear how collaboratives were chosen but	Duration: 3 or 2 years depending on arm	Barriers: <ul style="list-style-type: none"> - Design Quality & Packaging 	Clear aim: Yes Methods: Yes Appropriate design: Yes

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
2 national improvement collaboratives Mixed methods VA: No Jo`nko`ping University, School of Health Sciences, County Council; Kulturum and Futurum, Jo`nko`ping, Sweden; Dartmouth Institute for Health Policy and Clinical Practice	Primary data: Team (382), Coach (9), Leader (30) Team background: NR	leaders from The Cystic Fibrosis Foundation (CF) centers or Vermont Oxford Network Intensive Care Nurseries (ICN) teams had to apply to participate; national leaders assigned coaches to clinical teams "with consideration of physical location and time zones."	Coaching role: coach Coaches assigned to clinical teams; provided telephone, face-to-face, and email coaching to help teams develop their improvement capabilities; telephone coaching initially occurred weekly then decreased over time to monthly; email communication with coach was frequent; ICN collaborative had 3 site visits and CF arm had no site visits; CF coaches from within the CF community and ICN coaches from outside the ICN community	- Individual and Team Stages of Change/Process - Other Personal Attributes Facilitators: - Cost - Relative Advantage - Adaptability - Design Quality & Packaging - Other Personal Attributes	Recruitment: Can't tell Data Collection: No Research Relationship: Can't tell Ethical: Can't tell Rigorous Analysis: Can't tell Clear Findings: Yes Valuable Research: Can't tell
Hemler, 2018 ⁶⁴ USA 1500 practices Qualitative VA: No AHRQ	Individual interviews, field observation, online diaries Primary data: Coach (33) Team background: NR	Interviewees were from a cooperative that participated in EvidenceNOW, a collaboration of public and private healthcare organizations that enrolled	Duration: 9- 15 months Coaching role: practice facilitator All cooperatives used practice facilitation as their main intervention strategy to help practices improve delivery of the ABCS: aspirin use in	Barriers: - Cost - Design Quality & Packaging - Knowledge and Beliefs about Intervention/Process - Individual and Team Stages of Change/Process - Readiness for implementation Facilitators: - Executing	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Can't tell Data Collection: Yes Research Relationship: Yes Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
		over 1500 practices including approximately 5000 clinicians. Focused on small to medium sized primary care practices (15 or fewer clinicians).	high-risk individuals, blood pressure control, cholesterol management, and smoking cessation counseling.	- Adaptability - Design Quality & Packaging - Individual and Team Stages of Change/Process	
Huston, 2006 ⁷¹ Canada 53 primary care practices Qualitative VA: No Funding NR	Survey, coach narrative report progress log Primary Data: Team (65), Coach (5) Team background: MD (143; 3 physicians average per practice), Office staff (NR)	All family physician practices in Ottawa were invited to participate in the study.	Duration: 5 weeks Coaching role: nurse facilitator Public health nurses were trained as facilitators to disseminate the intervention for respiratory infection guidelines to family physician practices - a toolkit was used that included an outline of control guidelines, masks, wipes, alcohol gel pumps, <i>etc.</i> The intervention involved audit feedback, goal setting, and tailoring of	Barriers: - Planning - Readiness for implementation Facilitators: - Planning - Cost - Adaptability - Design Quality & Packaging - External Policies and Incentives	Clear aim: Yes Methods: Yes Appropriate design: Can't tell Recruitment: Can't tell Data Collection: Yes Research Relationship: No Ethical: Can't tell Rigorous Analysis: No Clear Findings: Yes Valuable Research: Yes

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
			intervention to local circumstances.		
Kotecha, 2015 ⁷⁰ Canada 7 family healthcare teams Qualitative VA: No Ontario Ministry of Health and Long Term Care	Individual interviews, field observation Primary data: Team (7) Coach (15) Team background: MD (NR)	Recruitment was aimed at all of the 16 practice facilitators that were using the quality control program that was being evaluated. A purposeful sampling strategy was used to select participating primary healthcare teams for interviews.	Duration: 14- 16 months Coaching role: facilitator The facilitator's job was to work with the assigned primary healthcare teams, conduct administrative tasks, ongoing facilitator training and education, maintain communication with the intervention team, and to support the healthcare team development and application of QI knowledge into practice.	Barriers: - Planning - Cost - Relative Advantage - Design Quality & Packaging - Individual and Team Stages of Change/Process - Other Personal Attributes Facilitators: - Cost - Relative Advantage - Adaptability - Design Quality & Packaging - Individual and Team Stages of Change/Process	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Yes Research Relationship: Yes Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes
Lessard, 2016 ⁶⁹ Canada 4 family medicine groups Qualitative VA: No MSSS-FRQS- Pfizer; Laval Health and Social Services Centers	Individual interviews, focus groups, case audit documentation Primary data: Team (32), Coach (8), case audit (37 meeting minutes and logs, 55 external facilitator field notes) Team composition: family physician (1), case manager nurse (NR),	Primary care clinics that were registered as family medicine groups in the greater Quebec area.	Duration: 1 year Coaching role: facilitator The study involved four family medicine groups, each represented by an interprofessional internal facilitator team (IFT). Each IFT was expected to fulfill 4 key responsibilities: (1) to act as a liaison to encourage	Barriers: - NR Facilitators: - Relative Advantage - Adaptability - Design Quality & Packaging	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Yes Research Relationship: Can't tell Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
	Admin(~1) Pharmacist (1) Kinesiology, psychologist or nutritionist (1)		each discipline to take ownership of change, (2) to select at least 1 of 6 interventions to be implemented in the family medicine group (<i>ie</i> , coordination of interprofessional follow-up by primary care nurse-case manager; case manager referrals to public group classes or private health professionals; clinicians' training and usage of motivational interviewing; utilization of patient- health booklet; application of collective prescriptions; utilization of internet based directory of community and health resources), (3) to develop action plans accordingly, and (4) to translate knowledge and disseminate change across the family medicine group and other external health specialists.		

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
Liddy, 2014 ⁶⁰ Canada 84 primary care practices Multi-methods VA: No CIHR; University of Toronto, Comprehensive Research Experience for Medical Students	Individual interviews Primary data: Coach (4) Team background: NR	Practice facilitators who worked with primary care practices enrolled in the Improved Delivery of Cardiovascular Care program. All primary care practices in the regional health authority in Eastern Ontario were eligible to participate, excluding walk-in clinics.	Duration: 2 years Coaching role: practice facilitator As part of the Improved Delivery of Cardiovascular Care program, trained facilitators worked with practices to incorporate elements of the chronic care model into daily practice routine. Facilitation included audit and feedback, consensus building, regular meetings with the practices, and interactive collaborative meetings.	Barrier: - Individual and Team Stages of Change/Process - Other Personal Attributes - External Policies and Incentives - Implementation Climate - Culture Facilitator: - Relative Advantage - Adaptability - Design Quality & Packaging - Individual and Team Stages of Change/Process - Other Personal Attributes - Culture	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Yes Research Relationship: Can't tell Ethical: Can't tell Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes
Liddy, 2016 ⁵⁹ Canada 83 primary care practices Survey VA: No Primary Health Care Services program of Ontario Ministry of Health and Long- Term Care; Pfizer	Survey Primary data: Team (95) Team background: MD (95)	Primary care physicians enrolled in the Improved Delivery of Cardiovascular Care program. All primary care practices in the regional health authority in Eastern Ontario	Duration: 1- 2 years Coaching role: facilitator Facilitators helped primary care providers improve cardiovascular disease care using the Chronic Care Model. After a chart audit, facilitators and physicians engaged in	Barriers: NR Facilitators: - Executing - Relative Advantage - Adaptability - Design Quality & Packaging - Individual and Team Stages of Change/Process - Readiness for implementation	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Yes Research Relationship: Can't tell Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes

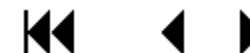


Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
Canada (indirectly through the Champlain Cardiovascular Disease Prevention Network); CIHR; Ottawa Hospital Academic Medical Organization's Innovation Fund		were eligible to participate, excluding walk-in clinics. One hundred and ninety physicians from 83 primary care practices participated in the study.	consensus building to identify areas needing improvement and set goals. Facilitators used a variety of methods to aid physicians in achieving their goals, including evidence-based decision support, delivery system redesign support, patient self-management tools, guideline documents, flow sheets and information regarding available community resources.		
McHugh, 2018 ⁶³ USA 27 teams Qualitative VA: No AHRQ	Individual interviews Primary data: Team (17), Coach (10) Team background: NR	Practices were eligible for the larger study if they had fewer than 20 primary care clinicians and were located in Indiana, Illinois, or Wisconsin. Out of the 4 waves of the study, the qualitative interviews were completed on Wave 2.	Duration: 1 year Coaching role: practice facilitator The practice facilitator met with the practices as often as requested, ideally once per month. Facilitators had a broad menu of quality improvement strategies from which practices could choose related to the 4 ABCS. Strategies included audit and feedback, clinical	Barriers: - Planning - Executing - Reflecting & Evaluating - Cost - Relative Advantage - Design Quality & Packaging - Individual and Team Stages of Change/Process - Other Personal Attributes - Implementation Climate Facilitators: - Planning - Executing - Relative Advantage	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Yes Research Relationship: Yes Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes



Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
			decision support within the electronic health record, standing orders, workflow improvements, and patient education and outreach.	<ul style="list-style-type: none"> - Adaptability - Design Quality & Packaging - Individual and Team Stages of Change/Process - Readiness for implementation - Culture 	
McKeever, 2014 ¹⁵ USA 30 health departments Multi-methods VA: No RWJF	Survey, Progress Reports, QI Coaching Logs and QI Coach Meeting Notes Primary data: Team (85), Coach (9), Other (30 sites) Team background: NR	Health department specific eligibility not specified. Health departments were participants in a QI Award Program that provides small grants and distance-based QI coaching to state, local, tribal, and territorial health departments.	Duration: NR Coaching role: QI coaches Coaches worked with health departments on their QI projects to provide support and technical assistance. QI coaches helped practices to engage in QI projects that addressed local priorities across all accreditation standards and measures. Coaches were able to do 1 in-person visit with the QI team lead at a twice-annual conference with up to 15 hours of remote coaching via phone, email, webinars, and video conferencing.	Barrier: <ul style="list-style-type: none"> - Planning - Design Quality & Packaging - Knowledge and Beliefs about Intervention/Process - Cosmopolitanism Facilitators: <ul style="list-style-type: none"> - Executing - Adaptability - Design Quality & Packaging 	Clear aim: Yes Methods: No Appropriate design: Can't tell Recruitment: Yes Data Collection: Can't tell Research Relationship: Can't tell Ethical: Can't tell Rigorous Analysis: No Clear Findings: Yes Valuable Research: Yes
Mekki, 2017 ⁷² Norway 12 nursing homes	Individual interviews, Focus groups, field observation	Nursing homes in a specific geographic area	Duration: 7 months	Barriers: <ul style="list-style-type: none"> - Planning - Relative Advantage 	Clear aim: Yes Methods: Yes Appropriate design: Yes

Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
Mixed Methods VA: No Research Council of Norway	reflection notes & workshops Primary data: Coach (8) Leader (12) Other (18 single- blinded raters) Team background: NR	were recruited if they: had residents with dementia; leaders from NH agreed to 1) collaborate with facilitators and pay cost, 2) participate at sessions with staff, 3) collaborate in organizing research at the institution.	Coaching role: external facilitator Two external facilitators delivered 2-day seminars + 6 months of coaching for all staff/leaders in each nursing home with the goal to reduce use of restraints and psychotropic drug use in patients with dementia; staff brought an actual patient situation to each coaching session	- Other Personal Attributes - Culture Facilitators: - Cost - Adaptability - Individual and Team Stages of Change/Process - Other Personal Attributes	Recruitment: No Data Collection: No Research Relationship: No Ethical: Can't tell Rigorous Analysis: No Clear Findings: No Valuable Research: Can't tell
Rogers, 2019 ⁶² USA 19 practices Qualitative VA: No AHRQ	Individual interviews Primary data: Team (19 clinicians) Team background: MD (18) Other (1)	A purposeful sampling approach was used to identify and recruit interviewees on 3 criteria: study wave (from 4 waves), geographic region (the 5 NYC boroughs), and baseline ABCS (aspirin, blood pressure, cholesterol, smoking)	Duration: 1 year Coaching role: practice facilitator Intervention consisted of 13 in-person visits by a practice facilitator (employed by the project) for 1 year. Facilitators had completed the University of Buffalo's Practice Facilitator Certificate Program and in-house study training. Facilitators reviewed	Barriers: - Other Personal Attributes - Readiness for implementation - Cosmopolitanism Facilitators: - Adaptability - Design Quality & Packaging - Individual and Team Stages of Change/Process - Readiness for implementation	Clear aim: Yes Methods: Yes Appropriate design: Yes Recruitment: Yes Data Collection: Yes Research Relationship: Yes Ethical: Yes Rigorous Analysis: Yes Clear Findings: Yes Valuable Research: Yes



Study Country # Enrolled Study Design VA- based? Funding Source	Methods Used Source of Primary Data (N) Team Background (N)	Eligibility	Intervention Duration Name of coaching role Intervention Description	CFIR Findings	Risk of Bias
		cessation) performance (high, medium, low).	baseline data with the practice and they prioritized the order they wanted to work on each measure. Facilitators implemented QI strategies, set performance targets and goals, provided performance feedback, provided data support, trained clinicians and staff on evidence- based practices for addressing each ABCS measure, and assessing and redesigning office workflow.		

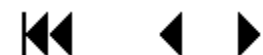
Abbreviations: AHRQ=Agency for Healthcare Research and Quality; CF=cystic fibrosis; CIHR=Canadian Institutes of Health Research; COPD=chronic obstructive pulmonary disorder; DHHS=Department of Health and Human Services; EHR=electronic health record; GP=general practitioner; ICN=intensive care nurse; IFT=internal facilitator team; NA=not applicable; NR=not reported; QI=quality improvement; PCMH=patient-centered medical home; RWJF=Robert Wood Johnson Foundation



APPENDIX C. IMPLEMENTATION STRATEGIES TABLE

For full study citations, please refer to the main report’s reference list.

Coaching Strategy	Dickinson, 2019 ³⁸	Carroll, 2018 ³⁹	Harris, 2015 ⁵⁵	Liddy, 2015 ⁵²	Parchman, 2013 ⁴³	Mold, 2014 ⁴⁰	Meropol, 2014 ⁴¹	Dickinson, 2014 ⁴²	Hogg, 2008 ⁵³	Chinman, 2017 ⁴⁴	van Bruggen, 2008 ⁴⁸	Goodwin, 2001 ¹⁸	Lemelin, 2001 ⁵⁴	Rask, 2001 ⁴⁵	Lobo, 2002 ⁵¹	Due, 2014 ⁴⁹	Engels, 2006 ⁵⁰	Margolis, 2004 ⁴⁶	Ornstein, 2004 ⁴⁷
Develop a formal implementation plan	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
Audit and provide feedback	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X
Develop/distribute educational materials			X	X	X	X	X		X	X	X	X	X	X	X			X	X
Conduct educational outreach visits		X	X		X	X	X			X	X		X	X	X	X		X	X
Provide ongoing consultation/ purposely reexamine the implementation	X	X			X			X	X	X			X			X	X	X	
Revise professional roles	X		X	X	X			X	X			X						X	
Provide local technical assistance/	X	X		X	X					X		X	X						



Coaching Strategy	Dickinson, 2019 ³⁸	Carroll, 2018 ³⁹	Harris, 2015 ⁵⁵	Liddy, 2015 ⁵²	Parchman, 2013 ⁴³	Mold, 2014 ⁴⁰	Meropol, 2014 ⁴¹	Dickinson, 2014 ⁴²	Hogg, 2008 ⁵³	Chinman, 2017 ⁴⁴	van Bruggen, 2008 ⁴⁸	Goodwin, 2001 ¹⁸	Lemelin, 2001 ⁵⁴	Rask, 2001 ⁴⁵	Lobo, 2002 ⁵¹	Due, 2014 ⁴⁹	Engels, 2006 ⁵⁰	Margolis, 2004 ⁴⁶	Ornstein, 2004 ⁴⁷
centralize technical assistance																			
Conduct local need assessment	X				X		X	X				X				X	X		
Conduct cyclical small tests of change/develop and implement tools for quality monitoring/develop and organize quality monitoring systems		X		X		X	X	X									X	X	
Create a learning collaborative		X		X				X					X						X
Develop resource sharing agreements	X		X	X	X														
Organize clinician implementation team meetings		X			X										X				
Build a coalition/conduct local consensus discussions/		X											X						

obtain and use patients/ consumers and family feedback																			
Coaching Strategy	Dickinson, 2019³⁸	Carroll, 2018³⁹	Harris, 2015⁵⁵	Liddy, 2015⁵²	Parchman, 2013⁴³	Mold, 2014⁴⁰	Meropol, 2014⁴¹	Dickinson, 2014⁴²	Hogg, 2008⁵³	Chinman, 2017⁴⁴	van Bruggen, 2008⁴⁸	Goodwin, 2001¹⁸	Lemelin, 2001⁵⁴	Rask, 2001⁴⁵	Lobo, 2002⁵¹	Due, 2014⁴⁹	Engels, 2006⁵⁰	Margolis, 2004⁴⁶	Ornstein, 2004⁴⁷

APPENDIX D. EXCLUDED STUDIES

KEY QUESTION 1

Study	Exclusion Reason						
	Not full publication/ OECD	Not eligible setting	Not population of interest	Not eligible intervention	Not eligible comparator	Not eligible outcome/ timing	Not eligible design
Ansari, 2003 ¹				X			
Aspy, 2008 ²			X				
Asselin, 2017 ³							X
Baskerville, 2001 ⁴	X						
Bitton, 2014 ⁵	X						
Bucknall, 2017 ⁶				X			
Calo, 2019 ⁷				X			
Chakrabarty, 2014 ⁸	X						
Clapp, 2015 ⁹	X						
Connolly, 2018 ¹⁰							X
Courtlandt, 2016 ¹¹							X
Deane, 2014 ¹²				X			
Dorr, 2015 ¹³	X						
Due, 2017 ¹⁴							X
Echevarria, 2016 ¹⁵				X			
Eriksson, 2013 ¹⁶	X						
Filardo, 2009 ¹⁷				X			
Finkelstein, 2002 ¹⁸				X			
Ford, 2017 ¹⁹		X					
Fox, 2011 ²⁰	X						
Gannon, 2011 ²¹							X
Garrard, 2006 ²²							X
Gepts, 2018 ²³	X						

Study	Exclusion Reason						
	Not full publication/ OECD	Not eligible setting	Not population of interest	Not eligible intervention	Not eligible comparator	Not eligible outcome/ timing	Not eligible design
Grunfeld, 2013 ²⁴			X				
Halladay, 2014 ²⁵				X			
Harris, 2017 ²⁶				X			
Horn, 2010 ²⁷							X
Huguet, 2018 ²⁸			X				
Hulscher, 2003 ²⁹	X						
Hulscher, 1997 ³⁰							X
Jefferies, 2012 ³¹			X				
Jenkins, 2008 ³²	X						
Jennings, 2017 ³³				X			
Kaplan, 2018 ³⁴				X			
Katz, 2014 ³⁵				X			
Kirchner, 2014 ³⁶				X			
Knierim, 2019 ³⁷				X			
Korner, 2018 ³⁸	X						
Lannon, 2013 ³⁹							X
Leamy, 2011 ⁴⁰	X						
Leonard, 2017 ⁴¹							X
Lindsay, 2015 ⁴²			X				
McCormack, 2019 ⁴³	X						
McNally, 2006 ⁴⁴			X				
Meurer, 2011 ⁴⁵							X
Michaels, 2017 ⁴⁶				X			
Midboe, 2018 ⁴⁷	X						
Modell, 1998 ⁴⁸				X			
Mullen, 2009 ⁴⁹			X				
Naccarella, 2016 ⁵⁰				X			

Study	Exclusion Reason						
	Not full publication/ OECD	Not eligible setting	Not population of interest	Not eligible intervention	Not eligible comparator	Not eligible outcome/ timing	Not eligible design
Nagykaldi, 2005 ⁵¹	X						
Nowalk, 2016 ⁵²			X				
Parchman, 2019 ⁵³				X			
Parchman, 2008 ⁵⁴	X						
Pearlman, 2002 ⁵⁵		X					
Persson, 2013 ⁵⁶	X						
Petro-Nustas, 1996 ⁵⁷	X						
Rakhmanova, 2016 ⁵⁸	X						
Rantz, 2017 ⁵⁹				X			
Roderick, 2017 ⁶⁰					X		
Ruhe, 2005 ⁶¹							X
Salbach, 2014 ⁶²	X						
Sarin, 2018 ⁶³			X				
Schiff, 2017 ⁶⁴				X			
Schmidt, 1998 ⁶⁵				X			
Siman, 2018 ⁶⁶	X						
Smith, 2019 ⁶⁷				X			
Solberg, 1998 ⁶⁸				X			
Starkey, 2016 ⁶⁹			X				
Steiner, 2010 ⁷⁰	X						
Thom, 2016 ⁷¹			X				
Trott, 1999 ⁷²	X						
Verreault, 2018 ⁷³				X			
Vos, 2010 ⁷⁴				X			
Wray, 2018 ⁷⁵	X						
Zimmerman, 2017 ⁷⁶				X			

References for KQ 1 Excluded Studies

1. Ansari M, Shlipak MG, Heidenreich PA, et al. Improving guideline adherence: a randomized trial evaluating strategies to increase beta-blocker use in heart failure. *Circulation*. 2003;107(22):2799-804.
2. Aspy CB, Enright M, Halstead L, et al. Improving mammography screening using best practices and practice enhancement assistants: an Oklahoma Physicians Resource/Research Network (OKPRN) study. *Journal of the American Board of Family Medicine: JABFM*. 2008;21(4):326-33.
3. Asselin J, Salami E, Osunlana AM, et al. Impact of the 5As Team study on clinical practice in primary care obesity management: a qualitative study. *CMAJ open*. 2017;5(2):E322-E329.
4. Baskerville NB, Hogg W, Lemelin J. Process evaluation of a tailored multifaceted approach to changing family physician practice patterns improving preventive care. *Journal of Family Practice*. 2001;50(3):W242-9.
5. Bitton A, Ellner A, Pabo E, et al. The Harvard Medical School Academic Innovations Collaborative: transforming primary care practice and education. *Academic Medicine*. 2014;89(9):1239-44.
6. Bucknall TK, Harvey G, Considine J, et al. Prioritising Responses Of Nurses To deteriorating patient Observations (PRONTO) protocol: testing the effectiveness of a facilitation intervention in a pragmatic, cluster-randomised trial with an embedded process evaluation and cost analysis. *Implement Sci*. 2017;12(1):85.
7. Calo WA, Gilkey MB, Leeman J, et al. Coaching primary care clinics for HPV vaccination quality improvement: Comparing in-person and webinar implementation. *Translational Behavioral Medicine*. 2019;9(1):23-31.
8. Chakrabarty S. Leadership: validation of a self-report scale: comment on Dussault, Frenette, and Fernet (2013). *Psychological Reports*. 2014;115(2):415-8.
9. Clapp JC. A Multidisciplinary Team Approach to Management of Postpartum Hemorrhage...Proceedings of the 2015 AWHONN Convention. *JOGNN: Journal of Obstetric, Gynecologic & Neonatal Nursing*. 2015;44:S22-S22.
10. Connolly MJ, Broad JB, Bish T, et al. Reducing emergency presentations from long-term care: A before-and-after study of a multidisciplinary team intervention. *Maturitas*. 2018;117:45-50.
11. Courtlandt C, Noonan L, Koricke MW, et al. Pediatrics Residents' Confidence and Performance Following a Longitudinal Quality Improvement Curriculum. *Journal of Graduate Medical Education*. 2016;8(1):74-9.
12. Deane FP, Andresen R, Crowe TP, et al. A comparison of two coaching approaches to enhance implementation of a recovery-oriented service model. *Administration & Policy in Mental Health*. 2014;41(5):660-7.
13. Dorr DA, McConnell KJ, Williams MP, et al. Study protocol: transforming outcomes for patients through medical home evaluation and redesign: a cluster randomized controlled trial to test high value elements for patient-centered medical homes versus quality improvement. *Implement Sci*. 2015;10:13.
14. Due TD, Thorsen T, Waldorff FB, et al. Role enactment of facilitation in primary care - a qualitative study. *BMC Health Serv Res*. 2017;17(1):593.
15. Echevarria M. Translating Knowledge Into Practice Through an Academic-Practice Partnership for Exploring Barriers That Impact Management of Homebound Patients With Heart Failure. *Care Management Journals*. 2016;17(2):81-96.

16. Eriksson L, Duc DM, Eldh AC, et al. Lessons learned from stakeholders in a facilitation intervention targeting neonatal health in Quang Ninh province, Vietnam. *BMC Pregnancy & Childbirth*. 2013;13:234.
17. Filardo G, Nicewander D, Herrin J, et al. A hospital-randomized controlled trial of a formal quality improvement educational program in rural and small community Texas hospitals: One year results. *International Journal for Quality in Health Care*. 2009;21(4):225-232.
18. Finkelstein JA, Lozano P, Streiff KA, et al. Clinical effectiveness research in managed-care systems: lessons from the Pediatric Asthma Care PORT. Patient Outcomes Research Team. *Health Services Research*. 2002;37(3):775-89.
19. Ford JH, 2nd, Abramson B, Wise M, et al. Bringing Healthy Aging to Scale: A Randomized Trial of a Quality Improvement Intervention to Increase Adoption of Evidence-Based Health Promotion Programs by Community Partners. *J Public Health Manag Pract*. 2017;23(5):e17-e24.
20. Fox C, Cadzow R, Cooper B, et al. Improving chronic kidney disease care in primary care practices. *American Journal of Kidney Diseases*. 2011;57(4):A40.
21. Gannon M, Qaseem A, Snow V, et al. Using online learning collaboratives to facilitate practice improvement for COPD: an ACPNet pilot study. *American Journal of Medical Quality*. 2011;26(3):212-9.
22. Garrard J, Choudary V, Groom H, et al. Organizational change in management of hepatitis C: evaluation of a CME program. *Journal of Continuing Education in the Health Professions*. 2006;26(2):145-60.
23. Gepts T, Siman N, Cleland C, et al. The impact of practice facilitation and seasonal variation on blood pressure control in small independent practices. *Circulation*. 2018;138.
24. Grunfeld E, Manca D, Moineddin R, et al. Improving chronic disease prevention and screening in primary care: results of the BETTER pragmatic cluster randomized controlled trial. *BMC Fam Pract*. 2013;14:175.
25. Halladay JR, DeWalt DA, Wise A, et al. More extensive implementation of the chronic care model is associated with better lipid control in diabetes. *J Am Board Fam Med*. 2014;27(1):34-41.
26. Harris MF, Parker SM, Litt J, et al. An Australian general practice based strategy to improve chronic disease prevention, and its impact on patient reported outcomes: evaluation of the preventive evidence into practice cluster randomised controlled trial. *BMC Health Serv Res*. 2017;17(1):637.
27. Horn SD, Sharkey SS, Hudak S, et al. Pressure ulcer prevention in long-term-care facilities: a pilot study implementing standardized nurse aide documentation and feedback reports. *Advances in Skin & Wound Care*. 2010;23(3):120-31.
28. Huguet N, Hatch B, Sumic A, et al. Implementation of Health Insurance Support Tools in Community Health Centers. *Journal of the American Board of Family Medicine: JABFM*. 2018;31(3):410-416.
29. Hulscher ME, Laurant MG, Grol RP. Process evaluation on quality improvement interventions. *Quality & Safety in Health Care*. 2003;12(1):40-6.
30. Hulscher ME, van Drenth BB, van der Wouden JC, et al. Changing preventive practice: a controlled trial on the effects of outreach visits to organise prevention of cardiovascular disease. *Qual Health Care*. 1997;6(1):19-24.

31. Jefferies D, Johnson M, Nicholls D, et al. Evaluating an intensive ward-based writing coach programme to improve nursing documentation: lessons learned. *International Nursing Review*. 2012;59(3):394-401.
32. Jenkins P. The role of the nurse educator: mentor, change agent, expert. *Journal for nurses in staff development : JNSD : official journal of the National Nursing Staff Development Organization*. 2008;24(5):245-247.
33. Jennings RM, Burtner JJ, Pellicer JF, et al. Reducing Head CT Use for Children With Head Injuries in a Community Emergency Department. *Pediatrics*. 2017;139(4).
34. Kaplan HC, King E, White BE, et al. Clinical practice and quality: Statewide quality improvement initiative to reduce early elective deliveries and improve birth registry accuracy. *Obstetrics and Gynecology*. 2018;131(4):688-695.
35. Katz DA, Holman JE, Johnson SR, et al. Implementing Best Evidence in Smoking Cessation Treatment for Hospitalized Veterans: Results from the VA-BEST Trial. *Joint Commission Journal on Quality & Patient Safety*. 2014;40(11):493-1.
36. Kirchner JE, Ritchie MJ, Pitcock JA, et al. Outcomes of a partnered facilitation strategy to implement primary care-mental health. *Journal of General Internal Medicine*. 2014;29 Suppl 4:904-12.
37. Knierim KE, Hall TL, Dickinson LM, et al. Primary Care Practices' Ability to Report Electronic Clinical Quality Measures in the EvidenceNOW Southwest Initiative to Improve Heart Health. *JAMA Network Open*. 2019;2(8).
38. Korner M, Becker S, Dinius J, et al. A patient-centred team-coaching concept for medical rehabilitation. *Journal of Interprofessional Care*. 2018;32(1):123-126.
39. Lannon CM, Peterson LE. Pediatric collaborative networks for quality improvement and research. *Academic Pediatrics*. 2013;13(6 SUPPL.):S69-S74.
40. Leamy M, Le Boutillier C, Bird V, et al. The REFOCUS randomised controlled trial: Lessons and early findings. *Psychiatrische Praxis*. 2011;38.
41. Leonard C, Lawrence E, McCreight M, et al. Implementation and dissemination of a transition of care program for rural veterans: a controlled before and after study. *Implement Sci*. 2017;12(1):123.
42. Lindsay JA, Kauth MR, Hudson S, et al. Implementation of video telehealth to improve access to evidence-based psychotherapy for posttraumatic stress disorder. *Telemedicine Journal & E-Health*. 2015;21(6):467-72.
43. McCormack RP, Hawk K, D'Onofrio G, et al. 159 Implementing Emergency Department-Initiated Buprenorphine in Low-Resource, High-Need Settings. *Annals of Emergency Medicine*. 2019;74(4):S62-S63.
44. McNally K, Lukens R. Leadership development: an external-internal coaching partnership. *Journal of Nursing Administration*. 2006;36(3):155-61.
45. Meurer WJ, Majersik JJ, Frederiksen SM, et al. Provider perceptions of barriers to the emergency use of tPA for acute ischemic stroke: a qualitative study. *BMC Emergency Medicine*. 2011;11(1):5-5.
46. Michaels L, Anastas T, Waddell EN, et al. A Randomized Trial of High-Value Change Using Practice Facilitation. *Journal of the American Board of Family Medicine: JABFM*. 2017;30(5):572-582.
47. Midboe AM, Martino S, Krein SL, et al. Testing implementation facilitation of a primary care-based collaborative care clinical program using a hybrid type III interrupted time series design: a study protocol. *Implement Sci*. 2018;13(1):145.

48. Modell M, Wonke B, Anionwu E, et al. A multidisciplinary approach for improving services in primary care: randomised controlled trial of screening for haemoglobin disorders. *BMJ*. 1998;317(7161):788-91.
49. Mullen JE, Kelloway EK. Safety leadership: a longitudinal study of the effects of transformational leadership on safety outcomes. *Journal of Occupational & Organizational Psychology*. 2009;82(2):253-272.
50. Naccarella L, Butterworth I, Moore T. Transforming Health Professionals into Population Health Change Agents. *Journal of Public Health Research*. 2016;5(1):643.
51. Nagykaldis Z, Mold JW, Aspy CB. Practice facilitators: a review of the literature. *Fam Med*. 2005;37(8):581-8.
52. Nowalk MP, Lin CJ, Pavlik VN, et al. Using the 4 Pillars™ Practice Transformation Program to increase adult Tdap immunization in a randomized controlled cluster trial. *Vaccine*. 2016;34(41):5026-5033.
53. Parchman ML, Anderson ML, Dorr DA, et al. A Randomized Trial of External Practice Support to Improve Cardiovascular Risk Factors in Primary Care. *Ann Fam Med*. 2019;17(Suppl 1):S40-S49.
54. Parchman ML, Pugh JA, Culler SD, et al. A group randomized trial of a complexity-based organizational intervention to improve risk factors for diabetes complications in primary care settings: study protocol. *Implement Sci*. 2008;3:15.
55. Pearlman DN, Camberg L, Wallace LJ, et al. Tapping youth as agents for change: evaluation of a peer leadership HIV/AIDS intervention. *Journal of Adolescent Health*. 2002;31(1):31-9.
56. Persson LA, Nga NT, Malqvist M, et al. Effect of Facilitation of Local Maternal-and-Newborn Stakeholder Groups on Neonatal Mortality: Cluster-Randomized Controlled Trial. *PLoS Medicine / Public Library of Science*. 2013;10(5):e1001445.
57. Petro-Nustas W. Evaluation of the process of introducing a quality development program in a nursing department at a teaching hospital: the role of a change agent. *International Journal of Nursing Studies*. 1996;33(6):605-18.
58. Rakhmanova NA, Snidevich U, Semenenko I. Improving HIV service delivery in detention centers and ART facility in Odessa, Ukraine. *International Journal of Infectious Diseases*. 2016;45:162.
59. Rantz MJ, Popejoy L, Vogelsmeier A, et al. Successfully Reducing Hospitalizations of Nursing Home Residents: Results of the Missouri Quality Initiative. *Journal of the American Medical Directors Association*. 2017;18(11):960-966.
60. Roderick SS, Burdette N, Hurwitz D, et al. Integrated behavioral health practice facilitation in patient centered medical homes: A promising application. *Families, Systems, & Health*. 2017;35(2):227-237.
61. Ruhe MC, Weyer SM, Zronek S, et al. Facilitating practice change: lessons from the STEP-UP clinical trial. *Preventive Medicine*. 2005;40(6):729-34.
62. Salbach NM, Wood-Dauphinee S, Barreca S, et al. Contributing evidence of the effectiveness of an active, multi-component knowledge translation intervention in improving implementation of a stroke rehabilitation guideline: Results from the stroke Canada optimization of rehabilitation through evidence-implementation trial (score-it). *Stroke*. 2014;45(12):e266.
63. Sarin E, Livesley N. Quality Improvement Approaches Associated with Quality of Childbirth Care Practices in Six Indian States. *Indian Pediatrics*. 2018;55(9):789-792.

64. Schiff GD, Reyes Nieva H, Griswold P, et al. Randomized Trial of Reducing Ambulatory Malpractice and Safety Risk: Results of the Massachusetts PROMISES Project. *Medical Care*. 2017;55(8):797-805.
65. Schmidt I, Claesson CB, Westerholm B, et al. The impact of regular multidisciplinary team interventions on psychotropic prescribing in Swedish nursing homes. *J Am Geriatr Soc*. 1998;46(1):77-82.
66. Siman N, Cleland C, Berry C, et al. The impact of practice facilitation on adherence to cardiovascular disease prevention guidelines. *Circulation*. 2018;138.
67. Smith SN, Almirall D, Prenovost K, et al. Change in Patient Outcomes After Augmenting a Low-level Implementation Strategy in Community Practices That Are Slow to Adopt a Collaborative Chronic Care Model: A Cluster Randomized Implementation Trial. *Medical Care*. 2019;57(7):503-511.
68. Solberg LI, Kottke TE, Brekke ML. Will primary care clinics organize themselves to improve the delivery of preventive services? A randomized controlled trial. *Prev Med*. 1998;27(4):623-31.
69. Starkey M, Wiest D, Qaseem A. Improving Depression Care Through an Online Learning Collaborative. *American Journal of Medical Quality*. 2016;31(2):111-7.
70. Steiner RM, Walsworth DT. Using quality experts from manufacturing to transform primary care. *Journal of Continuing Education in the Health Professions*. 2010;30(2):95-105.
71. Thom DH, Wolf J, Gardner H, et al. A Qualitative Study of How Health Coaches Support Patients in Making Health-Related Decisions and Behavioral Changes. *Ann Fam Med*. 2016;14(6):509-516.
72. Trott MC, Windsor K. Leadership effectiveness: how do you measure up? *Nursing Economic\$*. 1999;17(3):127-130.
73. Verreault R, Arcand M, Misson L, et al. Quasi-experimental evaluation of a multifaceted intervention to improve quality of end-of-life care and quality of dying for patients with advanced dementia in long-term care institutions. *Palliative Medicine*. 2018;32(3):613-621.
74. Vos L, Duckers ML, Wagner C, et al. Applying the quality improvement collaborative method to process redesign: a multiple case study. *Implement Sci*. 2010;5:19.
75. Wray LO, Ritchie MJ, Oslin DW, et al. Enhancing implementation of measurement-based mental health care in primary care: a mixed-methods randomized effectiveness evaluation of implementation facilitation. *BMC Health Serv Res*. 2018;18(1):753.
76. Zimmerman RK, Brown AE, Pavlik VN, et al. Using the 4 Pillars Practice Transformation Program to Increase Pneumococcal Immunizations for Older Adults: A Cluster-Randomized Trial. *Journal of the American Geriatrics Society*. 2017;65(1):114-122.

KEY QUESTION 2

Study	Exclusion Reason					
	Not OECD country	Not eligible evaluation	Not eligible sample	Not phenomenon of interest	Not eligible design	Not eligible research type
Ali, 2014 ¹		X				
Ammentorp, 2010 ²		X				
Andersen, 2015 ³		X				
Asselin, 2017 ⁴		X				
Baskerville, 2001 ⁵					X	
Bauer, 2019 ⁶		X				
Bauer, 2016 ⁷		X				
Bender, 2011 ⁸		X				
Bennell, 2017 ⁹		X				
Boamah, 2018 ¹⁰		X				
Bradd, 2018 ¹¹				X		
Bridges, 2013 ¹²		X				
Brooker, 2016 ¹³		X				
Brouwers, 2016 ¹⁴		X				
Brunette, 2008 ¹⁵		X				
Budhoo, 2011 ¹⁶		X				
Cable, 2018 ¹⁷			X			
Calo, 2019 ¹⁸				X		
Campbell, 2012 ¹⁹		X				
Chan, 2010 ²⁰		X				
Chreim, 2010 ²¹				X		
Chuang, 2014 ²²		X				
Cicirello, 2005 ²³		X				
Cranley, 2017 ²⁴					X	
Cummings, 2014 ²⁵				X		
Devers, 2013 ²⁶		X				

Study	Exclusion Reason					
	Not OECD country	Not eligible evaluation	Not eligible sample	Not phenomenon of interest	Not eligible design	Not eligible research type
Dickinson, 2014 ²⁷		X				
Dietrich, 1992 ²⁸		X				
Dimas, 2016 ²⁹		X				
Dobbins, 2019 ³⁰		X				
Donahue, 2013 ³¹		X				
Donaldson, 2008 ³²			X			
du Toit, 2019 ³³				X		
Duff, 2013 ³⁴		X				
Echevarria, 2016 ³⁵		X				
Edwards, 2018 ³⁶		X				
Eiff, 2016 ³⁷		X				
Fearing, 2014 ³⁸				X		
Felder, 2017 ³⁹		X				
Fernald, 2019 ⁴⁰		X				
Fernald, 2013 ⁴¹		X				
Fox, 2013 ⁴²		X				
Gandhi, 2000 ⁴³		X				
Gannon, 2011 ⁴⁴		X				
Garbutt, 2018 ⁴⁵		X				
Garrard, 2006 ⁴⁶				X		
Gastala, 2018 ⁴⁷		X				
George, 2015 ⁴⁸	X					
Gingold, 2016 ⁴⁹		X				
Gold, 2015 ⁵⁰		X				
Gonzalo, 2019 ⁵¹		X				
Gordon, 2013 ⁵²		X				
Grandes, 2017 ⁵³		X				
Grant, 2017 ⁵⁴		X				

Study	Exclusion Reason					
	Not OECD country	Not eligible evaluation	Not eligible sample	Not phenomenon of interest	Not eligible design	Not eligible research type
Greenberg, 2018 ⁵⁵			X			
Greiver, 2019 ⁵⁶				X		
Hackshaw, 2016 ⁵⁷			X			
Hall, 2019 ⁵⁸		X				
Halladay, 2016 ⁵⁹		X				
Halladay, 2017 ⁶⁰		X				
Hälleberg Nyman, 2019 ⁶¹		X				
Hallett, 1997 ⁶²		X				
Harris, 2018 ⁶³		X				
Harvey, 2012 ⁶⁴				X		
Harvey, 2018 ⁶⁵			X			
Hill, 2015 ⁶⁶		X				
Hill, 2015 ⁶⁷		X				
Hogg, 2008 ⁶⁸		X				
Hogg, 2008 ⁶⁹					X	
Homa, 2008 ⁷⁰		X				
Houle, 2017 ⁷¹		X				
Huguet, 2018 ⁷²		X				
Iyasere, 2016 ⁷³			X			
Jansen, 2008 ⁷⁴		X				
Jefferies, 2012 ⁷⁵		X				
Jinks, 2009 ⁷⁶		X				
Johnson, 2011 ⁷⁷			X			
Johnson, 2014 ⁷⁸		X				
Jones, 1992 ⁷⁹		X				
Jortberg, 2014 ⁸⁰		X				
Kaplan, 2013 ⁸¹		X				
Katz, 2014 ⁸²		X				

Study	Exclusion Reason					
	Not OECD country	Not eligible evaluation	Not eligible sample	Not phenomenon of interest	Not eligible design	Not eligible research type
Kavanagh, 2010 ⁸³		X				
Kjaerbeck, 2014 ⁸⁴		X				
Klop, 2017 ⁸⁵		X				
Korner, 2018 ⁸⁶				X		
Kotecha, 2015 ⁸⁷		X				
Lazorick, 2008 ⁸⁸		X				
Lefebvre, 2019 ⁸⁹		X				
Liddy, 2017 ⁹⁰		X				
Liddy, 2018 ⁹¹		X				
Lipman, 2016 ⁹²		X				
Loeb, 2019 ⁹³		X				
Luig, 2018 ⁹⁴		X				
Mader, 2016 ⁹⁵		X				
Madsen, 2016 ⁹⁶				X		
Mahloch, 1993 ⁹⁷		X				
Malik, 2016 ⁹⁸		X				
McCullough, 2017 ⁹⁹			X			
McGloin, 2015 ¹⁰⁰		X				
McIntosh, 2009 ¹⁰¹		X				
McNamara, 2014 ¹⁰²		X				
Meurer, 2011 ¹⁰³		X				
Mignogna, 2014 ¹⁰⁴					X	
Miller, 2018 ¹⁰⁵		X				
Mold, 2008 ¹⁰⁶		X				
Moriarty, 2007 ¹⁰⁷		X				
Morley, 2018 ¹⁰⁸		X				
Mulcahy, 2018 ¹⁰⁹		X				
Mutabdzic, 2015 ¹¹⁰		X				

Study	Exclusion Reason					
	Not OECD country	Not eligible evaluation	Not eligible sample	Not phenomenon of interest	Not eligible design	Not eligible research type
Naik, 2015 ¹¹¹		X				
Nease, 2008 ¹¹²		X				
Noel, 2013 ¹¹³		X				
O'Malley, 1992 ¹¹⁴		X				
Owen, 2013 ¹¹⁵		X				
Palmer, 2019 ¹¹⁶		X				
Pandhi, 2019 ¹¹⁷		X				
Paquette-Warren, 2014 ¹¹⁸		X				
Parchman, 2016 ¹¹⁹		X				
Parchman, 2013 ¹²⁰		X				
Pérez-Escamilla, 2014 ¹²¹		X				
Piers, 2017 ¹²²		X				
Pimentel, 2019 ¹²³		X				
Ploeg, 2010 ¹²⁴			X			
Pollak, 2016 ¹²⁵		X				
Prekert, 1997 ¹²⁶		X				
Rafferty, 2015 ¹²⁷		X				
Richters, 2018 ¹²⁸		X				
Ritchie, 2017 ¹²⁹		X				
Rivers, 2011 ¹³⁰		X				
Rodenbach, 2019 ¹³¹		X				
Salsbury, 2018 ¹³²		X				
Sathe, 2013 ¹³³		X				
Schiff, 2017 ¹³⁴		X				
Schiff, 2017 ¹³⁵		X				
Shunk, 2014 ¹³⁶				X		
Starkey, 2016 ¹³⁷		X				
Stetler, 2006 ¹³⁸		X				



Study	Exclusion Reason					
	Not OECD country	Not eligible evaluation	Not eligible sample	Not phenomenon of interest	Not eligible design	Not eligible research type
Stover, 2014 ¹³⁹	X					
Tabak, 2018 ¹⁴⁰		X				
Tafvelin, 2014 ¹⁴¹		X				
Tatla, 2017 ¹⁴²		X				
Thomas, 2014 ¹⁴³		X				
van Berkel, 2019 ¹⁴⁴			X			
van Dongen, 2018 ¹⁴⁵				X		
Volker, 2017 ¹⁴⁶		X				
Waldrop, 2019 ¹⁴⁷			X			
Watts, 2014 ¹⁴⁸		X				
Weiner, 2017 ¹⁴⁹		X				
Weng, 2015 ¹⁵⁰		X				
Westcott, 2016 ¹⁵¹			X			
Wilkie, 1995 ¹⁵²		X				
Woloschuk, 2012 ¹⁵³		X				
Wray, 2018 ¹⁵⁴		X				
Young, 2007 ¹⁵⁵		X				

References for KQ 2 Excluded Studies

1. Ali KJ, Farley DO, Speck K, et al. Measurement of implementation components and contextual factors in a two-state healthcare quality initiative to reduce ventilator-associated pneumonia. *Infection Control and Hospital Epidemiology*. 2014;35:S116-S123.
2. Ammentorp J, Kofoed PE. Coach training can improve the self-efficacy of neonatal nurses. A pilot study. *Patient Education & Counseling*. 2010;79(2):258-61.
3. Andersen H, Rovik KA. Lost in translation: a case-study of the travel of lean thinking in a hospital. *BMC Health Serv Res*. 2015;15:401.
4. Asselin J, Salami E, Osunlana AM, et al. Impact of the 5As Team study on clinical practice in primary care obesity management: a qualitative study. *CMAJ open*. 2017;5(2):E322-E329.
5. Baskerville NB, Hogg W, Lemelin J. Process evaluation of a tailored multifaceted approach to changing family physician practice patterns improving preventive care. *Journal of Family Practice*. 2001;50(3):W242-9.
6. Bauer MS, Miller CJ, Kim B, et al. Effectiveness of Implementing a Collaborative Chronic Care Model for Clinician Teams on Patient Outcomes and Health Status in Mental Health: A Randomized Clinical Trial. *JAMA Network Open*. 2019;2(3):e190230.
7. Bauer MS, Miller C, Kim B, et al. Partnering with health system operations leadership to develop a controlled implementation trial. *Implement Sci*. 2016;11:22.
8. Bender BG, Dickinson P, Rankin A, et al. The Colorado Asthma Toolkit Program: a practice coaching intervention from the High Plains Research Network. *Journal of the American Board of Family Medicine: JABFM*. 2011;24(3):240-8.
9. Bennell KL, Campbell PK, Egerton T, et al. Telephone Coaching to Enhance a Home-Based Physical Activity Program for Knee Osteoarthritis: A Randomized Clinical Trial. *Arthritis Care and Research*. 2017;69(1):84-94.
10. Boamah SA, Spence Laschinger HK, Wong C, et al. Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nursing Outlook*. 2018;66(2):180-189.
11. Bradd P, Travaglia J, Hayen A. Developing allied health leaders to enhance person-centred healthcare. *Journal of Health Organization & Management*. 2018;32(7):908-932.
12. Bridges RA, Holden-Huchton P, Armstrong ML. Transition to Nursing Practice of Accelerated Second-Degree Baccalaureate Students Using Clinical Coaches. *Journal of Continuing Education in Nursing*. 2013;44(5):225-229.
13. Brooker DJ, Latham I, Evans SC, et al. FITS into practice: translating research into practice in reducing the use of anti-psychotic medication for people with dementia living in care homes. *Aging & mental health*. 2016;20(7):709-718.
14. Brouwers MC, Vukmirovic M, Tomasone JR, et al. Documenting coordination of cancer care between primary care providers and oncology specialists in Canada. *Canadian Family Physician*. 2016;62(10):e616-e625.
15. Brunette MF, Asher D, Whitley R, et al. Implementation of integrated dual disorders treatment: a qualitative analysis of facilitators and barriers. *Psychiatric Services*. 2008;59(9):989-95.
16. Budhoo MR, Spurgeon P. Views and understanding of clinicians on the leadership role and attitude to coaching as a development tool for clinical leadership. *International Journal of Clinical Leadership*. 2011;17(3-4):123-129.

17. Cable S, Graham E. "Leading Better Care": An evaluation of an accelerated coaching intervention for clinical nursing leadership development. *J Nurs Manag.* 2018;26(5):605-612.
18. Calo WA, Gilkey MB, Leeman J, et al. Coaching primary care clinics for HPV vaccination quality improvement: Comparing in-person and webinar implementation. *Translational Behavioral Medicine.* 2019;9(1):23-31.
19. Campbell TD. Clinical Nurse Specialists' Role in Promoting Evidence Based Practice in Saskatchewan's Health Care Settings. University of Alberta (Canada); 2012.
20. Chan BC, Perkins D, Wan Q, et al. Finding common ground? Evaluating an intervention to improve teamwork among primary health-care professionals. *International Journal for Quality in Health Care.* 2010;22(6):519-524.
21. Chreim S, Williams BE, Janz L, et al. Change agency in a primary health care context: the case of distributed leadership. *Health Care Management Review.* 2010;35(2):187-99.
22. Chuang E, Ganti V, Alvi A, et al. Implementing panel management for hypertension in a low-income, urban, primary care setting. *Journal of Primary Care & Community Health.* 2014;5(1):61-6.
23. Cicirello NA. The role of parent coaching by pediatric physical therapists: An exploration of current practice. Portland State University; 2005.
24. Cranley LA, Cummings GG, Profetto-McGrath J, et al. Facilitation roles and characteristics associated with research use by healthcare professionals: a scoping review. *BMJ Open.* 2017;7(8):e014384.
25. Cummings G, Mallidou AA, Masaoud E, et al. On becoming a coach: a pilot intervention study with managers in long-term care. *Health Care Management Review.* 2014;39(3):198-209.
26. Devers KJ, Foster L, Brach C. Nine states' use of collaboratives to improve children's health care quality in medicaid and CHIP. *Academic pediatrics.* 2013;13(6 Suppl):S95-102.
27. Dickinson WP, Dickinson LM, Nutting PA, et al. Practice facilitation to improve diabetes care in primary care: a report from the EPIC randomized clinical trial. *Ann Fam Med.* 2014;12(1):8-16.
28. Dietrich AJ, O'Connor GT, Keller A, et al. Cancer: improving early detection and prevention. A community practice randomised trial. *BMJ.* 1992;304(6828):687-91.
29. Dimas ID, Renato Lourenco P, Rebelo T. The effects on team emotions and team effectiveness of coaching in interprofessional health and social care teams. *Journal of Interprofessional Care.* 2016;30(4):416-22.
30. Dobbins M, Greco L, Yost J, et al. A description of a tailored knowledge translation intervention delivered by knowledge brokers within public health departments in Canada. *Health Research Policy & Systems.* 2019;17(1):63.
31. Donahue KE, Halladay JR, Wise A, et al. Facilitators of transforming primary care: a look under the hood at practice leadership. *Ann Fam Med.* 2013;11 Suppl 1:S27-33.
32. Donaldson N, Rutledge D, Geiser K. Role of the External Coach in Advancing Research Translation in Hospital-Based: Performance Improvement. *Agency for Healthcare Research and Quality.* 2008;08:08.
33. du Toit SHJ, Chan YL, Jessup GM, et al. Peer-enabled staff training in residential care settings as means for promoting person-centred dementia care. *Aging & Mental Health.* 2019:1-10.

34. Duff J, Walker K, Omari A, et al. Educational outreach visits to improve nurses' use of mechanical venous thromboembolism prevention in hospitalized medical patients. *Journal of Vascular Nursing*. 2013;31(4):139-49.
35. Echevarria M. Translating Knowledge Into Practice Through an Academic-Practice Partnership for Exploring Barriers That Impact Management of Homebound Patients With Heart Failure. *Care Management Journals*. 2016;17(2):81-96.
36. Edwards NC, Smith Higuchi K. Process Evaluation of a Participatory, Multimodal Intervention to Improve Evidence-Based Care in Long-Term Care Settings. *Worldviews on Evidence-Based Nursing*. 2018;15(5):361-367.
37. Eiff MP, Green LA, Holmboe E, et al. A Model for Catalyzing Educational and Clinical Transformation in Primary Care: Outcomes From a Partnership Among Family Medicine, Internal Medicine, and Pediatrics. *Academic Medicine*. 2016;91(9):1293-304.
38. Fearing G, Barwick M, Kimber M. Clinical transformation: Manager's perspectives on implementation of evidence-based practice. *Administration & Policy in Mental Health*. 2014;41(4):455-68.
39. Felder JN, Segal Z, Beck A, et al. An Open Trial of Web-Based Mindfulness-Based Cognitive Therapy for Perinatal Women at Risk for Depressive Relapse. *Cognitive and Behavioral Practice*. 2017;24(1):26-37.
40. Fernald D, Hall T, Montgomery L, et al. Colorado Residency PCMH Project: Results From a 6-Year Transformation Effort. *Fam Med*. 2019;51(7):578-586.
41. Fernald DH, Wearner R, Dickinson WP. The journey of primary care practices to meaningful use: a colorado beacon consortium study. *J Am Board Fam Med*. 2013;26(5):603-611.
42. Fox CH, Vest BM, Kahn LS, et al. Improving evidence-based primary care for chronic kidney disease: study protocol for a cluster randomized control trial for translating evidence into practice (TRANSLATE CKD). *Implement Sci*. 2013;8:88.
43. Gandhi TK, Puopolo AL, Dasse P, et al. Obstacles to collaborative quality improvement: the case of ambulatory general medical care. *International Journal for Quality in Health Care*. 2000;12(2):115-23.
44. Gannon M, Qaseem A, Snow V, et al. Using online learning collaboratives to facilitate practice improvement for COPD: an ACPNet pilot study. *American Journal of Medical Quality*. 2011;26(3):212-9.
45. Garbutt JM, Dodd S, Walling E, et al. Theory-based development of an implementation intervention to increase HPV vaccination in pediatric primary care practices. *Implement Sci*. 2018;13(1):45.
46. Garrard J, Choudary V, Groom H, et al. Organizational change in management of hepatitis C: evaluation of a CME program. *Journal of Continuing Education in the Health Professions*. 2006;26(2):145-60.
47. Gastala NM, Wingrove PM, Gaglioti AH, et al. The Growing Trend of Health Coaches in Team-Based Primary Care Training A Multicenter Pilot Study. *Fam Med*. 2018;50(7):526-530.
48. George A, Blankenship KM, Biradavolu MR, et al. Sex workers in HIV prevention: From Social Change Agents to Peer Educators. *Global Public Health*. 2015;10(1):28-40.
49. Gingold JA, Briccetti C, Zook K, et al. Context Matters: Practitioner Perspectives on Immunization Delivery Quality Improvement Efforts. *Clinical Pediatrics*. 2016;55(9):825-37.

50. Gold R, Hollombe C, Bunce A, et al. Study protocol for "Study of Practices Enabling Implementation and Adaptation in the Safety Net (SPREAD-NET)": a pragmatic trial comparing implementation strategies. *Implement Sci.* 2015;10:144.
51. Gonzalo JD, Wolpaw DR, Krok KL, et al. A Developmental Approach to Internal Medicine Residency Education: Lessons Learned from the Design and Implementation of a Novel Longitudinal Coaching Program. *Medical education online.* 2019;24(1):1591256.
52. Gordon SJ, Melillo KD, Nannini A, et al. Bedside coaching to improve nurses' recognition of delirium. *Journal of Neuroscience Nursing.* 2013;45(5):288-293.
53. Grandes G, Sanchez A, Cortada JM, et al. Collaborative modeling of an implementation strategy: a case study to integrate health promotion in primary and community care. *BMC Research Notes.* 2017;10(1):699.
54. Grant AM, Studholme I, Verma R, et al. The impact of leadership coaching in an Australian healthcare setting. *Journal of health organization and management.* 2017;31(2):237-252.
55. Greenberg CC, Ghousseini HN, Pavuluri Quamme SR, et al. A Statewide Surgical Coaching Program Provides Opportunity for Continuous Professional Development. *Annals of Surgery.* 2018;267(5):868-873.
56. Greiver M, Dahrouge S, O'Brien P, et al. Improving care for elderly patients living with polypharmacy: protocol for a pragmatic cluster randomized trial in community-based primary care practices in Canada. *Implement Sci.* 2019;14(1):55.
57. Hackshaw KV, Plans-Pujolras M, Rodriguez-Saona LE, et al. A pilot study of health and wellness coaching for fibromyalgia. *BMC Musculoskeletal Disorders.* 2016;17(1):457.
58. Hall TL, Knierim KE, Nease DE, Jr., et al. Primary Care Practices' Implementation of Patient-Team Partnership: Findings from EvidenceNOW Southwest. *Journal of the American Board of Family Medicine: JABFM.* 2019;32(4):490-504.
59. Halladay JR, Mottus K, Reiter K, et al. The Cost to Successfully Apply for Level 3 Medical Home Recognition. *Journal of the American Board of Family Medicine: JABFM.* 2016;29(1):69-77.
60. Halladay JR, Tillman J, Hinderliter A, et al. Practice level costs of office-based hypertension performance improvement: The Heart Healthy Lenoir study. *Journal of Healthcare Management.* 2017;62(2):136-150.
61. Hälleberg Nyman M, Forsman H, Wallin L, et al. Promoting evidence-based urinary incontinence management in acute nursing and rehabilitation care—A process evaluation of an implementation intervention in the orthopaedic context. *Journal of Evaluation in Clinical Practice.* 2019;25(2):282-289.
62. Hallett CE. Learning through reflection in the community: the relevance of Schon's theories of coaching to nursing education. *International Journal of Nursing Studies.* 1997;34(2):103-10.
63. Harris M, Bonnington O, Harrison G, et al. Understanding hepatitis C intervention success—Qualitative findings from the HepCATT study. *Journal of Viral Hepatitis.* 2018;25(7):762-770.
64. Harvey G, Kitson A, Munn Z. Promoting continence in nursing homes in four European countries: the use of PACES as a mechanism for improving the uptake of evidence-based recommendations. *International Journal of Evidence-Based Healthcare.* 2012;10(4):388-96.

65. Harvey G, McCormack B, Kitson A, et al. Designing and implementing two facilitation interventions within the 'Facilitating Implementation of Research Evidence (FIRE)' study: a qualitative analysis from an external facilitators' perspective. *Implement Sci*. 2018;13(1):141.
66. Hill JN, Smith BM, Evans CT, et al. Implementing a declination form programme to improve influenza vaccine uptake by staff in Department of Veterans Affairs spinal cord injury centres: a pilot study. *Journal of Hospital Infection*. 2015;91(2):158-65.
67. Hill JN, Suda KJ, Ramanathan S, et al. Development of a unit-specific antibiogram and planning for implementation: Preimplementation findings. *American Journal of Infection Control*. 2015;43(11):1264-1267.
68. Hogg W, Lemelin J, Graham ID, et al. Improving prevention in primary care: evaluating the effectiveness of outreach facilitation. *Fam Pract*. 2008;25(1):40-8.
69. Hogg W, Lemelin J, Moroz I, et al. Improving prevention in primary care: Evaluating the sustainability of outreach facilitation. *Canadian Family Physician*. 2008;54(5):712-20.
70. Homa K, Regan-Smith M, Foster T, et al. Coaching physicians in training to lead improvement in clinical microsystems: a qualitative study on the role of the clinical coach. *International Journal of Clinical Leadership*. 2008;16(1):37-48.
71. Houle SK, Charrois TL, Faruquee CF, et al. A randomized controlled study of practice facilitation to improve the provision of medication management services in Alberta community pharmacies. *Research In Social & Administrative Pharmacy*. 2017;13(2):339-348.
72. Huguet N, Hatch B, Sumic A, et al. Implementation of Health Insurance Support Tools in Community Health Centers. *Journal of the American Board of Family Medicine: JABFM*. 2018;31(3):410-416.
73. Iyasere CA, Baggett M, Romano J, et al. Beyond Continuing Medical Education: Clinical Coaching as a Tool for Ongoing Professional Development. *Academic Medicine*. 2016;91(12):1647-1650.
74. Jansen M, Harting J, Ebben N, et al. The concept of sustainability and the use of outcome indicators. A case study to continue a successful health counselling intervention. *Fam Pract*. 2008;25 Suppl 1:i32-7.
75. Jefferies D, Johnson M, Nicholls D, et al. Evaluating an intensive ward-based writing coach programme to improve nursing documentation: lessons learned. *International Nursing Review*. 2012;59(3):394-401.
76. Jinks AM, Armitage H, Pitt R. A qualitative evaluation of an interprofessional learning project. *Learning in Health & Social Care*. 2009;8(4):263-271.
77. Johnson A, Hong H, Groth M, et al. Learning and development: promoting nurses' performance and work attitudes. *J Adv Nurs*. 2011;67(3):609-20.
78. Johnson KE, Coleman K, Phillips KE, et al. Development of a facilitation curriculum to support primary care transformation: the "coach medical home" curriculum. *Medical Care*. 2014;52(11 Suppl 4):S26-32.
79. Jones JN, Marsden P. Improved diabetes care in a UK health district. *Diabetic Medicine*. 1992;9(2):176-80.
80. Jortberg BT, Fernald DH, Dickinson LM, et al. Curriculum redesign for teaching the PCMH in Colorado Family Medicine Residency programs. *Fam Med*. 2014;46(1):11-8.
81. Kaplan HC, Froehle CM, Cassedy A, et al. An exploratory analysis of the Model for Understanding Success in Quality. *Health Care Management Review*. 2013;38(4):325-338.

82. Katz DA, Holman JE, Johnson SR, et al. Implementing Best Evidence in Smoking Cessation Treatment for Hospitalized Veterans: Results from the VA-BEST Trial. *Joint Commission Journal on Quality & Patient Safety*. 2014;40(11):493-1.
83. Kavanagh PM. Appreciative Inquiry: An interactive organizational intervention to translate acute pain management evidence into pediatric nursing practice. University of Toronto (Canada); 2010.
84. Kjaerbeck S, Petersen H. [Hygiene communication - conditions for change]. *Ugeskrift for Laeger*. 2014;176(23):02.
85. Klop R, Klompaker L. Evaluation of knowledge vouchers as instrument for implementing good practices. *International Journal of Integrated Care (IJIC)*. 2017;17:1-2.
86. Korner M, Becker S, Dinius J, et al. A patient-centred team-coaching concept for medical rehabilitation. *Journal of Interprofessional Care*. 2018;32(1):123-126.
87. Kotecha J, Brown JB, Han H, et al. Influence of a quality improvement learning collaborative program on team functioning in primary healthcare. *Families, Systems, & Health*. 2015;33(3):222-30.
88. Lazorick S, Crowe VL, Dolins JC, et al. Structured intervention utilizing state professional societies to foster quality improvement in practice. *Journal of Continuing Education in the Health Professions*. 2008;28(3):131-9.
89. Lefebvre G, Honey L, Hines K, et al. Implementing Obstetrics Quality Improvement, Driven by Medico-legal Risk, is Associated With Improved Workplace Culture. *Journal of Obstetrics and Gynaecology Canada*. 2019.
90. Liddy C, Rowan M, Valiquette-Tessier SC, et al. Improved Delivery of Cardiovascular Care (IDOCC): Findings from Narrative Reports by Practice Facilitators. *Preventive Medicine Reports*. 2017;5:214-219.
91. Liddy C, Rowan M, Valiquette-Tessier SC, et al. Experiences of practice facilitators working on the Improved Delivery of Cardiovascular Care project: Retrospective case study. *Canadian Family Physician*. 2018;64(1):e23-e32.
92. Lipman PD, Aspy CB. Local Learning Collaboratives to Improve Quality for Chronic Kidney Disease (CKD): From Four Regional Practice-based Research Networks (PBRNs). *Journal of the American Board of Family Medicine: JABFM*. 2016;29(5):543-52.
93. Loeb DF, Kline DM, Kroenke K, et al. Designing the relational team development intervention to improve management of mental health in primary care using iterative stakeholder engagement. *BMC Fam Pract*. 2019;20(1):124.
94. Luig T, Asselin J, Sharma AM, et al. Understanding Implementation of Complex Interventions in Primary Care Teams. *Journal of the American Board of Family Medicine: JABFM*. 2018;31(3):431-444.
95. Mader EM, Fox CH, Epling JW, et al. A Practice Facilitation and Academic Detailing Intervention Can Improve Cancer Screening Rates in Primary Care Safety Net Clinics. *Journal of the American Board of Family Medicine: JABFM*. 2016;29(5):533-42.
96. Madsen WC. Narrative Approaches to Organizational Development: A Case Study of Implementation of Collaborative Helping. *Family Process*. 2016;55(2):253-69.
97. Mahloch J, Taylor V, Taplin S, et al. A breast cancer screening educational intervention targeting medical office staff. *Health Education Research*. 1993;8(4):567-79.

98. Malik G, McKenna L, Plummer V. Facilitators and barriers to evidence-based practice: perceptions of nurse educators, clinical coaches and nurse specialists from a descriptive study. *Contemporary Nurse*. 2016;52(5):544-554.
99. McCullough MB, Gillespie C, Petrakis BA, et al. Forming and activating an internal facilitation group for successful implementation: A qualitative study. *Research In Social & Administrative Pharmacy*. 2017;13(5):1014-1027.
100. McGloin H, Timmins F, Coates V, et al. A case study approach to the examination of a telephone-based health coaching intervention in facilitating behaviour change for adults with Type 2 diabetes. *Journal of Clinical Nursing*. 2015;24(9-10):1246-57.
101. McIntosh J, Tolson D. Leadership as part of the nurse consultant role: banging the drum for patient care. *Journal of Clinical Nursing*. 2009;18(2):219-27.
102. McNamara MS, Fealy GM, Casey M, et al. Mentoring, coaching and action learning: interventions in a national clinical leadership development programme. *Journal of clinical nursing*. 2014;23(17-18):2533-2541.
103. Meurer WJ, Majersik JJ, Frederiksen SM, et al. Provider perceptions of barriers to the emergency use of tPA for acute ischemic stroke: a qualitative study. *BMC Emergency Medicine*. 2011;11(1):5-5.
104. Mignogna J, Hundt NE, Kauth MR, et al. Implementing brief cognitive behavioral therapy in primary care: A pilot study. *Translational Behavioral Medicine*. 2014;4(2):175-83.
105. Miller R, Weir C, Gulati S. Transforming primary care: scoping review of research and practice. *Journal of Integrated Care*. 2018;26(3):176-188.
106. Mold JW, Aspy CA, Nagykaldis Z, et al. Implementation of evidence-based preventive services delivery processes in primary care: an Oklahoma Physicians Resource/Research Network (OKPRN) study. *Journal of the American Board of Family Medicine: JABFM*. 2008;21(4):334-44.
107. Moriarty D, O'Hara A, Byron S. Macmillan nurse facilitators for palliative care: evaluation of a pilot project. *International Journal of Palliative Nursing*. 2007;13(7):334-43.
108. Morley KE, Barysaukas CM, Carballo V, et al. Characteristics of Volunteer Coaches in a Clinical Process Improvement Program. *Quality Management in Health Care*. 2018;27(2):81-86.
109. Mulcahy M, Lowry C, Hoban K, et al. Perspectives and experiences of nurses as facilitators within a Practice Development program. *Collegian*. 2018;25(1):3-10.
110. Mutabdzic D, Mylopoulos M, Murnaghan ML, et al. Coaching surgeons: Is culture limiting our ability to improve? *Annals of Surgery*. 2015;262(2):213-216.
111. Naik AD, Lawrence B, Kiefer L, et al. Building a primary care/research partnership: lessons learned from a telehealth intervention for diabetes and depression. *Fam Pract*. 2015;32(2):216-223.
112. Nease DE, Jr., Nutting PA, Dickinson WP, et al. Inducing sustainable improvement in depression care in primary care practices. *Joint Commission Journal on Quality & Patient Safety*. 2008;34(5):247-55.
113. Noel PH, Lanham HJ, Palmer RF, et al. The importance of relational coordination and reciprocal learning for chronic illness care within primary care teams. *Health Care Management Review*. 2013;38(1):20-8.

114. O'Malley J. Transformational leadership in action: an interview with a health care executive. Interview by Gloria E. Bader. *Nursing Administration Quarterly*. 1992;17(1):38-44.
115. Owen RR, Drummond KL, Viverito KM, et al. Monitoring and managing metabolic effects of antipsychotics: a cluster randomized trial of an intervention combining evidence-based quality improvement and external facilitation. *Implement Sci*. 2013;8:120.
116. Palmer JA, Parker VA, Mor V, et al. Barriers and facilitators to implementing a pragmatic trial to improve advance care planning in the nursing home setting. *BMC Health Serv Res*. 2019;19(1):527.
117. Pandhi N, Jacobson N, Crowder M, et al. Engaging Patients in Primary Care Quality Improvement Initiatives: Facilitators and Barriers. *American Journal of Medical Quality*. 2019:1062860619842938.
118. Paquette-Warren J, Roberts SE, Fournie M, et al. Improving chronic care through continuing education of interprofessional primary healthcare teams: a process evaluation. *Journal of Interprofessional Care*. 2014;28(3):232-8.
119. Parchman ML, Fagnan LJ, Dorr DA, et al. Study protocol for "Healthy Hearts Northwest": a 2 x 2 randomized factorial trial to build quality improvement capacity in primary care. *Implement Sci*. 2016;11(1):138.
120. Parchman ML, Noel PH, Culler SD, et al. A randomized trial of practice facilitation to improve the delivery of chronic illness care in primary care: initial and sustained effects. *Implement Sci*. 2013;8:93.
121. Pérez-Escamilla B, García-Cárdenas V, Gastelurrutia MA, et al. Perception of Practice Change Facilitators on the professional future of this new job in community pharmacy. *Pharmaceutical Care Espana*. 2014;16(3):81-88.
122. Piers RD, Versluys KJJ, Devoghel J, et al. A Typology of Interprofessional Teamwork in Acute Geriatric Care: A Study in 55 units in Belgium. *Journal of the American Geriatrics Society*. 2017;65(9):2064-2070.
123. Pimentel CB, Mills WL, Palmer JA, et al. Blended Facilitation as an Effective Implementation Strategy for Quality Improvement and Research in Nursing Homes. *Journal of Nursing Care Quality*. 2019;34(3):210-216.
124. Ploeg J, Skelly J, Rowan M, et al. The role of nursing best practice champions in diffusing practice guidelines: a mixed methods study. *Worldviews on Evidence-Based Nursing*. 2010;7(4):238-51.
125. Pollak KI, Nagy P, Bigger J, et al. Effect of teaching motivational interviewing via communication coaching on clinician and patient satisfaction in primary care and pediatric obesity-focused offices. *Patient Education and Counseling*. 2016;99(2):300-303.
126. Prekert F, Ehnfors M. A measure of organizational effectiveness in nursing management in relation to transactional and transformational leadership: a study in a Swedish county hospital. *J Nurs Manag*. 1997;5(5):279-87.
127. Rafferty R, Fairbrother G. Factors influencing how senior nurses and midwives acquire and integrate coaching skills into routine practice: a grounded theory study. *J Adv Nurs*. 2015;71(6):1249-1259.
128. Richters A, Nieuwboer M, Rikkert MO, et al. Longitudinal multiple case study on effectiveness of network-based dementia care towards more integration, quality of care,

- and collaboration in primary care. *International Journal of Integrated Care (IJIC)*. 2018;18:1-3.
129. Ritchie MJ, Parker LE, Edlund CN, et al. Using implementation facilitation to foster clinical practice quality and adherence to evidence in challenged settings: a qualitative study. *BMC Health Serv Res*. 2017;17(1):294.
 130. Rivers R, Pesata V, Beasley M, et al. Transformational Leadership: Creating A Prosperity-Planning Coaching Model for RN Retention. *Nurse Leader*. 2011;9(5):48-51.
 131. Rodenbach R, Kavalieratos D, Tamber A, et al. Coaching Palliative Care Conversations: Evaluating the Impact on Resident Preparedness and Goals-of-Care Conversations. *Journal of palliative medicine*. 2019.
 132. Salsbury SA, Goertz CM, Vining RD, et al. Interdisciplinary Practice Models for Older Adults With Back Pain: A Qualitative Evaluation. *Gerontologist*. 2018;58(2):376-387.
 133. Sathe A, Flowers E, Mathur A, et al. A culturally specific health coaching program targeting cardiovascular disease risk in south asians: Rationale, design, and baseline data. *Ethnicity and Disease*. 2013;23(3):304-309.
 134. Schiff GD, Bearden T, Hunt LS, et al. Primary Care Collaboration to Improve Diagnosis and Screening for Colorectal Cancer. *Joint Commission Journal on Quality & Patient Safety*. 2017;43(7):338-350.
 135. Schiff GD, Reyes Nieva H, Griswold P, et al. Randomized Trial of Reducing Ambulatory Malpractice and Safety Risk: Results of the Massachusetts PROMISES Project. *Medical Care*. 2017;55(8):797-805.
 136. Shunk R, Dulay M, Chou CL, et al. Huddle-coaching: a dynamic intervention for trainees and staff to support team-based care. *Academic Medicine*. 2014;89(2):244-50.
 137. Starkey M, Wiest D, Qaseem A. Improving Depression Care Through an Online Learning Collaborative. *American Journal of Medical Quality*. 2016;31(2):111-7.
 138. Stetler CB, Legro MW, Rycroft-Malone J, et al. Role of "external facilitation" in implementation of research findings: a qualitative evaluation of facilitation experiences in the Veterans Health Administration. *Implement Sci*. 2006;1:23.
 139. Stover KE, Tesfaye S, Frew AH, et al. Building district-level capacity for continuous improvement in maternal and newborn health. *Journal of Midwifery & Women's Health*. 2014;59 Suppl 1:S91-S100.
 140. Tabak RG, Dsouza N, Schwarz CD, et al. A formative study to understand perspectives of families eligible for a pediatric obesity program: a qualitative study. *BMC Public Health*. 2018;18(1):586.
 141. Tafvelin S, Hyvönen U, Westerberg K. Transformational Leadership in the Social Work Context: The Importance of Leader Continuity and Co-Worker Support. *British Journal of Social Work*. 2014;44(4):886-904.
 142. Tatla SK, Howard D, Antunes Silvestre A, et al. Implementing a collaborative coaching intervention for professionals providing care to children and their families: An exploratory study. *Journal of Interprofessional Care*. 2017;31(5):604-612.
 143. Thomas CL, Man M-S, O'Cathain A, et al. Effectiveness and cost-effectiveness of a telehealth intervention to support the management of long-term conditions: study protocol for two linked randomized controlled trials. *Trials*. 2014;15(1):36-36.
 144. van Berkel C, Almond P, Hughes C, et al. Retrospective observational study of the impact on emergency admission of telehealth at scale delivered in community care in Liverpool, UK. *BMJ Open*. 2019;9(7):e028981.

145. van Dongen JJJ, van Bokhoven MA, Goossens WNM, et al. Development of a Customizable Programme for Improving Interprofessional Team Meetings: An Action Research Approach. *International Journal of Integrated Care [Electronic Resource]*. 2018;18(1):8.
146. Volker N, Williams LT, Davey RC, et al. Implementation of cardiovascular disease prevention in primary health care: enhancing understanding using normalisation process theory. *BMC Fam Pract*. 2017;18(1):28.
147. Waldrop J, Derouin A. The Coaching Experience of Advanced Practice Nurses in a National Leadership Program. *Journal of Continuing Education in Nursing*. 2019;50(4):170-175.
148. Watts B, Lawrence RH, Singh S, et al. Implementation of quality improvement skills by primary care teams: case study of a large academic practice. *Journal of Primary Care & Community Health*. 2014;5(2):101-6.
149. Weiner BJ, Rohweder CL, Scott JE, et al. Using Practice Facilitation to Increase Rates of Colorectal Cancer Screening in Community Health Centers, North Carolina, 2012-2013: Feasibility, Facilitators, and Barriers. *Preventing Chronic Disease*. 2017;14:E66.
150. Weng RH, Huang CY, Chen LM, et al. Exploring the impact of transformational leadership on nurse innovation behaviour: a cross-sectional study. *J Nurs Manag*. 2015;23(4):427-39.
151. Westcott L. How coaching can play a key role in the development of nurse managers. *Journal of Clinical Nursing*. 2016;25(17-18):2669-77.
152. Wilkie DJ, Williams AR, Grevstad P, et al. Coaching persons with lung cancer to report sensory pain: Literature review and pilot study findings. *Cancer Nursing*. 1995;18(1):7-15.
153. Woloschuk DM, Raymond CB. Development and evaluation of a workplace-based preceptor training course for pharmacy practitioners. *Canadian Pharmacists Journal*. 2012;145(5):231-6.
154. Wray LO, Ritchie MJ, Oslin DW, et al. Enhancing implementation of measurement-based mental health care in primary care: a mixed-methods randomized effectiveness evaluation of implementation facilitation. *BMC Health Serv Res*. 2018;18(1):753.
155. Young D, Furler J, Vale M, et al. Patient Engagement and Coaching for Health: The PEACH study - A cluster randomised controlled trial using the telephone to coach people with type 2 diabetes to engage with their GPs to improve diabetes care: A study protocol. *BMC Fam Pract*. 2007;8.

APPENDIX E. CONSOLIDATED FRAMEWORK FOR IMPLEMENTATION RESEARCH (CFIR) CONSTRUCTS

	Construct	Short Description	Operationalization for Transformational Coaching
<i>I. Intervention Characteristics/Transformational Coach</i>			Intervention is the coaching itself and the characteristics that make transformational coaching more or less implementable (eg, modality, the coach as an individual, the act of coaching or how the coach actually interacted with the team members, who is being coached and relevant stakeholders)
C	Relative Advantage	Stakeholders' perception of the advantage of implementing the intervention versus an alternative solution	Stakeholders' view on why implementing transformational coaching instead of another intervention would be beneficial
D	Adaptability	The degree to which an intervention can be adapted, tailored, refined, or reinvented to meet local needs	How easily the transformational coaching can be tailored, changed, or adapted to meet the needs of the local interdisciplinary team
G	Design Quality & Packaging	Perceived excellence in how the intervention is bundled, presented, and assembled	How others view the quality and presentation of transformational coaching intervention
H	Cost	Costs of the intervention and costs associated with implementing the intervention including investment, supply, and opportunity costs	How much it costs to implement the coaching intervention
<i>II. Outer Setting</i>			Any level outside the transformational coach and the team receiving the coaching (eg, health care policy, health care system in which a team sits, social drivers such as rates of homelessness in patient population served)
B	Cosmopolitanism	The degree to which an organization is networked with other external organizations	The extent to which the team or larger practice is networked with other organizations
D	External Policy & Incentives	A broad construct that includes external strategies to spread	The external policies and incentives to engage with coaching and QI efforts

	Construct	Short Description	Operationalization for Transformational Coaching
		interventions, including policy and regulations (governmental or other central entity), external mandates, recommendations and guidelines, pay-for-performance, collaboratives, and public or benchmark reporting	
III. Inner Setting			The team unit and clinic level in which the transformational coaching widget is operating (eg, proximal influences of the widget, leaders not a part of the team being coached)
C	Culture	Norms, values, and basic assumptions of a given organization	The workings of an organization in which the interdisciplinary team sits
D	Implementation Climate	The absorptive capacity for change, shared receptivity of involved individuals to an intervention, and the extent to which use of that intervention will be rewarded, supported, and expected within their organization	How well implementation of new ideas is accepted and put into a practice
E	Readiness for Implementation	Tangible and immediate indicators of organizational commitment to its decision to implement an intervention	Indicators that show that the organization is ready and able to change
IV. Characteristics of Individuals and Team			The individual or team who is receiving the transformational coaching widget (eg, the individual team members being coached)
A	Knowledge & Beliefs about the Intervention	Individuals' attitudes toward and value placed on the intervention as well as familiarity with facts, truths, and principles related to the intervention	How individuals feel about transformational coaching and the value placed on it
C	Individual Stage of	Characterization of the	The stage of change the person is in with respect



	Construct	Short Description	Operationalization for Transformational Coaching
	Change	phase an individual is in, as he or she progresses toward skilled, enthusiastic, and sustained use of the intervention	to engagement with transformational coaching and QI
E	Other Personal Attributes	A broad construct to include other personal traits such as tolerance of ambiguity, intellectual ability, motivation, values, competence, capacity, and learning style	The personal traits of the person(s) receiving the coaching.
V. Process/QI Strategy			How the transformational coaching program was put into place within practice (implementation process, not coaching process)
A	Planning	The degree to which a scheme or method of behavior and tasks for implementing an intervention are developed in advance, and the quality of those schemes or methods	How well a protocol of transformational coaching implementation is developed
C	Executing	Carrying out or accomplishing the implementation according to plan	Actually doing the transformational coaching implementation as planned
D	Reflecting & Evaluating	Quantitative and qualitative feedback about the progress and quality of implementation accompanied with regular personal and team debriefing about progress and experience	Looking back about the progress that was made and if the transformational coaching intervention worked

APPENDIX F. CERQUAL EVIDENCE PROFILE

For full study citations, please refer to the main report’s reference list.

Summary of Review Finding	Studies Contributing to Review Finding	Methodologic limitations	Coherence	Adequacy	Relevance	CERQual Assessment of Confidence in the Evidence	Explanation of CERQual Assessment
External policy and incentives (context: inner and outer setting)							
<p>Barriers: External policy not aligned with the ongoing effort</p> <p>When the external policies governing practice level activities were not consistent with requirements of a QI project, this was problematic. For example, practices expressed the need for payment reform to align with the ongoing time and effort they are committing to improving quality of care.</p>	Fernald, 2014 ⁶⁵	Significant methodological limitations	No concerns (only 1 study)	Significant concerns about adequacy (only 1 study)	No concerns about relevance	Very low confidence	This finding was graded as very low confidence because of significant concerns regarding methodological limitations and significant concerns regarding adequacy.
<p>Barriers: Unanticipated competing demands shift focus on QI</p> <p>When teams were faced with unexpected events from outside the practice, their focus on coaching and QI could</p>	Liddy, 2014 ⁶⁰	Moderate methodological limitations	No concerns (only 1 study)	Significant concerns about adequacy (only 1 study)	No concerns about relevance	Low confidence	This finding was graded as low confidence because of significant concerns about adequacy moderate concerns regarding methodological limitations.

Summary of Review Finding	Studies Contributing to Review Finding	Methodologic limitations	Coherence	Adequacy	Relevance	CERQual Assessment of Confidence in the Evidence	Explanation of CERQual Assessment
be derailed. For example, practices working on QI activities during the H1N1 influenza outbreak found it difficult to retain momentum.							
<p>Facilitators: Project alignment with Government guidelines</p> <p>Coaching was more successful when QI project activities were aligned with guideline-identified best practices. For instance, the Ministry of Health distributed guidelines for respiratory infection control in community settings which were consistent with the QI intervention to improve respiratory infection control.</p>	Huston, 2006 ⁷¹	Significant methodological limitations	No concerns issues	No concerns (only 1 study)	Significant concerns about relevance (only 1 study)	Low confidence	This finding was graded as moderate confidence because of significant concerns about adequacy.
Relative advantage (transformational coaching/intervention characteristics)							
<p>Barriers: Lack of engagement by practice</p> <p>When practices were not invested in activities related to their QI</p>	McHugh, 2018 ⁶³ Due, 2018 ¹⁹ Kotecha 2015 ⁷⁰ Mekki, 2017 ⁷²	Minor methodological limitations (2 studies with no limitations, 1 with moderate and one with	No concerns (data are reasonably consistent)	Moderate concerns about adequacy	No concerns about relevance (differences in clinical setting [ie, PC and nursing home])	Moderate confidence	This finding was graded as moderate confidence because of minor concerns regarding methodological limitations and

Summary of Review Finding	Studies Contributing to Review Finding	Methodologic limitations	Coherence	Adequacy	Relevance	CERQual Assessment of Confidence in the Evidence	Explanation of CERQual Assessment
<p>projects or transformational coach, it was difficult for coaches to deliver the intended QI project. Examples of lack of engagement included when teams did not prioritize the planned QI intervention and when practices had limited resources allotted for transformational coaching and QI activities. Coaches found that when lack of engagement occurred, they had to “push” practices along and, at times, had difficulty finding a role for themselves within a busy practice.</p>		<p>minor methods limitations)</p>			<p>and country setting)</p>		<p>moderate concerns about adequacy.</p>
<p>Facilitators: Active engagement by practice</p> <p>Examples of practice engagement included teams having protected time and a convenient location for coaching activities, and the support of practice leadership. When</p>	<p>McHugh, 2018⁶³ Due, 2018¹⁹ Due, 2017⁶¹ Fernald, 2014⁶⁵ Buscaj, 2016⁶⁶ Lassard, 2016⁶⁹ Liddy, 2016⁵⁹ Kotecha, 2015⁷⁰ Liddy, 2014⁶⁰ Godfrey, 2014⁶⁸</p>	<p>Moderate methodological limitations (7 studies with any limitations, 2 studies with significant limitations)</p>	<p>No concerns (data are reasonably consistent)</p>	<p>No concerns about adequacy</p>	<p>No concerns about relevance</p>	<p>Moderate to high confidence</p>	<p>This finding was graded as moderate to high confidence because of moderate concerns regarding methodological limitations.</p>

Summary of Review Finding	Studies Contributing to Review Finding	Methodologic limitations	Coherence	Adequacy	Relevance	CERQual Assessment of Confidence in the Evidence	Explanation of CERQual Assessment
engaged, coach presence and the coach's actions helped practices be accountable during the QI project to making a change.							
Cost (intervention characteristics/transformational coaching)							
<p>Barriers: High workload for coach</p> <p>Coaches found it burdensome when, in addition to their planned QI support role, they had to compensate for data problems such as needing to collect data directly. Other sources of additional workload came from administrative tasks and a constantly changing daily routine.</p>	McHugh, 2018 ⁶³ Hemler, 2018 ⁶⁴ Kotecha, 2015 ⁷⁰	Minor methodological limitations	No concerns (data are reasonably consistent)	Moderate concerns about adequacy	No concerns about relevance	Moderate confidence	This finding was graded as moderate confidence because of minor concerns regarding methodological limitations and moderate concerns about adequacy.
<p>Facilitators: Investing in training coaches</p> <p>It was beneficial when coaches had adequate initial and ongoing training to help them with the QI process and understanding their role as a coach. One way to</p>	Kotecha, 2015 ⁷⁰ Godfrey, 2014 ⁶⁸ Mekki, 2017 ⁷² Huston, 2006 ⁷¹	Significant methodological limitations (1 study with moderate limitations, 1 with significant limitations)	No concerns (data are reasonably consistent)	Moderate concerns about adequacy	No concerns about relevance	Low confidence	This finding was graded as low confidence because of significant concerns regarding methodological limitations and moderate concerns about adequacy.

Summary of Review Finding	Studies Contributing to Review Finding	Methodologic limitations	Coherence	Adequacy	Relevance	CERQual Assessment of Confidence in the Evidence	Explanation of CERQual Assessment
support ongoing training for coaches was the creation of a network of other coaches to learn from during coaching activities.							
Knowledge and beliefs about the intervention (individual or team characteristics)							
<p>Barriers: Lack of knowledge</p> <p>Team level lack of knowledge regarding the coaching process, QI project details, and technical aspects of electronic medical records as they relate to QI data collection was a barrier to coaching success.</p>	Hemler, 201 ⁶⁴ Due, 2018 ¹⁹ Buscaj, 2016 ⁶⁶ McKeever, 2014 ¹⁵	Significant methodological limitations (3 studies with any limitations, 1 study with very significant limitations)	No concerns (data are reasonably consistent)	Moderate concerns about adequacy	No concerns about relevance	Low confidence	This finding was graded as low confidence because of significant concerns regarding methodological limitations and moderate concerns regarding adequacy.
<p>Barriers: Lack of ability to work with data</p> <p>Coaches experienced challenges when teams were not comfortable or readily able to work with QI data.</p>	Hemler, 2018 ⁶⁴	Moderate methodological limitations	No concerns (Only 1 study)	Significant concerns about adequacy (only 1 study)	No concerns about relevance	Very low confidence	This finding was graded as very low confidence because of significant concerns regarding adequacy and moderate concerns regarding methodological limitations.
Reflecting and evaluating (QI project)							
<p>Barriers: Data obstacles</p>	McHugh, 2018 ⁶³ Due, 2017 ⁶¹	Minor methodological limitations	No concerns (data are	Moderate concerns	No concerns about relevance	Moderate confidence	This finding was graded as moderate confidence because

Summary of Review Finding	Studies Contributing to Review Finding	Methodologic limitations	Coherence	Adequacy	Relevance	CERQual Assessment of Confidence in the Evidence	Explanation of CERQual Assessment
<p>Teams often had trouble acquiring the needed data for a given QI project which interfered with evaluating projects as planned. This led to team frustration and an inability of the coaches to execute relevant coaching implementation activities.</p>			<p>reasonably consistent)</p>	<p>about adequacy</p>			<p>of minor concerns regarding methodological limitations and moderate concerns about adequacy.</p>

APPENDIX G. PEER REVIEW COMMENTS AND RESPONSE TABLE

Question Text	Reviewer Number	Comment	Section of report	Response
Are the objectives, scope, and methods for this review clearly described?	1	Yes		Acknowledged
	2	Yes		Acknowledged
	3	Yes		Acknowledged
	4	Yes		Acknowledged
	5	No - This Review was commissioned to systematically examine quality improvement (QI) studies employing team-based quality improvement coaching interventions. Thus, findings from this synthesis should provide VA operational partners with a better understanding regarding how to assess process and clinical outcomes of VA transformational coaching (TC) approach and, to understand relevant contextual factors (barriers and facilitators) influencing coaching effectiveness.		We appreciate the reviewer’s thoughtful consideration of this report. The scope of this project, as co-developed by the nominating operations partners, was to focus on particular types of team-based QI innovations that are similar to the model of Transformational Coaching used within the VA system. We address and synthesize the evidence on: the effects of coaching on process outcomes (KQ 1b), the types of outcomes assessed (KQ 1a) and barriers and facilitators to the uptake of transformational coaching-like interventions (KQ 2).
	5	To paraphrase p. 11, lines 21-22, for the results of this project to be relevant to other health care organizations, a number of major and minor points warrant further consideration by the authors: Major Points 1. Pages 1, 9-10. The Introductory sections of this Report may be confusing to some reader because it is written from a perspective that assumes reader familiarity with a variety of concepts. Specifically, the clarity and logic flow of these sections could be significantly improved by defining key terms, providing a rationale for	Topic Development section of Executive Summary	Thank you for this recommendation. We have significantly revised introductory sections to clarify key terms, improve clarity, and logic flow.
			Introduction of Executive Summary	



Question Text	Reviewer Number	Comment	Section of report	Response
		selecting (or omitting) specific concepts, and provide strong justification for linking relevant theoretical constructs to TC. Some specific points:		
	5	a. What is a working definition of quality or process improvement? It is implied but never stated. In one section, QI is linked to characteristics of high-reliability organizations (p. 1) and as a strategy to achieve the health system quality outcomes outlined by the IOM (p. 9). It would be appropriate to operationally define how QI achieves these aims in both places or to use one clear consistent rationale. Similarly, a brief definition of facilitation is not provided in either section although a definition of practice facilitators is defined on p. 9, lines 21-24. Finally, what is a high reliability organization?	Intro of Exec Sum Intro of full report, second paragraph Intro of exec sum, first paragraph	A reference for the Institute for Healthcare Improvement (IHI) definition for QI has been included. Operational definition of QI has been added to Intro, Exec Summary, as well as a new table (Table 1) to further clarify where QI fits within various scientific approaches to improvement activities. Facilitation definition added. References in the introduction to high-reliability organizations have been removed. In the discussion, high reliability organization has been defined and the potential relationship to transformational coaching has been clarified (see page 85).
	5	b. It is unclear why the authors chose to focus on “one method” (p. 1, lines 12-13) of providing process improvement/quality improvement support (i.e., facilitation) versus other methods that are included in search criteria (e.g., improvement coaching/improvement advisor). For both VA and non-VA readers, it might be helpful to acknowledge some common approaches to leading team-based QI improvement projects including improvement coaching/advising or, coaching by expert staff trained in Lean, Six Sigma, or other systems redesign methodologies. These approaches actually compete with TC within VHA and it seems odd for them not be formally acknowledged.		Thank you for this observation. Other commonly used team-based QI coaching strategies have been acknowledged in the Introduction. As Transformational Coaching is not a term commonly used in the peer-reviewed literature, we cast a very wide net in our search logic to obtain a variety of QI support upon which to compare to the model of interest, Transformational Coaching.



Question Text	Reviewer Number	Comment	Section of report	Response
	5	c. The sequence of logically linking QI to facilitation as well as “practice” facilitation to TC is somewhat unclear in both sections. The logic in the Executive Summary is pretty hard to follow for readers with less familiarity with implementation science and quality improvement jargon. It does not seem necessary to even address facilitation in the Exec Summary provided that there’s an acknowledgement of the range of approaches to QI coaching that would be familiar to readers and similar to TC. The imprecision of terminology in these two sections may be off-putting to implementation science researchers and serve to undermine the report’s credibility for some potential users.		We have significantly revised these sections to improve clarity and reduce jargon. Further, we have added clarification that there is a wide-range of approaches to team-based QI coaching strategies.
	5	d. For p. 9, a clearer rationale for focusing on AHRQ’s model of facilitation vs. VA QUERI’s would be helpful. There is a strong difference between the two facilitation approaches but the nuances may not be evident for many readers.	Intro of executive summary and Topic development section of full report	Thank you for this recommendation. We have included VA QUERI and AHRQ’s definitions of facilitation and have acknowledged that there are multiple conceptualizations of facilitation.
	5	Study question KQ 1a, 1b. (p. 1, 11). It would be enhance the Report if these key questions used the same terminology as Figure 1 and explicitly state the focus of 1a is “process” outcomes and 1b is “clinical” outcomes for TC-like assessments.	Study selection section of executive summary, third paragraph. (Note: KQ 1a and b have been switched in the final report.)	We have aligned the terminology in Figure 1 and adjusted the wording of the key questions to clarify as suggested. Note that for KQ 1a, we did not limit outcomes to “clinical outcomes” but describe all outcomes included in studies meeting KQ 1 eligibility criteria. Figure 1 shows KQ 1a in both the process and clinical outcomes bubbles. This has been clarified in the methods section.
	5	Page 2, lines 42-47. Please provide clarification in the methods as to why the authors did not include quantitatively assessed barriers and facilitators to transformational coding (e.g. surveys, assessment instruments). The KQ2 question on p. 1 does not indicate that determinant assessment would rely solely on qualitative data.	Data synthesis and analysis section of executive summary	Our eligibility criteria (as outlined in SPIDER page 23), did allow for studies which used quantitative methodologies for assessment of barriers and facilitators (eg, surveys, observational). In fact, 1 included study was a survey that used open-ended questions



Question Text	Reviewer Number	Comment	Section of report	Response
				<p>(Liddy C, Singh J, Guo M, et al. Physician perspectives on a tailored multifaceted primary care practice facilitation intervention for improvement of cardiovascular care. <i>Fam Pract.</i> 2016;33(1):89-94). This has been clarified in the methods and results sections.</p> <p>Of note, we did identify multiple studies in our search that assessed the barriers and facilitators for the effectiveness of the QI project itself, but not the adoption of the coach-like role, so were thus excluded.</p>
	5	<p>4. Page 3, Data Synthesis and Analysis. It is unfortunate that this synthesis missed a significant opportunity to evaluate K1 metrics with respect to recommendations by the American College of Physicians to assessing the importance, appropriateness, clinical evidence, specifications, feasibility and applicability of potential performance metrics (Maclean, Kerr, Qaseem, 2018; NEJM) – most measures fail these criteria.</p> <p>Furthermore, numerous AHRQ studies pertaining to QI initiatives in primary care practice settings find a bias toward utilization and access metrics preferred by senior operational leaders that are neither meaningful or actionable by frontline providers, the people actually doing the QI work (e.g., Gray, Yakir, Hung, 2018). Helping teams and clinical leaders to selecting the appropriate ensemble of K1 measures is difficult for many primary care QI initiatives. In interpreting findings from this synthesis, the authors should</p>		<p>We agree that specific outcome metrics used to measure the success of a QI project and/or performance measure should be chosen thoughtfully and be valid for the context in which they are used. The scope of investigation and choice of outcomes for this review was informed by preferences from our operational partners and with guidance from our technical expert panel and multidisciplinary investigator team. Unfortunately, conducting a formal assessment of the outcomes identified in KQ 1a using criteria such as those put forth by the ACP in the identified article is out of scope for this current review. We agree that such an evaluation would be an important next step in building an understanding of how to best measure the impact of transformational coaching, and is a step that could be paired with improved stakeholder engagement to</p>



Question Text	Reviewer Number	Comment	Section of report	Response
		acknowledge this limitation or else err in summarizing meaningless measures.		ensure the use of relevant and valid metrics. We have noted this in the discussion and limitations.
	5	5. Page 18, KQ 1b. Mapping outcomes at multiple levels should be mentioned earlier in report.	Data synthesis section of the full report, KQ 1b (KQ 1a in final report) paragraph	Descriptions of mapping at multiple levels has been emphasized in the executive summary and methods of main report.
	5	<p>Page 54. KQ 2 findings. This section seems to conflate organizational barriers and facilitating contextual factors with TC implementation strategies/actions to mitigate B&Fs; these are two distinctly different evaluative questions. Consequently, framing of results in this section is flawed by mixing these two conceptually different constructs.</p> <p>As noted below in Minor suggestions, optimizing the selection of a practice-based determinants framework (e.g., Tailored Implementation for Chronic Disease framework (Flottorp, Oxman, Krause, et al., 2013 Implem Sci) would like have been more intuitive for readers and for use in categorizing determinants accurately without conflating implementation strategies with enabling factors.</p>	KQ 2 results section of main report	<p>We acknowledge that both organizational facilitators and coaching-initiated facilitators were included in the results for KQ 2. Both were included in our definition of facilitators. This was an intentional inclusion given the nature of transformational coaching. We felt it was important to identify all facilitators within each of the domains including those introduced by a coach. The coach-initiated facilitators directly impacted the domain for which they were included. We acknowledged this in the methods and limitations of the report.</p> <p>We acknowledge that there are multiple frameworks that could have been chosen as the core of our best fit framework approach to KQ 2, and that other choices could have led to different findings. We have added this consideration to our limitations section. In addition, we have clarified our rationale for the selection of CFIR as the core framework for this analysis in the methods section.</p>
	5	7. Minor: 1. Page 2, line 33. Define EPOC upon first use.	Study selection section of Exec Sum, second paragraph	Thank you. The suggested edit has been made.



Question Text	Reviewer Number	Comment	Section of report	Response
	5	2. Page 2, lines 47-49. Be mindful of undefined jargon such as “influencers” and “determinants.”	Study selection section of Exec Sum, third paragraph	We have rewritten throughout the report to reduce jargon and clarify definitions.
	5	3. Page 3. Line 28; p. 17. No rationale is provided for using the ERIC strategy taxonomy versus common QI frameworks like “change strategies” (i.e., The Improvement Guide by Langley, Moen, Nolan, Norman & Provost, 2009 that defined a 70+ traditional QI strategies).	Data synthesis and analysis of Exec Sum, first paragraph	We have added the rationale or our choice of ERIC strategy taxonomy to the methods section.
	5	4. Page 3 lines 54-60 and page 18. What is a “best fit framework” and why was CFIR selected as the organizational determinants framework? It is not checklist designed to assess primary care practice settings unlike the Tailored Implementation for Chronic Disease framework which was designed specifically for individual and organizational practice determinants.	Data synthesis and analysis of Exec Sum, third paragraph and Data synthesis section of main report, KQ 2 section	Thank you. We have now explicated the description of the best fit framework in the main methods section and executive summary for clarification. Further, we provide more justification for the choice of CFIR.
	5	5. Page 4, lines 26-28. Search term list seems incomplete versus Appendix B and Table 3 (p.17). Given VA’s longstanding relationship with IHI on major care initiatives, it seems appropriate to cite their terminology (quality improvement coach or advisor) which has been employed for nearly the last 25 years in VHA.	Results section of exec sum, KQ 1a (KQ 1b in final report) section, first paragraph	<p>We appreciate the need for clarification on these lists. The full list of terms used for our literature search are included in full in Appendix A. This collection of terms was identified from existing systematic reviews and exemplar papers, as well as with input from our operational partners and technical expert panel. After execution of the search, we identified additional terms that were searched for independently (see methods section, page 23.) These approaches together include those terms from IHI as the reviewer mentioned.</p> <p>Table 4 and Appendix B list the terms used by the authors of the included articles that met our eligibility criteria.</p>



Question Text	Reviewer Number	Comment	Section of report	Response
	5	Page 9, paragraphs 1 and 2. It is unclear what is to be evaluated – it seems to be facilitation or practice facilitation. Seems like introducing TC earlier would be helpful and to acknowledge there are many terms and models for doing team-based coaching. For example, there are close similarities between TC and AHRQ’s practice facilitation including...	Introduction of main report, first two paragraphs	The introduction has been significantly revised to better provide a rationale for the focus on Transformational Coaching. Further, we have multiple definitions for facilitation and have added a table to show the breadth of relevant terms we identified for this review.
	5	Page 9, line 32. Please refer to VA facilitation as “implementation facilitation.” A more appropriate and current reference would be the Implementation Facilitation guide (ver. 2.0) on the VA QUERI website.	Introduction of main report, third paragraph	Thank you for this information. We have made this revision and included this citation.
	5	8. Page 9, line 51. Rather than “facilitation methods” it would be preferable to be more precise such as “methods for facilitating team-based QI. “	Introduction of main report, fourth paragraph	Thank you for this suggestion. We have reworded this paragraph and no longer use this terminology.
	5	9. Page 11, TC definition, line 57. Use of external is confusing as used here relative to prior discussion about facilitators being internal or external to a team or healthcare system. Page 12 description on line 46 seems to contradict early discussion that TC/facilitation can be internal or external to a team (p. 9, line 40). Unclear here or elsewhere how TCs “catalyze and build capacity for sustained change” such as through what common principles, methods, skills, framework, etc.? TC seems like a black box intervention and not a well operationalized role and skill set.	Definition and conceptual model section of main report, first paragraph and third paragraph Introduction of main report, third paragraph	We appreciate that this topic requires clarity around language used given the overlapping fields of study and practice related to this subject matter. Because the definition of transformational coaching is something directly informed by, and developed with, the VA operations partners, we did not make further changes. However, we clarify the meaning of ‘external’ in the methods. We agree that the wording was confusing and have corrected it for consistency.
	5	10. Pages 10-11. The language pertaining to the use of the words “process (es)” and “outcome(s)” is used broadly. Greater precision and specificity would be welcome to help clarify term use in	Topic development section of main report	As noted above, we appreciate the importance of clarity around wording and have refined the definitions and language as suggested.



Question Text	Reviewer Number	Comment	Section of report	Response
		specific context (i.e., operationally defining these terms for purposes of this report).		
	5	11. Page 12, lines 48-49. New use of processes of care and clinical outcome terms without clear definition.	Definition and conceptual model of main report, fourth paragraph	Definitions and wording choices have been aligned.
	5	12. Page 12, lines 55-56. "...multiple determinants to the 'adoption' of TC..." It seems like KQ2 from the proceeding page mentioned the implementation and adoption of TC (order of terms should likely be reversed). These terms are being used imprecisely to describe the process of implementing a QI process/initiative. The authors are cautioned about using terms that refer to specific sequential steps in an implementation process, loosely. It seems like "adoption" in this report is a term borrowed from program evaluation frameworks like RE-AIM but which is different than its use in other implementation science contexts.	Definition and conceptual model of main report, fourth paragraph	Thank you. The model does focus on the overall uptake of transformational coaching, so the statement was amended to reflect this.
	5	13. Page 14, lines 8-9. "not necessarily" seems like imprecise wording for inclusion criteria (see Table 2 use as well). The Intervention exclusion criteria do not seem consistently applied. Many of the studies examined for K1 seem to be complex, multicomponent interventions per definition by the UK's MRC (e.g., guideline implementation) and there is reference to studies that used learning collaboratives (pp. 25). Not defining these terms precisely in this table seems to have created lapses in criteria being used consistently, affecting results. Outcomes on Table 1 seem outlined for K1a only and do not mention clinical outcomes of interest. How are constructs like self-efficacy and team member knowledge defined?	Study eligibility criteria table, intervention (and phenom. of interest) item 1. Table 4. transformational coaching activities	We have revised the inclusion criteria language to note that individuals in the coaching-like role were not required to be an expert on the clinical topic of relevance to a given QI project, though they could be. We acknowledge that transformational coaching is a complex intervention and thus the eligible studies included in this review were also complex interventions. We aimed to identify those studies which were consistent with transformational coaching as defined by the review's operational partners without including those studies which had significant co-delivered interventions which would preclude isolation of effect due to the



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				<p>coaching-like intervention. While we sought to develop clear rules to support making this distinction (eg, excluding longitudinal learning collaboratives vs including one-time learning collaboratives). We recognize that this may have excluded studies that potentially relevant information and have acknowledged this in the limitations.</p> <p>Definitions for self-efficacy and team member knowledge have been added to Table 2.</p>
	5	14. Page 17. Please explain the cause of the discrepancy in term use between K1 and K2 in Table 3.	Table 3. Other terms for transformational coaching	Table 4. shows the terms for the coach-like role used by the studies included in KQ 1 versus KQ 2. Because there were different studies included for each KQ, the terms are different as well. We have adjusted the title for this table for clarity
	5	15. Page 17, KQ1, line 43. Why were ERIC strategies used describe the methods use to make a QI process or clinical improvement rather than “other commonly used terms to enact change on sources of waste, inefficiency, barriers, etc. such as countermeasures, redesigns, change strategies, drivers, etc.? Given the lack of clarity about what a TC does with teams to help coach them to QI change, it’s hard to determine whether ERIC is appropriate or not.	Data Synthesis of main report, KQ 1b section, first paragraph	We chose to use the ERIC strategies to show the range of implementation activities that the coaches were involved with and to align with other facilitation research. We have added language to the methods to outline our rationale for choosing this particular taxonomy.
	5	16. Page 19, lines 49-59. Use of term over-read is awkward. Could less jargon be employed here for readability? Also, how many coders were needed to achieve consensus on codes/themes?	Data Synthesis of main report, KQ 2 section, third paragraph	We have refined the language here as recommended and clarified expectations for consensus.
	5	17. Pages 24-25, Table 4. It would be more intuitive to list implementation strategies by likely first use over the chronological timespan of a	Table 4. Transformational Coaching Activities	We have reordered this table (now Table 5) as suggested.

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		typical QI project. It is unclear if “operationalized definition” comes from ERIC studies, recent AHRQ evaluation by Perry, Damschroder et al., or an internal definition developed by this ESP team.		Clarification that the operationalized definitions were modified from the ERIC study has been added as a footnote.
	5	18. Page 25, lines 55-57. As noted by the AHRQ evaluators of EvidenceNow effort, audit and feedback are two distinctly separate strategies. See Perry, Damschroder, Hemler et al., 2019 Implem Sci.	Transformational Coaching Activities, KQ1 results, main report, second paragraph	We have acknowledged that these are distinct strategies, however list them together as that is the way they were typically described in the included studies.
	5	19. Page 29m Bottom Line. Was the ultimate problem that a clear performance benchmark was never set at the beginning of a QI project so that improvement relative to a goal was difficult to ascertain? See importance of distinguishing between audit and feedback for monitoring and accountability. Is this an issue of knowledge, literacy and proficiency in collecting the right data or being able to analyze it and digest in a manner to support systematic, iterative improvements in key goal targets for improvement?	Goal attainment section of main report, Detailed findings KQ 1b, bottom line box	We agree that this is an important question; however, we are unable to adequately address it based on the 2 studies with relevant outcomes for this section. We have noted the importance of thoughtful selection of valid and relevant outcomes for tracking success as noted in a previous response.
	5	20. Page 30, lines 10-11. Implementation of national preventive guidelines seems like a complex, multi-component intervention which should have been excluded per study criteria.	Adoption of Targeted Process of Care Activities, National preventative care guidelines, Detailed Findings KQ 1b	We recognize that the term “multi-component’ was unclear and have removed it from the inclusion criteria. Transformational coaching is a complex intervention, thus the included intervention were complex. However, we excluded those interventions which included co-delivery of strategies that are not part of the definition of transformational coaching and which would preclude the isolation of treatment effect for the coach-like intervention component.
	5	21. Page 30, line 29. Spell out number 1.	National preventative care guidelines,	Thank you for your comment.



Question Text	Reviewer Number	Comment	Section of report	Response
			Detailed Findings KQ 1b, second paragraph	
	5	22. Page 33. There is a considerable amount of jargon in this section – organizational structures, continuous QI framework, practice management, etc. As in defining reach on (line 49), it would be helpful to define less commonly understood terms like organization structures.	Organizational Process of Care, third paragraph	Thank you for this recommendation. We have removed unnecessary jargon and defined the remaining terms (continuous QI framework, practice management).
	5	23. Page 35, line 11. How did studies with learning collaboratives get included in the Results if learning or quality improvement collaboratives are considered an exclusion criterion?	Appropriate documentation, first paragraph	We have clarified that learning collaboratives were only a cause for exclusion if the effect of coaching was not able to be isolated. We agree that exploring the effect of coaching with learning collaboratives could be helpful; however, this was not within the scope of the key questions for this review.
	5	24. Page 54, 3rd bullet. While this point seems evident, the language is so broad here that it is difficult to interpret what “knowledge of the change processes required to implement QI...” is relative to expert credentials or skills needed by a TC.	KQ2 results section, Key Points	We have revised this statement and address the coach outcomes for the team to be successful.
	7	Yes		Acknowledged
Is there any indication of bias in our synthesis of the evidence?	1	No		Acknowledged
	2	No		Acknowledged
	3	No		Acknowledged
	4	No		Acknowledged
	5	No		Acknowledged
	7	No		Acknowledged
Are there any <u>published</u> or <u>unpublished</u>	1	No		Acknowledged
	2	Yes - See comment regarding exclusion of studies that used a collaborative improvement process		We have clarified that learning collaboratives were only a cause for



Question Text	Reviewer Number	Comment	Section of report	Response
studies that we may have overlooked?				<p>exclusion if the effect of coaching was not able to be isolated.</p> <p>We agree that exploring the effect of coaching with learning collaboratives could be helpful; however, this was not within the scope of the key questions for this review</p>
	3	<p>Yes - As I said in the other e-mail, I believe the search term "Transitional Coaching" do not have a standard definition. I suspect that Performance Improvement Literature with the associated roles of an improvement advisor, or facilitator, or PI coach, etc. have a huge overlap with this role. In addition, I wonder if the transitional coaching role emphasizes the people part of improvement more (I think it does) and the PI tools less (not sure). I wonder if T.C. is a VA term, or if it is really spread outside of VA. While I don't have a lot of insight into that (nor specific articles to suggest), just wanted to express that as a potential concern here. thank you</p>		<p>The reviewer is correct that transformational coaching is a VA term for a role that is conceptualized in similar ways outside of the VA. For the purposes of this report, we worked with our operational partners to develop a definition of transformational coaching - against which we could compare and identify similar interventions in the published literature.</p>
	4	No		Acknowledged
	5	No		Acknowledged
	7	No		Acknowledged
Additional suggestions or comments can be provided below. If applicable, please indicate the page and line numbers	1	<p>Thank you for the opportunity to review this ESP report on transformational coaching. This was an ambitious undertaking with potential important findings. I would say my main recommendation is to distill results down considerably and carefully align tables and text. This is very challenging to work through and the flow can be improved. I've provided suggestions here.</p>		Acknowledged
	1	Executive Summary	KQ2 results section, exec sum, third paragraph	We have clarified this language in the executive summary.



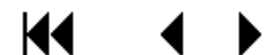
Question Text	Reviewer Number	Comment	Section of report	Response
from the draft report.		<ul style="list-style-type: none"> The language around presenting findings in terms of “COE” level is confusing. It may help readers if the authors identified barriers and facilitators and then tagged each parenthetically with COE level. For example, “high workload was a barrier (moderate COE)...” etc. 		
	1	<p>Applicability</p> <ul style="list-style-type: none"> Clarify that nearly all studies were in primary care settings (including the one in the VA). Making a blanket statement about applicability to VA is overly broad; it seems that applicability needs to be limited to primary care settings. 	Discussion section of exec sum, Applicability section	This qualification has been added as suggested.
	1	<p>Introduction</p> <ul style="list-style-type: none"> Move the KQs to Introduction. The section ends with a paragraph that seeks to summarize the aims but the description here does not quite match the KQs under Methods. E.g., assessing effects on clinical care delivery processes versus effects on team-based goal attainment, etc. 	Introduction section, main report, fourth paragraph	The KQs have been moved as recommended.
	1	<p>Methods</p> <ul style="list-style-type: none"> Figure 1: KQ 1a focused on <i>effects</i> of TC while KQ 1b focuses on <i>types</i> of outcomes—the diagram (and corresponding text) confuses this distinction 	Transformational Coaching Conceptual Model	We have adjusted the language in the KQs and the conceptual model description to reflect that KQ 1 was focused on the effect of transformational coaching on process of care outcomes and KQ 2 was focused on the mapping and grouping of all measured outcomes across patient, provider and practice level outcomes.



Question Text	Reviewer Number	Comment	Section of report	Response
	1	<p>Nice Table 1 that really helps the reader understand the operationalization of TC, which is a rather diffusely defined intervention</p> <ul style="list-style-type: none"> o Combining tables 1 and 2 with an extra column to indicate which KQs apply would be helpful. As is, I must compare the tables to see where the differences are 	Study eligibility criteria for KQ1 and 2	We appreciate that these 2 tables may add some confusion. However, they use separate criteria as appropriate for quantitative and qualitative evidence synthesis, they are incompatible for reducing to a single table.
	1	This is a picky point, but the ERIC list comprises strategies, not categories of strategies	Data synthesis KQ 1a section, first paragraph	Thank you, this wording has been changed.
	1	<p>Your definition of “facilitators” seems problematic: You say that your “Key Question was framed around the identification of barriers and facilitators to the implementation of transformational coaching...” but then go on to define facilitators as “as something that the coach does (or existing conditions) that helps to enable the coaching process around QI projects (including what the coach does to overcome barriers).” This is confusing and conflates the function of the THING (transformational coaching) that is being implemented with *facilitators* of that implementation. To put “existing conditions” (these might be true contextual facilitators for implementation) and “what the coach does” also, as a facilitator, blurs the line.</p>	Data synthesis, KQ 2 section, Second paragraph	We have clarified the wording throughout the report and added a table in the introduction to clarify terminology used.
	1	This is a picky comment: by “over-read” do the authors mean that a 2 nd reviewer read the article? This should be stated. “Over-read” doesn’t convey this idea.	Data synthesis, KQ 2 section, third paragraph	Thank you, this wording has been revised.
	1	Why not rate COE for all 15 CFIR constructs? We have worked with ops partners to ID “high priority” constructs and discovered that though some came	Rating the body of evidence, second paragraph	This topic and our report was driven by our nominating stakeholders’ information needs. We routinely survey our



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		to be empirically verified, others turned out not to be high priority and still others were on the empirically derived list that were not ID'd as "high priority" by our partners.		stakeholders to request prioritization of key outcomes for COE across all our reports and this is a routine practice in systematic reviews when it is infeasible due to team capacity to conduct COE for all identified outcomes. Thus, we elected to work with our operational partners who requested this review to select those constructs deemed of greatest relevance to them. We acknowledge that this may not reflect the most important constructs in other contexts or as perceived by other stakeholders. We have added a statement to this effect in the limitations.
	1	<p>Results</p> <ul style="list-style-type: none"> Suggest rearranging this section to provide results for KQ1, including the PRISM diagrams, followed by KQ2 and divide (following PRISM for KQ1a) sections for 1a versus 1b (i.e., p23, move KQ 1b down to a separate subsection 	Results, main report	We have moved the literature flow diagram for KQ 2 to the beginning of the KQ 2 section as suggested and separated the KQ 1b into its own subsection.
	1	In Table 4, suggest adding number of studies with documented use of each ERIC strategy	Table 4 Transformational Coaching Activities	The number of studies that used each coaching strategy has been added to Table 5 (formerly Table 4).
	1	Table 5 can be moved to an Appendix	Table 5 Implementation strategies	Thank you for this helpful suggestion. We have moved Table 5 to Appendix C.
	1	For Goal Attainment (p29), the bottom line seems to be that TC doesn't have an effect...though one low ROB study did find a positive effect. The other study with high ROB found no effect.	KQ 1a results section, goal attainment section	For this outcome, 1 study at unclear ROB found a significant improvement in the number of QI projects initiated. The second study at high ROB found no effect. Thus, our conclusion was mixed effect.



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	1	For the “Adoption of Targeted Process of Care Activities” section, Bottom Line states there were 6 trials but the 3 rd sentence refers to 7 trials. This summary should highlight that 6 of 7 studies had low/unclear ROB.	KQ 1a results section, Adoption of Targeted Process of Care Activities	Thank you, this section has been clarified.
	1	Suggest significantly distilling this section to consolidate all outcome types to a single Bottom Line. The number of studies within each category are small and the particular topics don’t really have meaning because the focus is on TC. Tables 6-11 can be combined into a single table – possibly pushed to an appendix.	Effects of Transformational Coaching on X tables	We have refined the key points for KQ 1a to provide a clearer overall outcome conclusion. However, we have retained the individual tables as the analysis was structured to provide some granularity across types of clinical activities around which a coach might engage with a clinical team. This approach differed from previous analysis of coaching-like interventions and so we believe adds to the existing literature.
	1	Suggest moving the summary of ROB (p45) before sections on outcomes. This way all outcomes are interpreted within context of overall ROB. Likewise, move the COE section (p47) to follow the ROB section.	Quality of Evidence KQ 1a Studies section Certainty of Evidence for Key Question 1a	The order of these sections was maintained to be consistent with ESP standard formatting.
	1	Bottom Line on p33, 2 nd sentence is unclear	Organizational Processes of Care	This sentence has been rewritten.
	1	Figure 6 – add n=number of studies	Figure 6. Risk of Bias Assessment Across Included Cohort Studies in KQ 1a	The number of included studies has been added to the figure title.
	1	The above recommended rearrangement is reinforced by the fact that KQ1b then goes into great detail about the types of outcomes. Is it possible to rearrange KQ1a-1b to reverse the order? It would flow better to first ID types of		We have switched the order of KQ 1a and KQ 1b.



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		outcomes (1b flipped into the new 1a) and then provide results on effects across those outcomes (and referring to the detailed table by type of outcome)		
	1	KQ2 <ul style="list-style-type: none"> o Which studies overlapped with studies ID'd for KQ1a-b? 		There are 2 studies in common between KQ 1a and KQ 2. This information has been added to the report in the results section of KQ 2.
	1	Figure 7 seems to provide themes/findings. The title should highlight this	Figure 7. Consolidated Framework for Implementation Research: Context	Thank you. The figures for the section on KQ 2 have been reworked and renamed.
	1	Table 15 should include all B&Fs identified in the text.	Table 15. CERQual Summary of Qualitative Findings Table for KQ 2	This topic and our report was driven by our nominating stakeholders' information needs. We routinely survey our stakeholders to request prioritization of key outcomes for COE across all our reports and this is a routine practice in systematic reviews when it is infeasible due to team capacity to conduct COE for all identified outcomes. Thus, we elected to work with our operational partners who requested this review to select those constructs deemed of greatest relevance to them. We acknowledge that this may not reflect the most important constructs in other contexts or as perceived by other stakeholders. We have added a statement to this effect in the limitations.
	1	It is confusing what is meant by e.g., "we found 1 barrier and no facilitators...an example is...another example is..." What are the examples? Does this mean that more than 1 study	Cosmopolitanism (outer setting)	We revised the language to add clarity that several examples exist under one big barrier for both constructs. The studies supporting each findings are cited in the text.



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		had that single barrier? The language here is unclear.	Implementation climate (inner setting)	
	1	Move ROB section earlier in this section.		The order of these sections was maintained to be consistent with ESP standard formatting.
	1	<p>The text for Table 15 should be prefaced with the fact that it includes only the 5 constructs chosen by the partners. Link these with the corresponding text in the previous sections. A final summary section could perhaps lightly touch on the other constructs but the details can be relegated to an appendix. It seems important, however, to rate COE for the non-chosen constructs as well.</p> <ul style="list-style-type: none"> ▪ Perhaps it missed it, but a rationale/criteria for choosing the 5 constructs is needed. This seems like a lot of work to do (coding for all the other constructs) and then only focus on 5 without any real empirical evidence. 	Table 15. CERQual Summary of Qualitative Findings Table for KQ 2	<p>(Please note that due to other changes, Table 15 is now Table 19). The text prior to Table 19 has been clarified.</p> <p>This topic and our report was driven by our nominating stakeholders' information needs. We routinely survey our stakeholders to request prioritization of key outcomes for COE across all our reports and this is a routine practice in systematic reviews when it is infeasible due to team capacity to conduct COE for all identified outcomes. Thus, we elected to work with our operational partners who requested this review to select those constructs deemed of greatest relevance to them. We acknowledge that this may not reflect the most important constructs in other contexts or as perceived by other stakeholders. We have added a statement to this effect in the limitations.</p>
	2	<p>The ESP Review of Transformation Coaching conducted by the investigators and documented in the report is comprehensive, thorough, detailed and highly valuable to VHA and particularly to those who strive to fully adopt the principles and practices of a high reliability organization. As a member of the TEP, I fully agree with the findings and conclusions reported in the review. I</p>	Results section of the executive summary	Thank you for your contributions to the report as a TEP member and your thoughtful review of the draft report. We appreciate this suggestion and have revised the executive summary as suggested.



Question Text	Reviewer Number	Comment	Section of report	Response
		<p>have several suggestions that I believe will enhance understanding and interpretation of the findings, as well as the limitations that the authors have specified in the report.</p> <p>I suggest the authors consider including more details on the key findings in the executive summary as I believe this will increase the clarity of the findings, especially for those who don't take the time to read the detailed results section of the review.</p>		
	2	<p>For example, in both the Summary of Results for Key Questions (starting on page 4) and the Discussion of Key Findings, starting on page 6, the authors offer fairly high level descriptions of the results. For example, on page 4, line 44, the authors state, "Across outcomes related to adoption of targeted process of care activities, there was very low to low COE that coaching probably has an effect on composite process of care outcomes and ordering of labs and vital signs, and possibly has an effect on changes in organizational process of care and delivery of appropriate counseling. It is uncertain if coaching has an effect on the conduct of specific exams and procedures, and probably does not have an effect on prescription of diagnosis appropriate medications." Though this is accurate, more detail about the positive findings noted would be valuable.</p>	<p>Summary of Results for Key Questions, exec sum, KQ 1a, second paragraph</p>	<p>We have incorporated more detail in the Executive Summary as suggested.</p>
	2	<p>Also, on page 6, in the discussion section, line 36, the authors state, "However, we found that coaching probably has an effect on composite process of care outcomes and ordering of labs and vital signs, and possibly has an effect on changes in organizational process of care and delivery of appropriate counseling. It is uncertain if coaching has an effect on the conduct of specific exams and</p>	<p>Discussion, exec sum, second paragraph</p>	<p>We appreciate these suggestions and have made revisions accordingly.</p>



Question Text	Reviewer Number	Comment	Section of report	Response
		<p>procedures, and probably does not have an effect on prescription of diagnosis-appropriate medications.” Again, more detail regarding the specific outcomes that were achieved by T-coaching might be included here.</p> <p>The Key Points listed on page 23 provide a bit more detail, listing the number of trials for each category of process of care outcomes, though even better yet would be inclusion of at least some of the “Bottom Line findings” for KQ1 which are found in the Detailed Findings section, starting on pg 29. Perhaps the most important results are found in the Bottom Line boxes on page 31, 33, 35 and 37.</p>		
	2	<p>The sections KQ2 results in the Executive Summary might also include additional detail regarding specific findings on barriers and facilitators. Limitations and Research Gaps in the Executive Summary are fine, though I suggest adding some of the points made in the section on Clinical Policy Implications, found on page 74, to the Conclusions section of the Executive Summary to make the link between T-Coaching and the broader effort to become a HRO. The final sentence of the Clinical Policy Implications needs to be in the conclusions, line 5774 – “As we describe in this report, coaches can play a critical role in facilitating access to and use of data and technical resources for QI activities.”</p>	Clinical Policy Implications, Discussion of main report	We appreciate these suggestions and have made revisions accordingly (see second paragraph under KQ 2 in results and the conclusions of Executive Summary).
	2	<p>Pg 14 – Table 1 - The exclusion criteria includes “Interventions that focus on learning collaborative as the main component of the intervention or have a longitudinal learning collaborative component. Please clarify why a learning collaborative led to exclusion if one could isolate the T-Coaching component across</p>	Table 1. Study Eligibility Criteria for KQ 1	We have clarified Table 2 (formerly Table 1) to note that learning collaboratives were only a cause for exclusion <i>if</i> the effect of coaching was not able to be isolated.



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		intervention and control conditions. This would allow inclusion of trials that utilized a longitudinal collaborative with or without the addition of a T-Coach assigned to assist a team participating in the collaborative. Since collaboratives offer resources which address many of the barriers found in the analysis of data gathered for KQ2, the addition impact of a coach might be even more valuable in this context. How many of the excluded studies were excluded because of this specific exclusion criteria. What impact might this have had on results?	Table 4. Transformational Coaching Activities	We agree that exploring the effect of coaching with learning collaboratives could be helpful; however, this was not within the scope of the key questions for this review.
	2	Pg 18 – line 41 KQ 1b second order outcomes example includes “increased delivery of patient centered evidence based”. Is something missing?	Data synthesis section, main report, KQ 1b	This section has been revised as suggested.
	2	Pg 19 – Figure 2 with CFIR elements is very helpful!	Figure 2. Consolidated Framework for Implementation Research (Adapted)	Thank you.
	2	Pg 30 - line 17; Hogg - Authors reported a mean difference of 2.0. It is not clear what the measure was for this study.	National preventive care guidelines, KQ 1 results, first paragraph	Thank you, this data point has been contextualized.
	2	Pg 30 – line 34; how were “ratio of ratios” calculated?	National preventive care guidelines, KQ 1 results, third paragraph	This language has been updated for clarity.
	2	Pg 31 – line 19 – “Among 40 primary care practices (822 patients), the authors found all 3 arms improved by end of intervention; however, the coaching arm based on reflective	Diabetes process of care, KQ 1 results, second paragraph	Thank you for noticing this error. The continuous quality improvement arm and the reflective adaptive process arms have been switched.

Question Text	Reviewer Number	Comment	Section of report	Response
		<p>adaptive process experienced greater improvement in process of care score (4.54 to 4.85) than either the continuous quality improvement arm (3.58 to 4.91; p<0.0001) or the enhanced usual care arm (3.63 to 4.39; p <0.0001)." The reported change in the coaching arm appears to be less than the change in control arms. Is this an error?</p>		
	2	<p>Pg 73 – line 14; consider organizing listing of barriers and facilitators by COE: moderate and high, low, very low COE</p>	<p>Summary and Discussion section of main report, KQ 2, second paragraph</p>	<p>We appreciate this suggestion and have re-ordered from higher level of evidence to lower level of evidence.</p>
	2	<p>Pg 72 – line 20; "Studies included a median of 5.73 implementation strategies". This piece of data might be included in the executive summary as it reflects the multi-dimensional quality of T-coaching.</p> <p>Thanks, again, for the opportunity to participate on the TEP and to review this excellent review and report!!</p>	<p>Summary and Discussion section of main report, KQ 1a, first paragraph</p>	<p>Thank you for this suggestion. This has been added to the executive summary.</p>
	3	<p>See above and prior e-mail</p>		
	4	<p>None</p>		
	5	<p>See detailed comments above. It is difficult to know if studies were left out or overlooked based on the broad inclusion and exclusion criteria. Most QI studies are not randomized clinical trials so that excludes the majority of the literature. Furthermore, many high quality VA randomized initiatives were likely excluded because they employed a virtual community of care or learning collaborative to foster more rapid learning across participating sites received team-based coaching or facilitation; it is unfortunate to lose those studies.</p>		<p>We made methodologic choices based on the specific key question put forward for this review (<i>ie</i>, limiting to EPOC criteria studies best suited to address questions of effectiveness). We acknowledge that the broader literature holds valuable information that was not incorporated into this review due to ineligible study design. We have noted this in the limitations.</p>



Question Text	Reviewer Number	Comment	Section of report	Response
	7	Pages referenced are the actual document pages noted on the bottom, not the pdf page identifier. pg. iii, line 3: Dr. Davies is not the National Director of Systems Redesign, this should be removed from his title.	TEP Acknowledgment	Acknowledgments have been updated.
	7	pg. iv, line 45: question 1a: the a is not capitalized like b is in question B and it is not written as a question, seems to be unfinished?	Table of contents	We have corrected this in the table of contents (abbreviated KQ).
	7	pg. v, line 41: I am not seeing a reference to KQ1 1B	Table of contents	We have corrected this.
	7	pg. 1, line 16: there is a period that does not belong there	Intro of exec sum, first paragraph	The Executive Summary has been updated.
	7	pg. 1, line 51: consistent capitalization or not on the 1 a and 1 b of the questions	Intro of exec sum, KQ 1a and KQ 1b	1a and 1b are lowercase.
	7	6. pg. 7, line 34: strategies decisions is difficult to read, perhaps strategy decisions	Research gaps section of executive summary	We have changed this to "strategic."
	7	pg. 11, line 55: Final definition for transformational coaching was as follows, should this be "is as follows"?	Definition and conceptual model section, main report, first paragraph	We have corrected this text.

APPENDIX H. GLOSSARY

For full study citations in this appendix, please refer to the report’s main reference list.

Term	Definition		
Certainty of evidence	We assessed the certainty of evidence using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach ³⁶ for 4 domains:		
	<i>Domain</i>	<i>Rating</i>	<i>How Assessed</i>
	Risk of bias	Low Unclear High	Assessed primarily through study design and aggregate study quality
	Consistency	Not serious inconsistency Serious inconsistency Very serious inconsistency	Assessed primarily through whether effect sizes are generally on the same side of “no effect,” the overall range of effect sizes, and statistical measures of heterogeneity
	Directness	Not indirect Serious indirectness Very serious indirectness	Assessed by whether the evidence involves direct comparisons or indirect comparisons through use of surrogate outcomes or use of separate bodies of evidence
	Precision	Not serious imprecision Serious imprecision Very serious imprecision	Based primarily on the size of the confidence intervals of effect estimates, the optimal information size and considerations of whether the confidence interval crossed a clinical decision threshold
CERQual (Confidence in the Evidence from	We assessed confidence in the evidence from using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) CERQual approach ^{36,37} for 4 domains:		



Term	Definition		
Reviews of Qualitative Research)	<i>Domain</i>	<i>Rating</i>	<i>How Assessed</i>
	Methodological Limitations	No limitations Minor limitations, Moderate limitations, Significant limitations	The extent to which there are problems in the design or conduct of the primary studies supporting a review finding
	Relevance	No concerns, Minor concerns, Moderate concerns, Significant concerns	The extent to which the body of evidence from the primary studies supporting a review finding is applicable to the context specified in the review question
	Coherence	No concerns, Minor concerns, Moderate concerns, Significant concerns	An assessment of how clear and cogent the fit is between the data from the primary studies and the review finding
	Adequacy	No concerns, Minor concerns, Moderate concerns, Significant concerns	The degree of richness and quantity of data supporting a review finding
Objective outcomes (ie, non-patient-reported outcomes)	Measures that are not subject to a large degree of individual interpretation and are likely to be reliably measured across patients in a study, by different health care providers, and over time.		
Patient-reported outcomes	Outcomes that are directly reported by the patient without interpretation of the patient's response by a clinician or anyone else and pertains to the patient's health, quality of life, or functional status associated with health care or treatment.		
Risk of bias (ROB)	An assessment of study quality. We used the following guidance in this report. (1) For KQ 1, we used the Cochrane EPOC ROB tool, ²³ which is applicable to randomized and nonrandomized studies: <ul style="list-style-type: none"> • Randomization and allocation concealment • Comparability of groups at baseline • Blinded outcomes assessment • Completeness of follow-up and differential loss to follow-up • Whether incomplete data were addressed appropriately • Protection against contamination 		



Term	Definition
	<ul style="list-style-type: none"> • Selective outcomes reporting • Intervention independent from other changes (specific to interrupted time series) • Intervention pre-specified (specific to interrupted time series) • Intervention effect on data collection (specific to interrupted time series) <p>Summary ROB ratings for a study:</p> <ul style="list-style-type: none"> • Low ROB—Bias, if present, is unlikely to alter the results seriously • Unclear ROB—Bias that raises some doubts about the results • High ROB—Bias that may alter the results seriously <p>(2) For KQ 2, we used the Critical Appraisal Skills Programme (CASP) tool²⁶:</p> <ul style="list-style-type: none"> • Validity of study results (clarity of aims, appropriate methodology/design/data collection) • Nature of the results (ethical consideration, rigorous data analysis, clarity of findings), • Helpfulness of the results (local value). <p>No summary ROB was possible for the CASP.</p>