

Supplementary Online Content

Mohan G, Chattopadhyay S. Cost-effectiveness of leveraging social determinants of health to improve breast, cervical, and colorectal cancer screening: a systematic review. Published online June 18, 2020. *JAMA Oncol*. doi:10.1001/jamaoncol.2020.1460

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Sample Literature Search Strategy From 1 of the 12 Databases (MEDLINE)

Database	Systematic Literature Search Strategy
Medline (Ovid) 1946-	<p>((breast* OR mammary OR mammaries OR cervical* OR uterine* OR uterus OR ovary OR ovaries OR ovarian* OR endometri* OR vagina* OR vulva* OR colorectal* OR colon* OR sigmoid* OR rectal* OR rectum* OR anus* OR anal) adj3 (cancer* OR neoplasm* OR neoplasia* OR tumor* OR malignanc* OR carcinoma*)).mp. OR exp Breast Neoplasms/ OR exp Genital Neoplasms, Female/ OR exp Colorectal Neoplasms/</p> <p>AND</p> <p>(screening* OR rescreen* OR prescreen* OR mammograph* OR mammogram* OR colonoscop* OR sigmoidoscop* OR proctosigmoidoscop* OR endoscop* OR pap test* OR Papanicolaou test* OR occult blood*).mp. OR ((vaginal* OR cervical* OR pap OR papanicolaou) adj2 smear*).mp. OR ((diagnos* OR detect*) adj2 (early OR prevent* OR imag*)).mp. OR exp Mass Screening/ OR exp "Early Detection of Cancer"/</p> <p>AND</p> <p>(cost OR costs OR costing OR econom* OR financ* OR ROI OR "return on investment" OR quality adjusted OR qaly OR dollar OR dollars OR utility OR efficien*).mp. OR exp "Costs and Cost Analysis"/</p> <p>AND</p> <p>(multicomponent* OR multilevel* OR multiphas* OR multiprong* OR uptake* OR outreach* OR accept OR acceptance OR access* OR adhere* OR advergam* OR advisor* OR advocate* OR app OR apps OR appointment* OR attendant* OR audit* OR avatar* OR aware* OR beauty OR blog OR blogs OR blogging OR cellphone* OR cell phone* OR checklist* OR clinic OR clinics OR commitment* OR communication* OR compensat* OR complian* OR complimentary OR computer* OR contract* OR copay OR co pay OR cosmetolog* OR coupon* OR coverage* OR cover OR covers OR covering OR covered OR cyberspace* OR ddr OR doctor* OR education* OR electronic mail* OR email* OR e mail* OR employee* OR expand* OR expansion* OR facebook OR feedback* OR flicker* OR foursquare* OR hairdresser* OR hair dresser* OR handheld OR hand held OR healthy people* OR hours OR impoverished OR incentiv* OR incremental* OR indigen* OR insurance* OR insure* OR Instagram* OR internet OR intervention* OR iphone OR ipad OR ipod OR law OR laws OR legal* OR linkedin OR link work* OR low income* OR managed care* OR media OR medicare OR Medicaid OR message* OR messaging OR microblog* OR microcomputer* OR mobile OR</p>

Nintendo* OR nruse* OR onsite* OR on site* OR orkut* OR peer OR peers OR persuasion* OR persuad* OR physician* OR policy OR policies OR poor OR poverty OR program* OR prompt* OR provider* OR quality OR radio OR remind* OR resident* OR salon* OR Saturday* OR schedul* OR social determinant* OR sms OR snapchat* OR standard* OR subsid* OR Sunday* OR telecommunication* OR television OR transportation* OR transported OR transporting OR translation* OR translator* OR tweet* OR twitter* OR uncompensat* OR underinsure* OR uninsured* OR video* OR virtual realit* OR voucher* OR weblog* OR weekend* OR week end* OR wii OR wiki* OR workplace* OR worksite* OR work place* OR work site* OR wraparound* OR wrap around* OR xbox).mp. OR ((health OR healthcare) adj3 (knowledge* OR promotion* OR benefit plan* OR maintenance* OR delivery OR reform* OR improvement* OR skilled* OR allied* OR lay OR "2.0")).mp. OR ((patient*) adj3 (knowledge* OR attitude* OR perception* OR perceive* OR compliance* OR participation* OR navigat*)).mp. OR ((after OR extend* OR expand* OR longer) adj2 (hour*)).mp. OR ((employer* OR institution* OR organization* OR occupation* OR community OR communities OR web) adj3 (provide* OR support* OR based*)).mp. OR exp "early intervention (education)"/ or exp early medical intervention/

Limits: English, 2004-2019

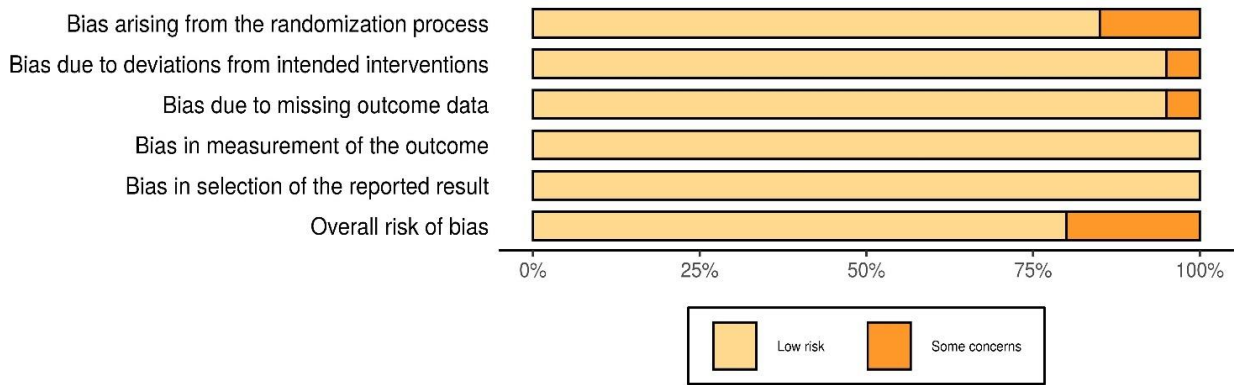
eTable 2. Quality Assessment Template for Studies With Modeled Outcomes

Assessment Categories	Examples	Yes/No
Type of Model Constructed and Method of Analysis	<ul style="list-style-type: none"> • <u>Type</u>: Decision analytic model • <u>Analytic Method</u>: Individual Patient Simulation 	
Data Used for the Model	<ul style="list-style-type: none"> • Programmatic data • Data from secondary literature sources • Combination of programmatic and literature derived data 	
Description of Associated Elements	<ul style="list-style-type: none"> • Transitional probabilities • Utility of being in health state • Cost of being in health state • Time/ Number of cycles spent in health state, etc. 	
Assessment of Uncertainty	<ul style="list-style-type: none"> • Sensitivity analysis 	
Final Quality Assessment	Scoring Guidelines	
Good Quality	<ul style="list-style-type: none"> • Satisfying 4 of these categories 	
Fair Quality	<ul style="list-style-type: none"> • Satisfying 3 of these categories 	
Poor Quality	<ul style="list-style-type: none"> • Satisfying 2 or less of these categories 	

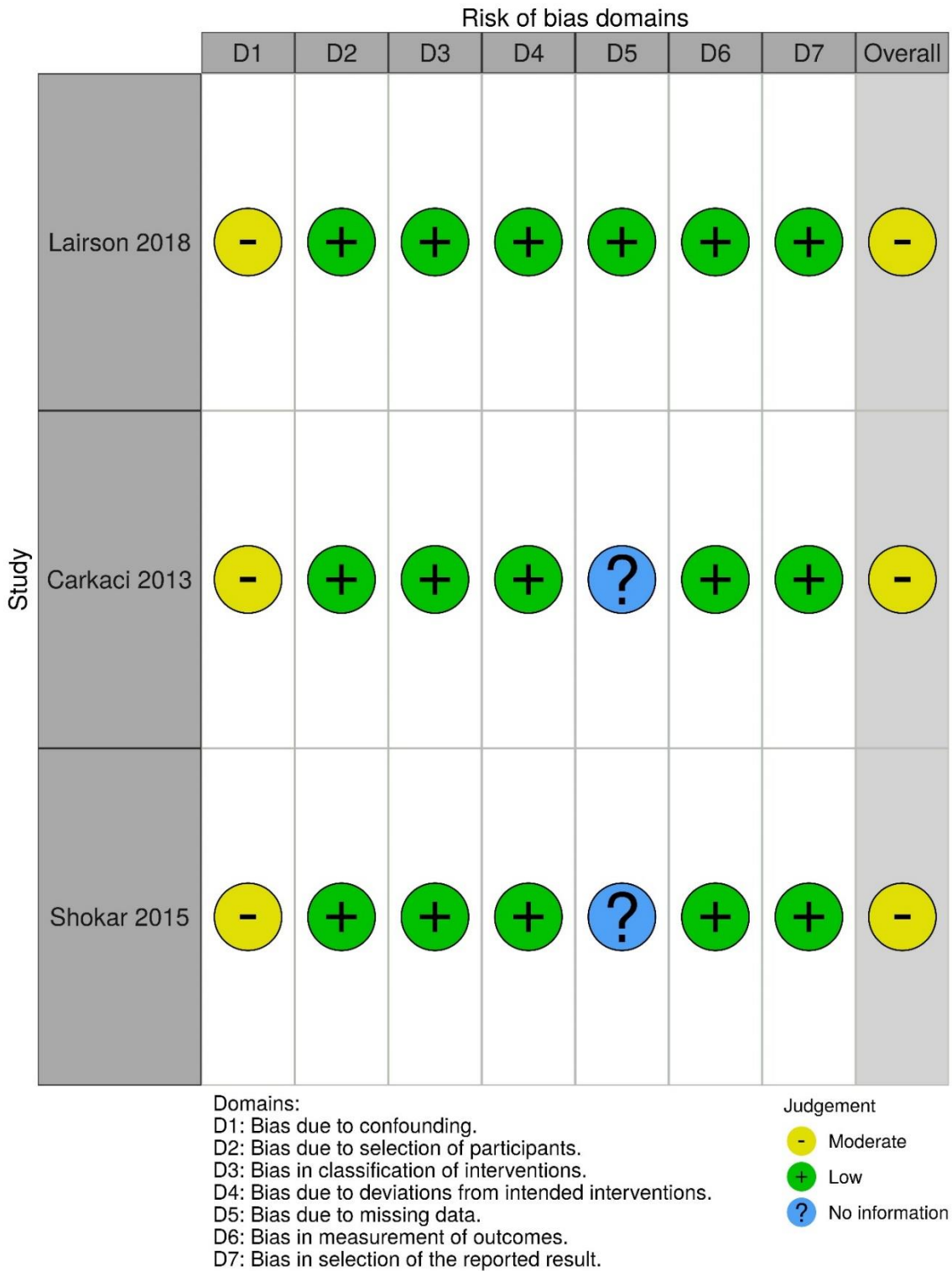
eFigure 1. Traffic Plot Risk of Bias Assessment for Randomized Controlled Trials



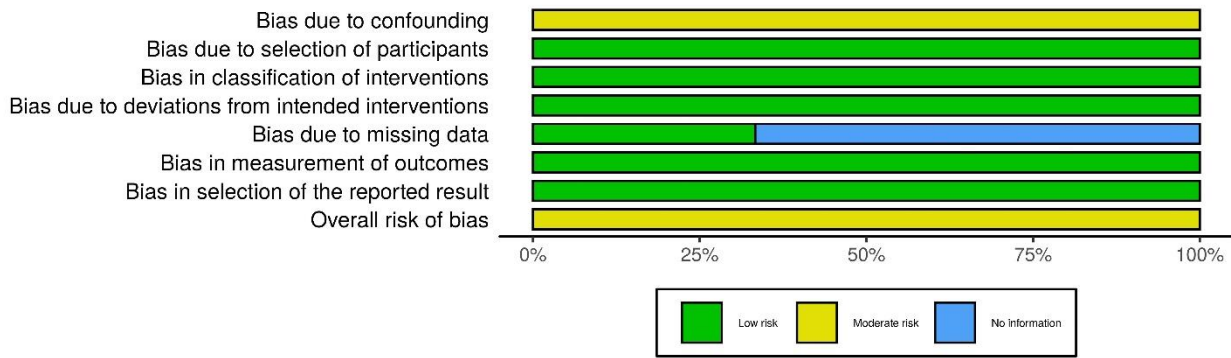
eFigure 2. Bar Plot Risk of Bias Assessment for Randomized Clinical Trials



eFigure 3. Traffic Plot Risk of Bias Assessment for non-RCTs



eFigure 4. Bar Plot Risk of Bias Assessment for non-RCTs



eFigure 5. Traffic Plot Risk of Bias Assessment for Modeled Studies

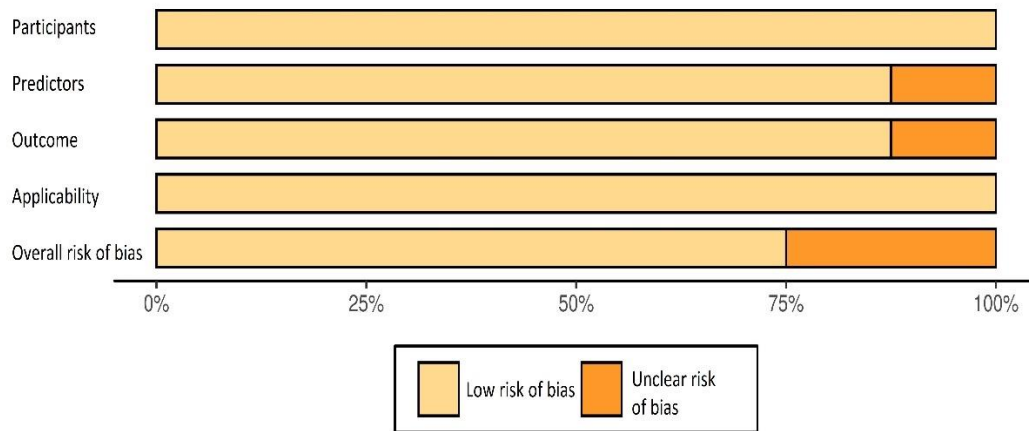
	Risk of bias domains				
	D1	D2	D3	D4	Overall
Allaire 2019					
Li 2019					
Donaldson 2012					
Li 2017					
Rice 2019					
Kim 2016					
Scoggins 2010					
Wilson 2015					

Study

Domains:
D1: Participants
D2: Predictors
D3: Outcome
D4: Analysis

Judgement
 Unclear
 Low

eFigure 6. Bar Plot Risk of Bias Assessment for Modeled Studies



eReferences

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2. Sterne JAC, Savović J, Page MJ, et al. RoB 2: a revised tool for assessing risk of bias in randomised trials. 2019;366:14898.
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4. Wolff RF, Moons KGM, Riley RD, et al. PROBAST: a tool to assess the risk of bias and applicability of prediction model studies. *Ann Intern Med.* 2019;170(1):51-58.
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