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Defining the research question

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SR: Take Home Points

- Causal inference requires judgment; Hill's criteria is most commonly applied framework
- SRs use explicit methods to reduce bias and to help make better health decisions for patients, practitioners, and policymakers
- The PICO(TS) framework is essential for asking specific, answerable questions
- PRISMA, AMSTAR, and GRADE are tools to report and evaluate SR, evaluate quality of evidence, and assess strength of recommendations

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 APRIL 12, 2007 VOL. 356 NO. 15

Optimal Medical Therapy with or without PCI for Stable Coronary Disease

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ABSTRACT

BACKGROUND

BMJ

BMJ 2014;348:g3318 doi: 10.1136/bmj.g3318 (Published 27 May 2014) Page 1 of 15

RESEARCH

Effect of fixed dose combination treatment on adherence and risk factor control among patients at high risk of cardiovascular disease: randomised controlled trial in primary care

OPEN ACCESS

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Original Article

Effect of a Computer-Guided, Quality Improvement Program for Cardiovascular Disease Risk Management in Primary Health Care

The Treatment of Cardiovascular Risk Using Electronic Decision Support Cluster-Randomized Trial

David Peiris, MBBS, MIPH, PhD; Tim Usherwood, MBBS, MD; Kathryn Panaretto, MBBS, MPH; Mark Harris, MD; Jennifer Hunt, MBBS, PhD; Julie Redfern, PhD; Nicholas Zwar, MBBS, PhD; Stephen Colagiuri, MD; Noel Hayman, MBBS, MPH; Serigne Lo, PhD; Bindu Patel, MPH; Marilyn Lyford, BHSc; Stephen MacMahon, DSc; Bruce Neal, MBChB, PhD; David Sullivan, MBBS; Alan Cass, MBBS, PhD; Rod Jackson, PhD; Anushka Patel, MBBS, SM, PhD

Background—Despite effective treatments to reduce cardiovascular disease risk, their translation into practice is limited.

Methods and Results—Using a parallel arm cluster-randomized controlled trial in 60 Australian primary healthcare centers, we tested whether a multifaceted quality improvement intervention comprising computerized decision support, audit/feedback tools, and staff training improved (1) guideline-indicated risk factor measurements and (2) guideline-indicated medications for those at high cardiovascular disease risk. Centers had to use a compatible software system, and eligible patients were regular attendees (Aboriginal and Torres Strait Islander people aged ≥35 years and others aged ≥45 years). Patient-level analyses were conducted using generalized estimating equations to account for clustering. Median follow-up for 38 725 patients (mean age, 61.0 years; 42% men) was 17.5 months. Mean monthly staff support was <1 hour/site. For the coprimary outcomes, the intervention was associated with improved overall risk factor measurements (62.8% versus 53.4% risk ratio; 1.25; 95% confidence interval, 1.04–1.50; P=0.02), but there was no significant differences in recommended prescriptions for the high-risk cohort (n=10 308; 56.8% versus 51.2%; P=0.12). There were significant treatment escalations (new prescriptions or increased numbers of medicines) for antiplatelet (17.9% versus 2.7%; P<0.001), lipid-lowering (19.2% versus 4.8%; P<0.001), and blood pressure–lowering medications (23.3% versus 12.1%; P=0.02).

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The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 NOVEMBER 20, 2008 VOL. 359 NO. 21

Rosuvastatin to Prevent Vascular Events in Men and Women with Elevated C-Reactive Protein

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ABSTRACT

CKGROUND

creased levels of the inflammatory biomarker high-sensitivity C-reactive protein edict cardiovascular events. Since statins lower levels of high-sensitivity C-reactive

From the Center for Cardiovascular Disease Prevention (P.M.R., E.D., J.G.M., R.J.G.) and Division of Cardiovascular Medi-

STEP 1: DEFINE THE PICOTS FOR EACH TRIAL

STEP 2: CONSTUCT A RESEARCH QUESTION USING PICOTS FRAMEWORK

STEP 3: REFINE YOUR RESEARCH QUESTION USING PICOTS FRAMEWORK

STEP 4: USE THE PECOTS FRAMEWORK FOR DEFINING RESEARCH QUESTIONS USING NON-RANDOMIZED STUDIES

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