PD43 Single-Arm Studies In Literature Reviews: Trials Versus Case Series

Mary Chappell (mary.chappell@york.ac.uk), Anita Fitzgerald, Alice Sanderson, Deborah Watkins, Paul Miller, Lavinia Ferrante di Ruffano, Mary Edwards and Rachael McCool

Introduction: Single-arm studies, particularly single-arm trials (SATs), are increasingly being used in submissions for marketing authorization and health technology assessment. As reviewers of evidence, we sought to better understand the validity of SATs, compared with observational single-arm studies (case series), and how to assess them in our reviews.
Methods: We conducted a highly pragmatic literature review to create a convenience sample of recent systematic reviews published from January to July 2023 to establish the following: (i) what single-arm study designs are included; (ii) what quality assessment tools are used; and (iii) whether there is a difference in effect size and variability among different study designs. A single reviewer identified reviews of interventions that included single-arm studies and extracted information on the numbers of included SATs and case series, and the quality assessment tools used. Any misclassifications by review authors were identified. For meta-analyses, outcome data were extracted and a subgroup analysis comparing SATs and case series was conducted.
Results: Work is still underway to complete this investigation. So far, it appears that a large proportion of systematic reviews misclassify SATs and case series studies and few use appropriate quality assessment tools. There is not yet any evidence of a systematic difference between SATs and case series in terms of effect size.
Conclusions: Findings suggest that there is poor understanding of SATs in the review community. There are limited specific quality assessment tools for SATs and review authors frequently use inappropriate tools to assess them. More research is likely to be needed to investigate the relative validity of SATs and single-arm observational studies.

PD45 A Rapid Evidence Synthesis Method For Cancer Screening Recommendations In A Hospital Setting

Carlos Muñoz-Montecinos, Catalina González-Browne, Felipe Maza and Camila Quirland (camila.quirland@falp.org)

Introduction: International agencies advocate for population-based cancer screening to prevent cancer-related deaths. The Arturo Lopez Perez Oncology Institute is interested in implementing screening programs, but international recommendations differ on program details such as screening tests, target population, age range, and frequency. A review of international evidence-based recommendations is essential for advising stakeholders on the effective implementation of screening programs.
Methods: A rapid scoping review was performed to identify international recommendations on cancer screening programs. Evidence-based recommendations derived from the World Health Organization and the European Union were analyzed. We also searched for evidence-based recommendations from the following health technology assessment agencies with specific sections for evaluating screening strategies: the Canadian Agency for Drugs and Technologies in Health (Canada), the Institute for Quality and Efficiency in Health Care (Germany), the Medical Services Advisory Committee (Australia), and the National Institute of Health and Care Excellence (UK). Additionally, we explored international cancer screening programs implemented by health systems in the aforementioned countries or in countries with implemented screening programs. Finally, we searched for recommendations from scientific societies on cancer screening strategies. This iterative process was repeated for five different cancers.
Results: We found a total of 32 favorable or unfavorable recommendations for breast, cervical, colorectal, lung, gastric, and prostate cancer screening. Breast and cervical cancer had the highest number of favorable recommendations, with complete agreement on the type of test and only small differences regarding age range and periodicity. On the other hand, we found some recommendations against population-based screening for prostate and gastric cancer and limited agreement for both test type and target population. Direct comparisons between the recommendations served as a guide to elaborate a cancer screening program based on the most recommended strategies.
Conclusions: This rapid scoping review allowed us to assess the consistency of cancer screening recommendations. Major differences were found mainly between recommendations from international agencies and scientific societies. As a result, a cancer screening program was designed based on the most recommended strategies.

PD49 Developing Evidence-Based Optimal Testing Strategies To Monitor Long-Term Conditions In Primary Care

Martha Elwenspoek (martha.elwenspoek@bristol.ac.uk), Rachel O'Donnell, Katie Charlwood, Alice Malpass, Mary Ward, Howard Thom, Jonathan Banks, Clare Thomas, Hayley Jones, Jonathan Sterne, Francesco Palma, Christina Stokes, Alastair Hay, Jessica Watson and Penny Whiting

Introduction: Most patients with long-term conditions (LTC) receive regular blood tests to monitor disease progression and

https://doi.org/10.1017/S0266462324003088

response to treatment and to detect complications. There is currently no robust evidence to inform recommendations on monitoring. Creating this evidence base is challenging because the benefits and harms of testing are dependent on what is done in response to the test results.
Methods: We identified a list of commonly used tests. We defined a series of filtering questions to determine whether there was evidence to support the rationale of monitoring, such as "Can the general practitioner do anything in response to an abnormal test result?" Through a series of rapid reviews we identified evidence to answer each question. The evidence was presented at a consensus meeting where clinicians and patients voted for inclusion, exclusion, or further analysis. A process evaluation was performed alongside this. Further analyses were performed using routinely collected healthcare data and by performing incidence analyses, emulating randomized controlled trials (RCTs), and modeling disease progression.
Results: We tested this methodology on three common LTCs: chronic kidney disease (CKD), type 2 diabetes mellitus (T2DM), and hypertension. We found sufficient evidence to include hemoglobin A1C and estimated glomerular filtration rate (eGFR) for monitoring patients with T2DM; hemoglobin and eGFR for patients with CKD; and eGFR for patients with hypertension. The consensus panel excluded four tests, while 10 tests were selected for further analysis. The emulated RCTs will investigate the effect of regular monitoring with certain tests on health outcomes among routinely monitored patients. In addition, we will investigate the signal-to-noise ratio of each test over time using a modeling approach.
Conclusions: The cost effectiveness of the evidence-based testing panels needs to be tested in clinical practice. We are currently developing an intervention package and are planning to run a feasibility trial. This program of work has the potential to change how LTCs are monitored in primary care, ultimately improving patient outcomes and leading to more efficient use of healthcare resources.

PD50 Does The New Healthcare Reform Improve Job Satisfaction Among Village Clinic Doctors In China? A Meta-Analysis

Lifang Zhou, Yuncong Yu, Junping Liu, Jiaxian Shao, Wenqiang Yin, Qianqian Yu and Zhongming Chen (czm3306196@163.com)

Introduction: Since 2009, the Chinese government has launched a new health system reform that affected primary healthcare significantly. We aimed to analyze the factors associated with job satisfaction among village clinic doctors since the new healthcare reform, and to provide a reference for the next stage of reform.
Methods: We systematically searched one English (PubMed) and two Chinese literature databases (CNKI and Wanfang Data). Cross-sectional studies containing information related to job satisfaction among village clinic doctors in China were included. The total job satisfaction among village clinic doctors was estimated using a random effects meta-analysis. Differences in study-level characteristics among groups were estimated using subgroup analysis and meta-regression.
Results: We identified 17 cross-sectional studies investigating a total of 28,468 village clinic doctors in China. The pooled job satisfaction value was 0.40 (95% confidence interval [CI]: 0.32, 0.49). The results showed that lower job satisfaction was reported in the period from 2016 to 2020 (0.33, 95% CI: 0.23, 0.42) than in the period from 2010 to 2015 (0.51, 95% CI: 0.33, 0.70). The main factors influencing job satisfaction among village clinic doctors were salary (odds ration [OR] 1.71, 95% CI: 1.23, 2.36), number of training sessions (OR 2.56, 95% CI: 1.68, 3.90), age (OR 3.45, 95% CI: 2.22, 5.35), and level of education (OR 0.68, 95% CI: 0.40, 1.15).
Conclusions: Since the new health system reform, only 40 percent of village clinic doctors in China are satisfied with their work and it is likely this figure will continue to decrease. Those with higher salaries, more training sessions, and greater age had higher job satisfaction. In contrast, village clinic doctors with a higher level of education had lower job satisfaction.

PD51 Effectiveness And Safety Of Vitamin D For COVID-19: A Living Evidence Synthesis Informing A Health Technology Assessment Report

Juan Antonio Blasco-Amaro, Trinidad Sabalete-Moya (trinidad.sabalete@juntadeandalucia.es), Rocío Rodríguez-López and Maria X. Rojas

Introduction: An evidence synthesis developed to inform decision-making on the use of vitamin D for preventing and treating COVID-19 showed that current available evidence is of low to very low quality. We set up a rigorous living evidence to inform health decisions (LE-IHD) approach to provide timely updates of this health technology assessment (HTA) report and aid decision-making.
Methods: Following the LE-IHD framework, we developed a baseline synthesis and evidence monitoring on the effects of high-dose vitamin D for the prevention and treatment of severe COVID-19 on all-cause mortality, COVID-19-related hospitalization, intensive care unit admission, length of hospital stay, quality of life, adverse events, and long COVID-19. The evidence identification, screening, and selection processes were supported by Epistemonikos technological enablers and the Living Overview of Evidence platform. We searched for ongoing studies in trial registries every three months. New eligible studies were assessed using a systematic and reproducible process to update the HTA report.
Results: For the baseline synthesis we identified nine randomized control trials (RCTs) assessing high dose vitamin D2, vitamin D3,

https://doi.org/10.1017/S0266462324003088