Conclusions

The training is designed appropriately to clinicians' needs. Improvement of risk communication after training encouraged initiation of a controlled trial. There is however need for further research to make implementation of patient involvement into medical decision making more likely and to consider possible side-effects of disclosure of scientific uncertainty to patients.

▮▮ Fidelity to Decision Aid Usage Instructions in Five Practice-Based Clinical Trials: A Patient-Level Meta-Analysis

Kirk Wyatt , Annie LeBlanc , Megan Branda , Laurie Pencille , Victor Montori
Mayo Clinic

Background

Decision aids (DAs) are tools designed for use by clinicians in order to improve patient knowledge, decrease decisional conflict and improve treatment outcomes through patient engagement in clinical encounters. Properly-implemented, they should empower patients to engage in the medical decision making process and arrive at treatment decisions that accommodate their values and preferences. We conducted a retrospective video review meta-analysis of DA clinical trials in order to assess clinician fidelity to DA usage instructions and analyze the effect of fidelity to intervention instructions on study outcomes.

Methods

We reviewed 229 recordings of clinical encounters from 5 practice-based randomized controlled trials of DAs. We captured clinicians' fidelity to DA usage through tailored fidelity checklists. Fidelity scores were compared to the quality of the decision making process, as reported by patient knowledge, the Decisional Conflict Scale (DCS), and the OPTION instrument

Results

The mean proportion of fidelity items observed in each encounter was 58.4% (standard deviation 23.2%), and over two-thirds of fidelity items were observed in almost half of encounters. Fidelity was significantly associated with patient knowledge (p=.01) and the OPTION score (p<.0001). There was no significant association between fidelity and the DCS or any of the DCS subscales. In over one third of clinical encounters, clinicians made an unsolicited management recommendation to patients.

Conclusion

Clinician fidelity to decision aid usage instructions is inconsistent between encounters, and the full effect of decision aids may be underestimated in clinical trials where they are not used as intended. Furthermore, while decision aids may promote information transfer and deliberation, clinicians' insistence in offering unsolicited recommendations challenges the notion that decision aids alone promote the ideal model of shared decision making.

Ethical and economic domains of SDM

Moderator: Dr. Nora Moumjid

✖ Do patient decision support tools or aids lead to cost savings? A systematic review

Thom Walsh [a], Paul Barr [b], Rachel Thompson [c], Elissa Ozanne [d], Tom Mead [c], Ciaran O'Neill [e], Glyn Elwyn [f]
[a] The Dartmouth Center for Health Care Delivery Science and The Dartmouth Institute for Health Policy & Clinical Practice,Dartmouth College, USA
[b] The Dartmouth Center for Health Care Delivery Science Dartmouth College, USA
[c] The Dartmouth Center for Health Care Delivery Science, Dartmouth College, USA
[d] Institute for Health Policy Studies, The University of California, San Francisco, USA
[e] Cairns School of Business and Economics, NUI Galway, Ireland
[f] The Dartmouth Center for Health Care Delivery Science and The Dartmouth Institute for Health Policy & Clinical Practice,Dartmouth College, USA and The Cochrane Institute for Primary Care and Public Health, Cardiff University, UK

Background

Consistent evidence that patient decision support interventions (DESIs) reduce intervention rates has led many to speculate that they will lead to health system savings. The aim of this systematic review was to determine support for this speculation by assessing relevant economic analyses, judging their methods, their quality and their risk of bias.

Methods

After registration with PROSPERO, we searched 9 databases, from inception to September 2012, using relevant MeSH terms and text words. Studies of DESIs were included if they contained quantitative economic data, including spending, costs, cost-effectiveness analysis, cost-benefit analysis, or resource utilization. All titles were screened by the lead author, with 10% screened independently by a second reviewer. Data extraction was undertaken by two reviewers. A narrative synthesis of study findings was performed using the PRISMA checklist. We also assessed included studies using the Drummond's quality checklist for economic studies and the Cochrane risk of bias method.

Results

We found no consistent evidence of savings attributable to the use of DESIs in the six studies (of 1457 articles identified) that met eligibility criteria. The savings reported ranged from $0 to ~ $1000, and were based on various units (per person or per group). Extracted data do not enable us to provide an estimate of aggregate savings as the studies used heterogeneous approaches (varying allocation methods and cost outcomes) and different time frames (6 months to 2 years). Most studies had brief time horizons and lacked sensitivity analyses; none had formal incremental cost effectiveness ratios. Studies employed a range of economic perspectives, including organizational (n=1), healthcare system (n=4), and societal (n=1). The mean risk of bias score was 3 (range 1-9 of 9); the mean quality score was 4.8 (range 2-6 of 10). Five of the six studies were randomized control trials. The studies considered women's reproductive health (n=4), knee/hip replacement (n=1), and benign prostatic hyperplasia (n=1).

Conclusions

Extrapolating system-wide savings from the lower intervention rates reported in studies of patient DESIs cannot be supported by existing economic analyses. More rigorous, dynamic, models of cost effectiveness over longer time horizons are required.

● Can Shared Decision Making Reduce Medical Malpractice Litigation? A Systematic Review

Marie-Anne Durand [a], Benjamin Moulton [b], Elizabeth Cockle [c], Mala Mann [d], Glyn Elwyn [e]

[a] University of Hertforshire

[b] Harvard School of Public Health/Informed Medical Decisions Foundation

[c] University of Hertfordshire

[d] Cardiff University

[e] The Dartmouth Center for Health Care Delivery Science

Background

The impact of shared decision making and decision support interventions on patient knowledge levels and their better understanding of healthcare treatments have been widely demonstrated in controlled research contexts. Many have also speculated that these interventions would lead to reduced levels of litigation. Our aim was to evaluate the impact of shared decision making on medical malpractice litigation and patients' intentions to initiate litigation.

Methods

Systematic review and narrative synthesis, using the 2006 UK Economic and Social Research Council research methods programme guidance. The following databases were searched from inception until June 2012: CINAHL, Cochrane Register of Controlled Trials, Cochrane Database of Systematic Reviews, EMBASE, HMIC, Lexis library, MEDLINE, NHS Economic Evaluation Database, Open SIGLE, PsycINFO and Web of Knowledge. We also hand searched reference lists of included studies and contacted experts in the field. The review was registered on PROSPERO, and was planned and reported in accordance with the preferred reporting items for systematic reviews and meta-analyses (PRISMA).

Results

5971 records were screened and 19 articles were retrieved for full-text review. Five studies were included in the review. The analysis suggests that promoting and documenting shared decision making in situations of clinical equipoise can improve patient satisfaction and reduce the risk of medical malpractice litigation. However, the findings also indicate that, from a legal standpoint, promoting shared decision making and the diagnosis of patients' preferences is not yet recognised as an established way to engage in informed consent, and as such, does not currently offer irrefutable medico-legal protection. This may discourage clinicians from practicing shared decision making and might support those who practice "defensive medicine", and order more tests and procedures independently of published guidelines and demonstrated value. However, simulated scenarios suggest that documenting the use of decision support in patients' notes, as part of the informed consent process, could offer some level of medico-legal protection.

Conclusion

Ensuring that patients are well-informed is an uncontroversial proposal that provides legal protection. However, introducing shared responsibility for decisions, and patients' involvement in determining optimal treatments, is still subject to legal debate.

✖ Predicting the economic impact of implementing patient decision support for knee osteoarthritis treatments using a Monte Carlo simulation model

Elissa Ozanne [a], Vincent Knight [b], Paul Harper [b], Andrew Rix [c], Deborah Jones [c], Andrew Price [d], Angela Coulter [e], Glyn Elwyn [f]

[a] University of California, San Francisco Medical Center

[b] School of Mathematics, Cardiff University

[c] School of Medicine, Cardiff University

[d] Nuffield Orthopaedic Centre, University of Oxford

[e] Informed Medical Decision Making Foundation, University of Oxford

[f] The Dartmouth Center for Health Care Delivery Science, Cochrane Institute for Primary Care and Public Health, Cardiff University

Background

The use of patient decision support interventions (DESI) has been shown to reduce the uptake of certain surgical treatments, leading to speculation that widespread use of DESIs will contribute to a reduction in the costs of medical care. However, few studies have examined this question directly, and those that have are limited by short time horizons in which they assess the relevant costs. We sought to assess the long-term impact of implementing DESI for knee osteoarthritis within the NHS in the UK using Monte Carlo simulation modeling.

Methods

The potential impact of DESI on rates of total knee replacement (TKR) and resulting costs was modeled using @RISK software. The model was based on forecasts of potential patients that would need TKR in the UK extrapolated until 2033 and the projected demand for TKR over a 20-year planning horizon. Key variables included the number of individuals exposed to the DESI, the resulting impact on decisions regarding TKR, and associated costs of DESI and TKR. The primary outcome is the predicted average annual reduction in spending on TKR that can be achieved by the implementation of DESI.

Results

The simulation projected that the average annual savings attributed to the use of DESI for knee osteoarthritis in the UK was £12.1 million (standard deviation £4.9 million). This assumes that 40% of the eligible patient population is exposed to a DESI. In sensitivity analyses, the projected savings was always positive, with 90% of projected savings falling between £5.3 and £21.3 million. Further, in the worst-case scenarios, the use of DESI never led to increased costs.

Conclusion

Predictive modeling suggests there may be substantial cost savings to widespread implementation of DESI for knee osteoarthritis treatment in the UK. These results are based primarily on assumptions stemming from small trials indicating that DESI will reduce the use