PROFESSIONALS' OPINIONS ABOUT QUESTIONS TO ADDRESS WITH CURABLE PROSTATE CANCER PATIENTS. D Feldman-Stewart, MD Brundage, C Hayter, P Groome, JDavidson, C Nickel. Radiation Oncology Research Unit, Queen's University, Kingston, Ontario, Canada.

The study was designed to determine what questions health-care professionals think should, and should not, be addressed with their patients who have curable prostate cancer before treatment decisions are made. A survey was distributed to all radiation therapists (RTs), nurses and doctors (radiation and medical oncologists) involved in treating prostate cancer patients in Ontario cancer centres and to all urologists practicing in Ontario. Participants were given a scenario describing a case of curable prostate cancer and asked to judge the importance, using one of four categories (essential / important / no opinion / avoid), of addressing each of 78 questions.

Of 538 surveys sent out (250 to RTs, 50 to nurses, and 238 to doctors), 244 surveys (45%) have been returned to date.

All 78 questions were judged "essential" by someone in each group; the most frequently assigned "essential" question by RTs related to patient autonomy and to treatment toxicity by both nurses and doctors. Most respondents thought most of the questions were at least "important": 74, 73 and 70 questions were "essential" or "important" to at least 50% of RTs, nurses and doctors, respectively. Many of those questions, however, were also identified by co-professionals as questions to be avoided.

The number of questions assigned to each category varied considerably across respondents. The number of questions considered "essential" ranged from (median in brackets) 1-77 (41), 18-71(39), 0-71(24) for RTs, nurses, and doctors, respectively. "Avoid" questions ranged (median) from 0-41(1), 0-33(1), 0-41(1), by RTs, nurses, and doctors, respectively.

At least some professionals consider a wide variety of questions as "essential" to address with patients before treatment decisions are made but the scope varies greatly across individuals in each profession. In addition, every question that someone thinks should be avoided is thought by others within the same profession as at least "important" to address. The results bode poorly for attempts to standardize information provision and for adherence to the ethical principles underpinning informed consent.

THE ALLOCATION OF PALLIATIVE TREATMENT IN END-STAGE DISEASE AMONG AN AIDS POPULATION.
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Offering a mix of palliative and curative services to terminal HIV-AIDS home bound patients which focus on the biopsychosocial domains of the terminal disease trajectory, versus a singular focus on acute medical care, facilitates decision making.

One hundred and sixty-eight (n=168) HIV-AIDS home care patients were randomly assigned to a conventional model of home care stressing acute services only (n=81) and an experimental model of care, a blended treatment model (n=78). The conventional model was staffed by nurse case-managers, while the blended model was case-managed by a multi-disciplinary team of a nurse and a social worker. Care in the two models was evaluated over eight months. Seventy percent of the study sample were admitted to home care services diagnosed with either CMV retinitus or wasting.

Results demonstrated that costs of care inclusive of labor costs and medication costs were $2,600 lower ($p = .01$) in the experimental model of care versus the conventional model; this was for a mean length of stay of 120 days (on home care services). The experimental model produced greater numbers of acknowledgments of the patients terminal prognosis and a greater number of hospice admissions over conventional care. The experimental group decided for admission for hospice earlier than the conventional group and had twice as many days in hospice service compared to the conventional care model.

Overall the experimental model facilitated decision making in the patient system versus the conventional model with regard to key end-stage decision points.

CHOLESTEROL-LOWERING MEDICATION IN PRIMARY PREVENTION: PHYSICIANS' OPINIONS ABOUT PATIENTS' DECISION AIDS
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Earlier studies highlighted the need to develop, test, and disseminate decision aids for patients considering a cholesterol-lowering agent for primary prevention. However, failure to take into account the physician's perspective when developing and evaluating such aids may undermine their introduction into family practice settings.

Using the College of Physicians and Surgeons of Ontario registrant data base and a formal survey strategy (Dillman 1978), a questionnaire was mailed to a random sample of family physicians and general practitioners. The questionnaire described the proposed decision aid, asked respondents to indicate its acceptability, then obtained Likert ratings (1 = "not at all important"; 5 = "extremely important") for including 16 informational items in the aid, as well as using different measures (7 baseline, 16 outcome) to evaluate its clinical effectiveness.

138 physicians (response rate: 75%) provided useable data. 123 (89%) indicated that the proposed aid would have a place in their practice. ≥ 80% of respondents ascribed importance ratings of '4' or '5' to: 8 Information Items (description of drug regimen, costs to patient, qualitative description of side effects, qualitative and quantitative descriptions of CHD risk without and with medication, and an illustration of the effects of modifying other risk factors); 1 Baseline Measure (patient's age); and 6 Outcome Measures (level of understanding of alternatives' risks/benefits, clarity about factors involved in decision, confidence in ability to make informed choice, confidence in physician-patient relationship, time with physician attributable to use of aid, and 'compliance' with decision).

These results imply that there is physician consensus about the elements to include in the design and evaluation of an aid for this clinical situation; these consensual data will be used to guide the development and assessment of the aid itself. Furthermore, this survey strategy serves as a model for obtaining physician opinions about the design and testing of aids for other clinical applications.

ASSESSMENT OF THE UTILITY OF PROPHYLACTIC MASTECTOMY IN WOMEN WITH A GENETIC PREDISPOSITION TO BREAST CANCER
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Background. Female carriers of the breast/ovarian cancer susceptibility genes BRCA1 and BRCA2 are at a high breast cancer risk (85%). They face the choice between prophylactic mastectomy (PM) or breast cancer screening. For this treatment choice, a decision support procedure was developed.

Purpose. The assessment of the feasibility, constant proportional tradeoff and reliability of utility assessment by the time tradeoff test (TTO) in this high-risk group.

Methods. 24 women with a (suspected) BRCA1/BRCA2 mutation were provided with comprehensive oral, written and audiovisual information. The utility of PM was assessed on two occasions. Utilities assessed on the last occasion were used for individual decision analyses. If there was a discrepancy between the two test replications leading to different decision analysis results, the woman was tested a third time. In order to test proportionality, the TTO consisted of four items, each with a different longevity. Proportionality was tested by MANOVA with factors 'longevity' and 'replication'.

Results. 20 of 24 women underwent DNA-testing; in four women this was impossible for technical reasons. Seven women were tested positive, two were negative and for 11 women DNA-test results are not yet available. Two women (8%) did not complete the decision support procedure. Five women performed the TTO a third time. The mean utility of PM in the last session was 0.67 (SD=0.32). Proportionality was not violated [$F(3, 63)=0.29$, $p=0.83$]. Furthermore, the 'replication' effect was not significant [$F(1, 21)=0.93$, $p=0.345$]. For each individual and for each replication, an average utility value was computed over the four TTO-items. The Pearson correlation coefficient between these average utilities of the two last sessions was 0.96. The outcome of the individual decision analyses (assuming that the mutation was present, except for two women who were BRCA-negative) was 12 times PM and 10 times breast cancer screening.

Conclusions. TTO utilities of PM cover a wide range, which results in different treatment choices. Therefore, it is necessary to obtain individual utilities. According to our preliminary results, individual utility assessment by the TTO in this patient group is feasible, valid and reliable.

THE RESULTS OF DIRECT AND INDIRECT TREATMENT COMPARISONS IN META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS
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When little or no data directly comparing two treatments are available, investigators often rely on indirect comparisons from studies testing the treatments against standard treatment or placebo. One approach to indirect comparison is to pool findings from the active treatment arms of the original controlled trials. This approach offers no advantage over a comparison of observational study data and is prone to bias.

We present an alternative model that evaluates the differences between treatment and placebo in two sets of clinical trials, and preserves the experimental study design. We apply the method to data of randomized controlled trials comparing directly trimethoprim-sulphamethoxazole and dapsone/pyrimethamine or both prophylactic regimen indirectly with aerosolized pentamidine as prophylaxis against Pneumocystis carinii pneumonia in HIV infected patients. The indirect comparison showed substantial increased benefit from the former (odds ratio 0.36, 95% CI 0.21 to 0.65), while direct comparison from randomized trials suggests a much smaller difference (risk ratio 0.64, 95% CI 0.45 to 0.90; p-value for difference of effect = 0.10).

Direct comparisons of treatment should be sought. When direct comparisons are unavailable, indirect comparison meta-analysis should evaluate the magnitude of treatment effects across studies, recognizing the limited strength of inference.

STRESS ECHOCARDIOGRAPHY, POSITRON EMISSION TOMOGRAPHY, AND MAGNETIC RESONANCE IMAGING FOR THE DIAGNOSIS OF CORONARY ARTERY DISEASE: ARE THEY UP TO THE CHALLENGE?
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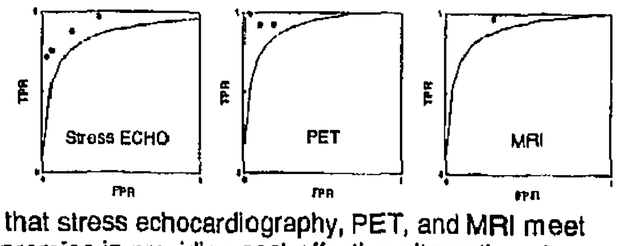
Purpose: To evaluate whether stress echocardiography, exercise positron emission tomography (PET), and magnetic resonance imaging (MRI) could become cost-effective alternatives compared to exercise thallium scintigraphy for the diagnosis of coronary artery disease.

Methods: Based on published data, we constructed a summary receiver operating characteristic (ROC) curve for exercise thallium scintigraphy. Subsequently, we constructed challenge ROC curves for stress echocardiography, PET, and MRI. Challenge ROC curves represent the threshold pairs of true and false positive rates that the new tests would have to attain to be cost-effective compared to exercise thallium scintigraphy. We assumed a threshold willingness-to-pay of $50,000/QALY gained. In sensitivity analysis a range of values for the probability of disease, proportion of uninterpretable test results, costs of the tests, QALY's gained with revascularization, and incremental costs with revascularization were explored. Published results of the diagnostic performance of the new tests were compared to the derived challenge ROC curves.

Results: The challenge ROC curves and corresponding published results are presented. For all three tests published results of the diagnostic parameters were above the challenge ROC curves. These results were fairly robust in a sensitivity analysis.



Conclusions: This analysis suggests that stress echocardiography, PET, and MRI meet the challenge and all three tests show promise in providing cost-effective alternatives to exercise thallium scintigraphy for the diagnosis of coronary artery disease.