Shared decision making interventions for people with mental health conditions (Protocol)

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This is a reprint of a Cochrane protocol, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library* 2009, Issue 4

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[Intervention Protocol]

Shared decision making interventions for people with mental health conditions

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Cochrane Database of Systematic Reviews, Issue 4, 2009 (Status in this issue: Unchanged) Copyright © 2009 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

DOI: 10.1002/14651858.CD007297

This version first published online: 16 July 2008 in Issue 3, 2008. (Help document - Dates and Statuses explained)

This record should be cited as: Duncan E, Best C, Hagen S. Shared decision making interventions for people with mental health conditions. *Cochrane Database of Systematic Reviews* 2008, Issue 3. Art. No.: CD007297. DOI: 10.1002/14651858.CD007297.

ABSTRACT

This is the protocol for a review and there is no abstract. The objectives are as follows:

To assess the effects of provider-, consumer- or carer-directed shared decision making (SDM) interventions for people of all ages with mental health conditions, on a range of outcomes including: patient satisfaction, clinical outcomes, and health service outcomes.

BACKGROUND

Mental illness

A quarter of the world's population will suffer from a diagnosable mental health condition during their life course (WHO 2001). For the purposes of this review, a mental health condition is deemed to be any diagnosis defined by recognisable criteria such as those included in the Diagnostic and Statistical Manual Version IV-TR (APA 2000) or the International Classification of Diseases (WHO 1992). Mental health conditions have a devastating impact on the lives of the people who experience them, their families and communities (WHO 2001). They can be personally debilitating and adversely affect a person's ability to work and participate in daily living, social and leisure activities. Moreover, caring for a family member who suffers from a mental health condition can lead to significant economic and emotional pressures. Unsurprisingly mental health conditions are classified as a national and international health priority topic (Scot Exec 2006; WHO 2001).

The care and treatment of people with mental health conditions has evolved considerably over the last 400 years; from a model of social persecution and ostracism, to a model of social care, through a period of medicalisation, to the present day where consumers are increasingly recognised as central to care and health improvement is viewed in terms of recovery, rather than simply symptom relief. The recovery model of mental health recognises that patients have a drive to find meaning and purpose in life. Evolving from international service user movements, the recovery model emphasises control being placed in the hands of the individual and not the professional (Jacobson 2001) and has now been adopted at a national policy level (Scot Exec 2006). Taking a recovery model perspective of care requires an increased emphasis to be given to the collaborative nature of care between providers, consumers and their families. The individual's right to autonomy and self-determination is fundamental to this perspective.

Decision making

Paternalism has, until relatively recently, been the dominant model of decision making within health care. There have been exceptions to this and alternative models of decision making were promulgated as long as 50 years ago (Balint 1957; Engel 1960). However, despite calls for change throughout the 1970s (Veatch 1972) and 1980s (Brody 1980, Quill 1983), alternative models of decision making in health care did not truly gather pace until the 1990s (Adams 2006; Charles 1997; Frosch 1999).

One alternative to the paternalistic model of decision making is the 'informed decision making' model. In this model, professionals are viewed as technical experts whose role it is to impart information to patients, who then have responsibility for making any treatment decisions. Another decision making model is the 'professional as agent' model. Here, the professional either assumes to know, or elicits, the preferences for treatment of the patient and makes a decision based on both technical knowledge and knowledge of patient preferences. Neither of these models can be considered models of shared decision making. This is because informed decision making excludes the preferences of the professional so is not a shared decision. The 'professional as agent' model relies on the professional determining patient preferences and including these in the decision. This too is not shared decision making as it is known that the professional may not accurately gauge patient preferences (Gafni 1998). The patient's perspective may therefore not truly be involved in the decision. Shared decision making (SDM) instead requires the sharing of treatment preferences and decisions by both the professional and the patient (Charles 1997).

Shared decision making

For a decision to be a 'shared' decision it has to have certain characteristics. It must involve at least two participants, and the sharing of information. The decision (which may be to do nothing) must be made and agreed upon by all parties (Charles 1997). Montori (Montori 2006) examined Charles' (Charles 1997) SDM model in relation to long-term conditions and concluded that for SDM to work in these conditions it was necessary to add another component to the model: "ongoing partnership between the clinical team (not just the clinician) and the patient" (p.25).

Whilst SDM research is now well established, its focus to date has been on physicians dealing with physical conditions, often in primary care (e.g. Davis 2003; Elwyn 1999). SDM for people with mental health conditions has been less well evaluated. Adams 2006 argued that whilst there is examination of professional-patient partnerships, patient education and other interventions that may contain elements of SDM, there are few studies that have:

- assessed patients' desire and ability to participate in SDM:
- evaluated training of professionals to adopt SDM;
- developed SDM interventions; or
- measured the effects of SDM in mental health settings.

In short, the impact of SDM for people with mental health conditions has not been studied thoroughly and explicitly. There has, however, been some work in this area. Hamann 2003 conducted a review of SDM in psychiatry and identified four relevant studies. Three related to the choice of treatment options (Bedi 2000; King 2000; Rokke 1999) and the fourth examined the decision to continue or discontinue psychotropic medication (Bunn 1997). Hamann reports that only Bunn 1997 employed an adequate model of SDM. Both the paucity of studies and methodological issues with the studies themselves means that no firm conclusions can be drawn from the review about the effects of SDM interventions. Significant time has passed since the review's publication and, this being an emerging field, it is likely that there is

now new evidence available about SDM interventions for mental health conditions.

Marshall and colleagues (Marshall 2005) published a review of patient involvement and collaboration in SDM that focused on chronic disease management. Their review included 146 articles representing 137 studies. However the overall poor quality of reporting of these studies made data extraction and quality assessment difficult. The authors found that across all conditions, interventions to increase collaborative care had a positive effect on patient satisfaction and health outcomes, particularly in the short term. They also found great diversity in the interventions and outcome measures used in the identified studies. Only 11% of included articles focused on mental health conditions and no subgroup analysis was conducted on them. The authors acknowledge that the majority of articles included in the review were of medical decision making, and highlight that studies of multidisciplinary care or care by nurses or allied health professionals were lacking. Marshall et al's review was limited in the range of sources searched. A broader, more inclusive approach may retrieve relevant literature from other sources.

There are a number of related systematic reviews which have been published or are underway. Lewin 2001 examined interventions to promote a patient-centred approach in clinical consultations and Peri (Peri 2006) is currently reviewing the literature on goal setting in physical rehabilitation for older people. However, whilst patient-centred care is the context of SDM, and goal setting can be a part of SDM, neither is synonymous with SDM and in neither review is the target population people with mental health conditions. A number of recent articles have highlighted the need for more research into SDM specifically in mental health settings (Deegan 2006; Schauer 2007; Wills 2006). To date there has not been a comprehensive review of SDM interventions for people with mental health conditions.

Shared decision making interventions

A variety of interventions include elements of SDM, although they do not comprise all the features of SDM noted by Charles 1997. Examples of these are:

- including the patient in the decision making process (for example, listening, finding out what the patient already knows, involving patients in the definition of the problem, ensuring that patients understand the clinical problem and the nature of the decision required);
- exploring patients' worries, fears and expectations (for example, discussing uncertainties, providing opportunities for questions, and setting goals);
- discussing potential treatment options (for example, agreeing levels of involvement in the decision making process - which may result in patients deciding they do

- not wish to be involved, discussing intervention options considering risks and benefits);
- providing information (for example, communicating risk, providing information about interventions, discussing pros and cons);
- ensuring information is understood (for example, discovering the level of a patients' understanding about a condition and the intervention options, obtaining patients' views about intervention);
- ensuring patients are happy with the decision making process and the decisions made (for example, encouraging patients to be involved in actioning intervention plans, asking patients' preferences);
- and providing opportunities to review decisions made (Braddock 1997; Edwards 1999; Elwyn 2005).

The importance of having effective, individualised and comprehensive care which directly involves mental health service users in the decision making process has been well recognized (Sainsbury 1998). SDM is being incorporated into healthcare policy and practice both in the UK and internationally (DoH 2007; IoM 2006; Siriwardena 2006). Despite this, there is limited knowledge about the quality and effectiveness of SDM interventions for mental health conditions.

People can experience a range of mental health conditions throughout their life span, and be treated in various settings, ranging from primary care to secure services. Whilst the specific needs of clients with varying diagnoses may differ, the processes of care are broadly similar regardless of age, setting, or clinical condition. Frequently a client's care is not decided by the client and professional in isolation. Friends, family or carers may all have an interest in a client's care; some may act as advocates for the client or actively participate in the care process. This review will focus on the effectiveness of SDM interventions with clients of all ages who have a mental health condition, regardless of treatment setting. Studies where decisions involving family members or carers are the target of the SDM intervention will be included. Subgroup analysis of these differentiating factors will be conducted where sufficient data are extracted.

OBJECTIVES

To assess the effects of provider-, consumer- or carer-directed shared decision making (SDM) interventions for people of all ages with mental health conditions, on a range of outcomes including: patient satisfaction, clinical outcomes, and health service outcomes.

METHODS

Criteria for considering studies for this review

Types of studies

We will include:

- randomised controlled trials (RCTs),
- quasi-randomised controlled trials (q-RCTs),
- controlled before-and-after studies (CBAs); and
- interrupted time series (ITS).

We include designs other than RCTs because the nature of research in this field means that conducting RCTs is sometimes unfeasible, and valuable data may be excluded by stringent criteria regarding research design. However should there be sufficient well-designed RCTs which meet all selection criteria, then other study designs which are more open to bias will be excluded.

Comparison groups will be composed of participants not receiving a specific SDM intervention. We will also include trials comparing the effects of two different SDM interventions with people who experience mental health conditions.

Types of participants

The people receiving the healthcare service will be diagnosed with a mental health condition by any defined criteria such as the International Classification of Diseases (WHO 1992) or the Diagnostic and Statistical Manual of Mental Disorders (APA 2000). We will include studies enrolling individuals of all ages. We will include public and private healthcare consumers.

We will exclude studies that focus on people with substance misuse problems where comorbid mental health conditions have not been assessed using DSM or WHO criteria.

The participants receiving the intervention may be professionals, service users, family and/or carers.

Types of interventions

Studies may assess a single intervention or a combination of interventions, and may compare them with other interventions with a similar purpose, or with usual care. An intervention will be included if its description is sufficient to allow review authors to determine that its aim was to increase the degree of shared decision making (SDM) between patient and provider. For a decision to be classified as 'shared' it must involve at least two participants, information must be shared between participants, both parties must participate in the decision making process, and a decision must be made or actively deferred (Charles 1997). Studies will be included if they focus on enhancing any aspect of these four criteria identified by Charles (Charles 1997), providing that two parties are involved in making a decision, and the decision is not about future crisis care, i.e. advanced directives. Studies that meet all four of Charles' criteria will be differentiated from those that address less than four of the criteria, and this will be recorded at data extraction.

The review will include interventions targeted at providers (such as training in problem definition and agreement, presenting op-

tions), consumers (such as those which enhance participation, involvement or autonomy), or carers or family members. Interventions may take place in any environment and will not be restricted by the mode or intensity of delivery.

We will include studies that have interventions provided by a wide range of mental health service providers (including general practitioners, psychiatrists, psychologists, nurses, social workers, occupational therapists and other allied health professionals, and lay support staff working in mental health settings).

We will exclude any intervention which:

- is primarily a secondary intervention (e.g. anxiety management);
- consists solely of information provided to patients about a condition, i.e. patient education without the two-way sharing of information necessary for SDM.
- aims at enhancing communication between patient and provider, without focus on a particular choice or decision; or
- is targeted at future care, i.e. Ulysses contracts or advanced directives.

Types of outcome measures

Primary outcomes

The primary outcomes will be:

- Patient global satisfaction (measurement tools of global patient satisfaction could include the Client Satisfaction Questionnaire-8 (Attkisson 1982));
- Clinical outcome (measurement tools for clinical outcome could include depression scales such as the Beck Depression Inventory (Beck 1996) or the Patient Health Questionnaire -9 (Kroenke 2001); met and unmet needs scales such as the Camberwell Assessment of Need (Slade 1999); levels of psychosocial functioning scales such as the Global Assessment of Functioning (GAF; Jones 1995) or the Health of the Nation Outcome Scales (Wing 1996); or anxiety scales such as the State-Trait Anxiety Inventory (Spielberger 1983));
- Health service outcome (rate of readmission to hospital)

Secondary outcomes

The secondary outcomes will be:

- Level of consumer's involvement in the decision-making process (e.g. OPTION (observing patient involvement) scale (Elwyn 2003); Patient's Perceived Involvement in Care Scale (Lerman 1990)
- Consumer satisfaction with decision (measurement could be by Satisfaction with Decision Scale (Holmes-Rovner 1996))
- Consumer satisfaction with information provided (measures of the consumer's satisfaction with infor-

mation provided, for example that developed by the Swedish Institute (Swedish Inst 1993).

- Consumer experience of patient-provider interaction (e.g. Stewart 1999);
- Consumer quality of life (e.g. WHOQOL-100 (Skevington 1999));
- Consumer knowledge;
- Provider knowledge;
- Provider satisfaction;
- Family/carer satisfaction;
- Family/carer experience of family/carer-provider interaction:
- Family/carer involvement in the decision-making process:
- Consumer concordance with treatment plan;
- Consultation time;
- Intent to change health behaviour;
- Other service outcomes (e.g. length of hospital stay).

Search methods for identification of studies

We will:

- Search electronic bibliographic databases for published work:
- Search trial registers and contact authors for ongoing and recently-completed studies;
- Search the reference lists of relevant published studies; and
- Contact authors of relevant studies to check for additional studies.

There will be no language or date restrictions.

Electronic database searching

We will use an explicit search strategy, developed in collaboration with the Cochrane Consumers and Communication Group, to search the following bibliographic databases:

- Cochrane Central Register of Controlled Trials (CEN-TRAL, The Cochrane Library);
- Cochrane Consumers and Communication Review Group Specialised Register;
- Centre for Reviews and Dissemination Databases (Database of Abstracts and Reviews of Effects (DARE), Health Technology Assessment (HTA) Database, and the Ongoing Reviews Database);
- MEDLINE (1950-date)
- CINAHL (1982-date);
- EMBASE (1980-date);
- British Nursing Index and Archive (1985-date);
- PsycINFO (1967-date);
- SIGLE (1980-date).

We present the search strategy for MEDLINE (Ovid) in Appendix 1; and will adapt it to search other databases. The search strategy is structured according to a study design filter, mental Illness search terms (based on advice from the Cochrane Depression, Anxiety and Neurosis Review Group, and the Schizophrenia Review Group), and shared decision making terms.

Ongoing and recently completed clinical trials

We will locate and contact study authors of ongoing and recentlycompleted clinical trials to obtain details of unpublished studies. Additionally, we will search the following databases:

- ReFer (Research Findings register, DOH);
- National Research Register, International Register of Controlled Trials.

Searching reference lists

We will search the reference lists of relevant published studies to see if they include any studies not already assessed for inclusion in this review.

Contacting study authors

Where required, we will contact authors of relevant studies for further information about their studies, and to ask if they are aware of any other complete or ongoing studies meeting our inclusion criteria.

Data collection and analysis

Selection of studies

Two review authors will conduct the search and initial screening of studies (using titles and abstracts) for possible inclusion. We will retrieve full text copies of all articles judged to be potentially relevant to the review, and two review authors will independently assess these for inclusion. Any differences in judgement will be reconciled through discussion between the two review authors and, where consensus is still not reached, with the third author. Where a study has insufficient information to allow a decision to be made, we will contact the authors of the study to obtain further information to enable the study to be definitively included or excluded. Any study excluded at this stage will be listed in the table 'Characterstics of Excluded Studies' and the reason for exclusion given.

Data extraction and management

Two review authors will extract data independently from all included studies using a standard form derived from the data extraction template of the Cochrane Consumers and Communication Review Group (DET 2007), reconciling differences by discussion and, where consensus cannot be reached, with a third author.

The data extraction tool will include a measure of whether shared decision making criteria (Charles 1997) have been partially or completely met.

For each study, we will extract the following data on outcome measures:

- name of outcome measure;
- method of data collection used to assess each measure (e.g. questionnaire, interview, observation);
- outcome data at immediate (up to 1 month), 3, 6, 12, 18 and 24 month follow ups; and
- adverse incidents (e.g. complaints about outcome measurement, other adverse incidents).

We will extract the results of each study in terms of outcome measures' means, standard deviations (SD), percentages (N), significant and non-significant differences, and P values.

If reliable data cannot be extracted from a study then the authors will be contacted, and if the data are not available then the study will be recorded as an Included study without data. There will be no masking of author names during the screening process. Data will be checked and entered into RevMan by one review author and this data will be checked after entry by a second author.

Assessment of risk of bias in included studies

We will assess and report on the methodological quality of included studies in accordance with the guidelines of the Cochrane Consumers and Communication Review Group (Ryan 2007), which recommends the explicit reporting of the following individual quality elements for RCTs: randomisation; allocation concealment; blinding (participants, providers, outcomes assessors, data analysts); baseline comparability; follow-up; intention-totreat analysis; validation of tools; and other sources of bias, for example skewed data. We will assess skewed data in accordance with the guidelines in the Cochrane Handbook (section 8.5.2.11, Deeks 2006; Higgins 2006). Quasi-randomised controlled trials, CBA and ITS studies will be also be systematically assessed for quality in accordance with the criteria outlined in the guidelines of the Cochrane Consumers and Communication Review Group. Should sufficient studies with comparable outcome measures be found, then we will conduct a sensitivity analysis based on study quality. We will remove studies of low quality from the analysis, and assess the effect on the results.

In all cases, two review authors will independently assess the quality of included studies, with any disagreements resolved by discussion and consensus. We will contact study authors for additional information about the included studies, or for clarification of the study methods as required. We will incorporate the results of the quality assessment into the review through systematic narrative description and commentary about each of the quality items, leading to an overall assessment of the quality of included studies and a judgement about the internal validity of the review's results.

Measures of treatment effect

Once the previous steps of the review have been completed, we will analyse the included studies to determine whether there are any studies sufficiently similar in design, setting (e.g. in-patient, com-

munity mental health team, etc), age, intervention, and outcome measurement to allow their data to be combined for meta-analysis. For studies with continuous data, we will report mean differences with 95% confidence intervals. Where studies have used different assessments to measure the same concept (e.g. anxiety levels), we will report the standardised mean difference (SMD). We note that there are difficulties in interpreting findings regarding differences in SMDs since they cannot easily be related back to the original assessment scales.

For dichotomous data, in studies that have measured outcomes in a standard way, we will report the risk ratio and confidence intervals. We will take a cautious approach to combining results throughout, and outline in the review the rationale for doing so. A meeting of all review authors will decide whether there is sufficient homogeneity of interventions, participants or outcomes to enable meta-analysis to take place. As the subject matter of this review is broad in nature, we expect that meta-analysis will only be feasible for a few, if any, subgroups of participants, interventions or outcomes. Where studies are found to be heterogeneous in design, intervention or in outcome measures used, we will conduct a descriptive review of included studies, and present it using both a narrative summary and presentation of extracted data in tables and figures as appropriate.

Unit of analysis issues

Cluster randomised trials will not be meta-analysed directly with non-cluster trials, in order to avoid a unit of analysis error.

Dealing with missing data

We will use an intention-to-treat (ITT) analysis, where data will be analysed based on the treatment condition a participant was allocated to rather than the treatment they received, or whether they were lost to follow up. We will contact study authors for missing statistical data.

Assessment of heterogeneity

We will assess statistical heterogeneity visually with a forest plot. The presence or absence of overlapping confidence intervals will indicate whether the variation observed in the results is likely to be explained by chance alone. Heterogeneity will also be assessed using the chi-square test. A significance level of P=0.1 will be used in view of the low power of such tests.

If there are not overlapping confidence intervals and the chi-square test indicates heterogeneity, then the level of heterogeneity will be examined further by calculating I² (Higgins 2002), where I² values of 50% and more indicate a substantial level of heterogeneity (Higgins 2003; Higgins 2006).

Assessment of reporting biases

We will assess publication bias graphically through a funnel plot. We acknowledge the limitations of such analysis and if asymmetry is found we will examine other possible interpretations such as clinical heterogeneity before concluding publication bias is present (Section 8.11.1 Publication bias and funnel plots Cochrane Handbook for Systematic Reviews of Interventions (Deeks 2006).

Multiple publications (if any) will be collated and assessed as one study.

Data synthesis

If there are enough suitable studies, meta-analysis will be conducted using a random-effects model.

Subgroup analysis and investigation of heterogeneity

Potential subgroup analysis will include:

- study design;
- the environmental setting of the intervention (e.g. inpatient, outpatient, primary care, community, secure environment);
- diagnosis (e.g. depression, schizophrenia, anxiety etc);
- age groups (e.g. children (0 to16), adult (16 to 65) and elderly (over 65));
- intervention type (e.g. to providers, consumers or carers); and
- outcome measurement (patient satisfaction or clinical outcome).

If substantial heterogeneity is found, we will attempt to determine potential reasons for it by examining individual study characteristics and those of subgroups of the main body of evidence.

Sensitivity analysis

We will perform sensitivity analyses in order to explore the influence of the following factors on effect size:

1. study quality (excluding studies identified as being of poor quality); and

2. excluding outliers.

We will also test the robustness of the results by repeating the analysis using different statistical models (fixed-effect and random-effects models). The number of analyses is restricted as we anticipate a small number of studies will be included in any meta-analysis and repeated testing would be inappropriate in that context.

Consumer Participation

A consumer advisory panel has been constituted in collaboration with Voices of Experience (VOX) (a Scottish national organisation of people who have experienced mental health conditions, who seek to create an environment where mental health conditions are not a barrier to participating in society). VOX have agreed to act as a contact point to use their networks and membership to disseminate the protocol and draft review, and to collate responses from service users to inform the review. VOX's involvement will be acknowledged in both the protocol and review.

ACKNOWLEDGEMENTS

We thank the staff and editors of the Cochrane Consumers and Communication Review Group, and in a particular way Professor Adrian Edwards (Contact Editor for this protocol) and Megan Prictor (Review Group Coordinator). We also wish to thank Voice of Experience (VOX) for agreeing to provide active consumer involvement and the Nursing, Midwifery and Allied Health Professions Research Unit (NMAHP RU) for funding this review.

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* Indicates the major publication for the study

APPENDICES

Appendix I. MEDLINE (Ovid) search strategy

Study design filter

- 1. randomised controlled trial.pt.
- 2. controlled clinical trial.pt.
- 3. randomised controlled trials.sh.
- 4. random allocation.sh.
- 5. double blind method.sh.
- 6. single blind method.sh.
- 7. or/1-6
- 8. (animals not humans).sh.
- 9.7 not 8
- 10. clinical trial.pt.
- 11. exp clinical trials/
- 12. (clinic\$ adj25 trial\$).ti,ab.
- 13. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj5 (blind\$ or mask\$)).ti,ab.
- 14. random\$.ti,ab.
- 15. or/10-14
- 16. 15 not 8
- 17. 16 not 9
- 18. Comparative study.sh.
- 19. exp Evaluation studies/
- 20. Follow-up studies.sh.
- 21. Prospective studies.sh.
- 22. (latin adj square).tw. or cross-over studies.sh.
- 23. or/18-22
- 24. 23 not 8
- 25. 24 not (9 or 18)
- 26. 9 or 17 or 25

Mental illness search terms

- 27 exp Eating disorders/
- 28 exp Anorexia nervosa/
- 29 exp Bulimia/
- 30 exp Suicide, attempted/
- 31 exp Self mutilation/
- 32 exp Self-injurious behavior/
- 33 exp Mood disorders/
- 34 exp Bipolar disorder/
- 35 exp Neurotic disorders/
- 36 exp Depressive disorder/
- 37 exp Dysthymic disorder/
- 38 exp depression/ or exp depression, involutional/ or exp depression, postpartum/
- 39 exp Seasonal affective disorder/
- 40 exp anxiety/ or exp anxiety disorders/ or exp anxiety, separation/ or exp dental anxiety/
- 41 exp panic/ or exp panic disorder/
- 42 exp Phobic disorders/
- 43 exp combat disorders/ or exp stress disorders, post-traumatic/
- 44 exp Somatoform disorders/
- 45 exp Hypochondriasis/
- 46 exp Hysteria/

- 47 exp Conversion disorder/
- 48 exp munchausen syndrome/ or exp munchausen syndrome by proxy/
- 49 exp Neurasthenia/
- 50 exp Fatigue syndrome, chronic/
- 51 exp Obsessive-compulsive disorder/
- 52 exp Obsessive behavior/
- 53 exp Compulsive behavior/
- 54 exp Stress, psychological/
- 55 *Mental disorders/
- 56 or/27-55
- 57 exp schizophrenia/
- 58 exp paranoid-disorders/
- 59 schizo\$
- 60 hebephreni\$
- 61 oligophreni\$
- 62 psychotic\$
- 63 psychos#s
- 64 (chronic\$ adj mental\$).ti, ab.
- 65 (sever\$ adj mental).ti, ab.
- 66 mental\$ adj disorder\$).ti, ab.
- 67 (mental\$ adj ill\$).ti,ab.
- 68 (emotion\$ adj disorder\$).ti,ab.
- 69 or/57-68
- 70 69 or 56
- Shared decision making search terms
- 71 decision making.sh.
- 72 exp choice behavior/
- 73 (share\$ adj decision adj mak\$).ti,ab.
- 74 (decision adj analys\$).mp.
- 75 or/71-74
- 76 (patient or client or subject or consumer).mp.
- 77 (family or carer).mp.
- 78 (professional or physician or clinician or practitioner).mp.
- 79 (76 and 78) or (77 and 78)
- 80 professional-patient relations.sh.
- 81 physician-patient relations.mp.
- 82 or/79-81
- 83 shar\$ adj information.mp.
- 84 (patient adj choice\$).mp.
- 85 (patient adj understanding).mp.
- 86 ((check or clarify) adj3 understanding.mp.
- 87 physician adj preferences.mp.
- 88 (treatment adj option\$).mp.
- 89 values.mp.
- 90 preferenc\$.mp.
- 91 (communicat\$ adj risk).mp.
- 92 attitude of health personnel.sh.
- 93 (patient adj expect\$).mp.
- 94 (problem adj definite\$).mp.
- 95 (ask adj question\$).mp.
- 96 (assess adj risk).mp. 97 self-manag\$.mp.
- 98 equipoise.mp.

99 or/83-98

100 (decision adj aids).mp.

101 decision support techniques.sh.

102 checklist.mp.

103 or/100-102

104 (goal adj set\$).mp

105 negotiat\$.mp.

106 deliberat\$

107 (decis\$ adj mak\$).mp.

108 consensus.mp.

109 concordance.mp

110 agreement.mp.

111 (action adj plan).mp.

112 or/104-111

113 'quality of lfe'.tw.

114 (patient adj satisfaction).mp.

115 (follow adj up).mp.

116 readmission.mp.

117 (treatment adj (compliance or concordance)).mp.

118 or/113-117

119 (75 and 82) or (82 and 99) or (82 and 103) or (85 and 112) or (75 and 118) or (99 and 118)

120 27 and 73 and 122

HISTORY

Protocol first published: Issue 3, 2008

CONTRIBUTIONS OF AUTHORS

Edward Duncan: Conceived the review, wrote the title registration form and the protocol. Will be leading and contributing to all further stages of the review.

Suzanne Hagen: Provided guidance on preparing the title registration form and protocol. Will contribute to the assessment of methodological quality of retrieved studies, analysis of results, and will critically read drafts of the review document.

Catherine Best: Will conduct electronic searches of databases; will assess title and abstracts obtained from electronic and other searches and will contribute to the assessment of the methodological quality of the retrieved studies, the analysis of the results and the drafting of the review.

DECLARATIONS OF INTEREST

None known

SOURCES OF SUPPORT

Internal sources

• Nursing, Midwifery and Allied Health Professions Research Unit, UK.

External sources

• No sources of support supplied