

Table DSI Studies considered in the review

Study	Treatment choice	Participants	Country	Clinical characteristics	Age, years Mean (s.d.)	Participation rate %	Mental capacity assessment
Appelbaum <i>et al</i> (1981)	Voluntary admission	50 voluntary psychiatric in-patients	USA	62% schizophrenia 12% Affective or personality disorder 6% OBS/mental retardation	NR	67	15-item questionnaire: 7 categories
Appelbaum <i>et al</i> (1998)	Voluntary admission	100 voluntary psychiatric in-patients	USA	NR	NR	73	MUD-VH: purpose of hospitalisation and release hospital; recall and recognition criteria MacCAT-T
Appelbaum & Redlich (2006)	Diverse psychiatric treatments	120 community psychiatric patients	USA	53% schizophrenia 18% bipolar disorder 32% major depression	44.58 (10.05)	87	MacCAT-T
Bean <i>et al</i> (1994, 1996)	Consent to ECT	96 psychiatric in-patients referred for ECT	Canada	56% major depression 30% schizophrenia or schizoaffective disorder 13% detained	48.9 (8.5)	NR	Two researchers independently rated CIS 15-item questionnaire (binary decision); compared with assessment by attending physician
Beckett & Chaplin (2006)	Consent to treatment	53 patients with bipolar disorder, current episode manic (with or without psychosis)	UK	Mean YMRS score 29.0 (s.d.=7.0) 66% detained	42 (13)	75	Clinical interview based on definition of capacity laid out in the MCA All assessments by one of two interviewers transcribed and independently rated by separate interviewer
Bellhouse <i>et al</i> (2003a)	Consent to admission	43 psychiatric and learning disability in-patients	UK	20% detained under the MHA 14% learning disability 52% psychotic illness	36 (median)	73	Semi-structured interview designed to produce binary ratings based on UK law Ten transcripts independently rated by separate interviewer
Bellhouse <i>et al</i> (2003b)	Diverse treatments	41 psychiatric and learning disability in-patients (same sample as above)	UK	17% detained under the MHA 22% Schizophrenia 46% Affective disorders	36 (median)	61	Semi-structured interview designed to produce binary ratings
Billick <i>et al</i> (1996)	Diverse psychiatric treatments	20 psychiatric in-patients	USA	35% schizophrenia or schizoaffective disorder 11% bipolar disorder (manic) 24% depression 14% organic mood disorder 16% detained	45.9 (23.3)	54.1	15-item CQ compared with assessment by a forensic psychiatrist
Cairns <i>et al</i> (2005b)	Diverse psychiatric treatments	Psychiatric in-patients	UK	56% psychotic illness 29% depression 34% detained Subset of patients from Cairns <i>et al</i> (2005a)	36.2 (12.4)	43.3	MacCAT-T (used to guide a clinical decision on mental capacity for specific decision) on two occasions Senior clinicians' independent assessment of transcribed interviews

(Continued)

Table DSI (Continued)

Cairns <i>et al</i> (2005a)	Diverse psychiatric treatments	112 psychiatric in-patients	UK	55% psychosis 22% depression 19% bipolar disorder 32% detained	37.2 (11.8)	59	MacCAT-T used to guide clinical decision on mental capacity
Grisso & Appelbaum (1991)	Vignettes on psychiatric or physical illness	102 psychiatric and medical in-patients	USA	25% schizophrenia 25% depression 25% ischaemic heart disease 25% primary care patients	43.4	NA	Measuring understanding to disclosure
Grisso <i>et al</i> (1995), Grisso & Appelbaum (1995b,c); a subsample of this study is described in Grisso & Appelbaum (1991)	Diverse medical and psychiatric treatment relating to condition of individual	249 psychiatric and medical in-patients	USA	30% schizophrenia 37% depression 33% ischaemic heart disease Equal numbers of community controls 43% detained	NR	23-42	Three semi-structured measures: understanding treatment disclosure; thinking rationally about treatment (reasoning); perception of disorder (appreciation)
Grisso <i>et al</i> (1997)	Diverse psychiatric treatments	40 psychiatric in-patients 40 community volunteers	USA	100% schizophrenia (mean BPRS score 36)	39	32	MacCAT-T Subset of 20 patients and 20 controls examined by three researchers for interrater reliability
Hoffman & Srinivasan (1992)	Diverse psychiatric treatments	60 psychiatric in-patients	Canada	72% schizophrenia 11% bipolar disorder 8% unipolar depression 7% OBS 47% detained	38 (range 18-68)	NR	Capacity assessment based on Mental Health Act in Ontario
Howe <i>et al</i> (2005)	Treatment not specified	110 psychiatric in-patients	Australia	58% schizophrenia 23% schizoaffective 19% bipolar disorder	37.2 (12.3)	NR	MacCAT-T
Irwin <i>et al</i> (1985)	Consent to antipsychotic medication	47 psychiatric in-patients	USA	67% schizophrenia 12% unipolar depression 18% bipolar disorder 54% detained	36.8 (10.2)	NR	Semi-structured interview by psychiatrist, noted on 5-point scale
Jacob <i>et al</i> (2005)	Diverse medical treatments	71 patients presenting to an emergency room with self-harm	UK	91% overdosages 52% had consumed alcohol	35.1 (13.2)	89	Clinical interview designed to give binary capacity assessment Subset of 25 interviews audiotaped and rated by second psychiatrist
Janofsky <i>et al</i> (1992)	Consent to medical treatment	41 patients: 16 on a general medical ward and 25 on a general or geriatric psychiatry ward	USA	61% psychiatric patients (mean MMSE score 19.4) 39% medical patients (mean MMSE score 22.4)	54 (18.9)	NR	Clinical assessment of competency by forensic psychiatrist, compared with HCAT Subset of 10 patients independent assessment of HCAT

(Continued)

Table DSI (Continued)

Kitamura <i>et al</i> (1998)	Diverse medical and psychiatric treatments	48 voluntary psychiatric and medical in-patients	Japan	52% psychiatric patients 48% medical patients	52.2 (15.1) 49.6 (19.0)	NR	SICIATRI
Koren <i>et al</i> (2005)	Diverse psychiatric treatment	21 in-patients with first-onset schizophrenia	Israel	100% first-episode schizophrenia	23.9 (4.5)	NR	MacCAT-T WCST scored in two ways: conventional and 'metacognitive'
Lapid <i>et al</i> (2003)	Consent to ECT	40 in-patients with major depressive disorder	USA	28% psychosis (mean scores) MMSE 28.3, HRSD 30.83	57.0 (18.3)	46%	MacCAT-T, MMSE, GAF18, HRSD
Melamed <i>et al</i> (1997, 1999)	Diverse psychiatric treatments	113 voluntary psychiatric in-patients	USA	61% schizophrenia 16% other psychotic disorder 13% psychosis attributed to medical illness 10% mood disorder	47.6 (17.2)	NR	Clinical interview and 15-item competency questionnaire
Mukherjee & Shah (2001)	Admission	65 voluntary and involuntary geriatric psychiatric patients	UK	28% dementia 41% depression 15% schizophrenia 8% mania 3% personality disorder 15% detained	74 (median; range 65-92)	85	Clinical interview researcher compared with patient's consultant assessment
Norko <i>et al</i> (1990)	Admission	100 voluntary psychiatric in-patients	USA	22% schizophrenia 39% affective disorder 32% substance misuse 7% OBS	44 (range 18-91)	83	15-item questionnaire (MUD-VH) Independently rated by four interviewers
Palmer <i>et al</i> (2002)	Atypical antipsychotic medication	16 community out-patients with history of psychosis (subsample of Palmer <i>et al</i> , 2004)	USA	69% schizophrenia 19% schizoaffective disorder 6% bipolar disorder 6% non-specified psychosis	54.6 (7.2)	NR	MacCAT-T and HCAT Two raters independently scored 13 assessments
Palmer <i>et al</i> (2004)	Atypical antipsychotic medication	59 community out-patients with history of psychosis 39 healthy controls	USA	83% schizophrenia 17% schizoaffective disorder	50.2 (6.8)	NR	MacCAT-T
Paul & Oyeboode (1999)	Initiation or change in antipsychotic medication	40 voluntary psychiatric in-patients	UK	38% schizophrenia and related disorders 52% affective disorder 10% anxiety-related disorder	37.2 (12.3)	87	CRS I-4 based on hierarchy of capacity
Poythress <i>et al</i> (1996)	Voluntary hospitalisation	120 psychiatric patients brought to a crisis team	USA	45% schizophrenia/schizoaffective disorder 42% major affective disorder 13% other 50% involuntary	35	70	MUD-VH

(Continued)

Table DSI (Continued)

Roth <i>et al</i> (1982)	Consent to ECT	57 psychiatric patients	UK	77% consenting to ECT 21% refusing ECT 81% affective disorder 2% schizophrenia 11% schizoaffective disorder 18% neurotic disorder 11% OBS All participants had ECT for depression 7% detained	43.2 (16.3)	70	Information leaflet provided, with 15-item questionnaire to assess understanding of information in leaflet; 23 patients independently assessed by four judges (two attorneys; two psychiatrists)
Tan <i>et al</i> (2003)	Treatment	10 patients with anorexia or atypical anorexia	UK	Median BMI 17.1 kg/m <sup>2</sup> (range 12.6–19.6) 20% in-patients (detained) 10% in-patients (voluntary) 20% day patients 40% psychiatric out-patients 10% GP care	17 (median)	NR	Clinical interview and MacCAT-T. Two raters, independently scored
Tomoda <i>et al</i> (1997)	Diverse treatments	23 medical and 25 voluntary psychiatric in-patients	Japan	Psychiatric patients: 44% affective disorders 40% schizophrenia 12% other	50 (17.0)	NR	Two raters' independent scores on SICIATRI Physicians' clinical judgements
Vellinga <i>et al</i> (2004)	Diverse treatments	80 patients aged > 65 admitted to geriatric ward for 'psychiatric and somatic screening'	The Netherlands	38% dementia	83	33	Separate assessment by physician, family member, vignette (supplying binary outcome)
Vollmann <i>et al</i> (2003)	Diverse psychiatric treatments	109 voluntary psychiatric and dementia patients	Germany	32% depression 39% schizophrenia 28% dementia	69.7 (9.3) (dementia patients) 45.8 (12.5) (psychiatric patients)	56.7	MacCAT-T compared with physicians' judgements
Wong <i>et al</i> (2000)	Capacity to consent to blood test	62 patients with 'mental disability' recruited from diverse clinical settings and a general population comparison group (n=20).	UK	34% learning disability 32% dementia 34% schizophrenia 11% detained	Dementia patients 82.2 (8.3), learning disability patients 36.8 (12.1), mental illness patients 40.1 (10.6)	NR	Decision Assessment Measure (information sheet describing five elements, including procedure, risks of having/not having the tests) Subgroup of 16 (4 from each group) interviews independently rated by separate rater
Wong <i>et al</i> (2005)	Maintenance antipsychotics treatment	81 voluntary in-patients with schizophrenia	Hong Kong	Patients with schizophrenia who had been voluntarily admitted	36.9 (10.4)	NR	MacCAT-T

BMI, Body Mass Index; BPRS, Brief Psychiatric Rating Scale; CIS, Competency interview Schedule; CQ, Competency questionnaire; CRS, Consent Rating Scale; ECT, electroconvulsive therapy; GAF, Global Assessment of Functioning; GP, general practitioner; HCAT, Hopkin's Competency Assessment Test; HRDS, Hamilton Rating Scale for Depression; MacCAT-T, MacArthur Competence Assessment Tool-Treatment; MCA, Mental Capacity Act; MHA, Mental Health Act; MMSE, Mini-Mental State Examination; MUD-VH, measuring understanding to disclosure-voluntary hospitalisation; NA, not applicable; NR, not reported; OBS, organic brain syndrome; PANSS, Positive and Negative Syndrome Scale; SICIATRI, Structured Interview for Competency/Incompetency Assessment Testing and Ranking Inventory; WCST, Wisconsin Card Sorting Test; YMRS, Young Mania Rating Scale.