Appendix 19: Health Economic Evidence- Evidence Tables of Published Studies

Preventing psychosis

References to included studies

1. Phillips LJ, Cotton S, Mihalopoulos C, Shih S, Yung AR, Carter R, et al. Cost implications of specific and non-specific treatment for young persons at ultra high risk of developing a first episode of psychosis. Early Intervention in Psychiatry. 2009;3:28-34.
2. Valmaggia LR, McCrone P, Knapp M, Woolley JB, Broome MR, Tabraham P, et al. Economic impact of early intervention in people at high risk of psychosis. Psychol Med. 2009;39:1617-26.

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Phillips et al, 2009 Australia Cost minimisation analysis	Specific preventive intervention; consisting of a combination of risperidone and cognitive-oriented psychotherapy in addition to 'needs-based' intervention Standard care (SC) (needs-based intervention)	Population: young people at ultra high risk of developing first episode of psychosis Study design: RCT Source of effectiveness data: RCT and follow-up study of young people attending the Personal Assessment and Crisis Evaluation (PACE) Clinic Source of resource use estimates: RCT and follow-up study of young people attending the Personal Assessment and Crisis Evaluation (PACE) Clinic Source of unit costs: local and national sources	Costs: intervention, outpatient, inpatient, pharmacology, needs-based treatment (supportive counselling, case management) Cost per person 0-6 months: • Intervention $AUS 3,078 • SC $AUS 2,488 • Difference: $AUS 590, p=ns Cost per person 6-12 months: • Intervention $AUS 1,800 • SC $AUS 1,429 • Difference: $AUS 371, p=ns Cost per person 12-36 months: • Intervention $AUS 5,668 • SC $AUS 11,614 • Difference: -$AUS 5,946, p=ns Primary outcome: Transition probability to psychosis (Global Assessment of Functioning – GAF], Hamilton Anxiety Rating Scale [HAM-A], Hamilton Depression Rating Scale [HAM-D], Quality of Life Scale [QLS], Scale for the Assessment of Negative Symptoms [SANS], Young Mania Rating Scale [YMRS])	Cost effectivenesss: Transition probability to psychosis (GAF, Brief Psychiatric Rating Scale for Psychosis, HAM-A, HAM-D, QLS, SANS, YMRS): No significant difference	Perspective: health sector Currency: AUS$ Cost year: 1997 Time horizon: 36 months Discounting: 3% Applicability: partially applicable Quality: potentially serious limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Valmaggia et al, 2009 UK Cost effectiveness analysis	Early intervention consisting of information about the symptoms, practical and social support, and the offer of cognitive behavioural therapy (CBT) and medication (a low-dose antipsychotic or an antidepressant) Standard care (SC)	Population: people at high risk of developing psychosis; mean age 24 years; 59% male Study design: decision analytic model Source of effectiveness data: Outreach and Support in south London clinical service (n=114); Lambeth Early Onset (LEO), an early intervention team for people with first episode psychosis in the same geographical area of south London Source of resource use estimates: Outreach and Support in south London clinical service (n=114); Lambeth Early Onset (LEO), an early intervention team for people with first episode psychosis in the same geographical area of south London; authors' assumptions Source of unit costs: national sources	Costs: intervention, GP, outpatient care (including community mental health teams contacts), informal inpatient stay, formal inpatient stay, costs incurred during duration of untreated psychosis, sectioning, psychologist, community psychiatric nurse, social worker, CBT session, medication, productivity losses Cost per person 24 months: • Intervention £4,313 • SC £3,285 • Difference: £1,028 Primary outcome: probability of transition to psychosis • Intervention 0.20 • SC 0.35 • Difference: -0.15	Cost effectivenesss: Incremental cost per person avoiding psychosis at 24 months is £6,853	Perspective: NHS and societal Currency: UK£ Cost year: 2004 Time horizon: 2 years Discounting: none Applicability: partially applicable Quality: potentially serious limitations

Interventions to promote physical health in adults

References to included studies

1. Winterbourne S, Knapp M, McCrone P, Bell N, Campion J, Clark M, et al. Preventing future physical morbidity and premature mortality in people with first-episode psychosis: an economic evaluation of the possible benefits of weight management interventions. In publication.
2. Winterbourne S, Knapp M, McCrone P, Bell N, Campion J, Clark M, et al. Quitting smoking for young people with schizophrenia – is it worth it? Economic evaluation of smoking cessation interventions. In publication.

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Winterbourne et al, in publication. UK Cost-utility analysis	3-month intervention: psychoeducation, nutritional and/or exercise counselling Standard care (SC) (basic advice on weight and exercise, on the risk of developing cardiovascular event and/or type 2 diabetes mellitus and life expectancy)	Population: cohort of 1,000 30-year old service users with first episode psychosis Study design: markov model Source of effectiveness data: RCT review, authors' assumptions, published sources, Qdiabetes and QRISK2-2012 risk calculators Source of resource use estimates: authors' assumptions, RCT review Source of unit costs: national sources	Costs: medication, nutrition education sessions with detician, nutrition information booklet, clinical psychologist, mental health nurse, cognitive nehavioural therapist, training, management of co-morbidities, death (hospital care) Mean lifetime costs per person: • Intervention £6,893 • SC £6,293 • Difference: £560 Primary outcome: QALYs Mean lifetime QALYs: • Intervention 14.0 • SC 13.4 • Difference: 0.6	Cost effectivenesss: Cost/QALY=£960 If WTP=£20,000-30,000 probability intervention cost effective 0.95 Sensitivity analysis: Deterministic: results sensitive to intervention effect, intervention costs, utility values Using 12-month follow up data from Alvarez-Jimenaz et al, 2010 RCT: intervention was dominated by SC Sub-group analysis: Changing gender, smoking status, baseline BMI, diagnosis cost/QALY £705-1,034	Perspective: NHS Currency: UK£ Cost year: 2010-11 Time horizon: lifetime Discounting: 3.5% cost and outcomes Applicability: partially applicable Quality: potentially serious limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Winterbourne et al, in publication. UK Cost-utility analysis	Bupropion in combination with CBT and nicotine replacement therapy (NRT) Standard care (SC) (CBT and NRT)	Population: cohort of 1,000 27-year old male service users with schizophrenia Study design: markov model Source of effectiveness data: RCT meta-analysis, authors' assumptions, other published sources Source of resource use estimates: authors' assumptions, published literature Source of unit costs: national sources	Costs: direct health care costs including intervention costs, co-morbidity management, death (hospital care) Mean lifetime costs per person: • Intervention £12,730 • SC £12,713 • Difference: £16 Primary outcome: QALYs Mean lifetime QALYs: • Intervention 19.7 • SC 19.6 • Difference: 0.07	Cost effectivenesss: Cost/QALY=£244 If WTP=£20,000-30,000 probability intervention cost effective 0.93-0.94 Sensitivity analysis: Deterministic: model robust to estimates of co-morbidities, utilities, cost of death, intervention costs Lower estimate of intervention effect cost/QALY=£150,609; upper estimate of intervention effect intervention dominant 10-year time frame: cost/QALY=£54,446 Sub-group analysis: Female cohort: intervention cost saving	Perspective: NHS Currency: UK£ Cost year: 2010-11 Time horizon: lifetime Discounting: 3.5% cost and outcomes Applicability: partially applicable Quality: potentially serious limitations

Peer support & self management

References to included studies

1. Lawn S. Mental health peer support for hospital avoidance and early discharge: An Australian example of consumer driven and operated service. Journal of Mental Health. 2008;17:498-508.

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Lawn et al, 2008 Australia Cost analysis	Peer support (PS) Standard care (SC) (psychiatric inpatient care, care by community-based emergency team, care by multidisciplinary community mental health team)	Population: people with bipolar affective disorder, schizophrenia, schizoaffcetive disorder, first episode psychosis; mean age 36 years; 26.5% male Study design: pre-, post-observational study Source of effectiveness data: pre-, post-observational study [n=49] Source of resource use estimates: pre-, post-observational study [n=49] Source of unit costs: unclear	Costs: admissions, community emergency contacts, programme provision PS over 3 months (per participant): • Saved $2,308 • Cost $405 • Net savings $1,901	Cost effectiveness: N/A	Perspective: healthcare payer Currency: Australian$ Cost year: unclear Time horizon: 3 months Discounting: not needed Applicability: partially applicable Quality: very serious limitations

Team and service level interventions I- community based

Early intervention services

References to included studies

1. Cocchi A, Mapelli V, Meneghelli A, Preti A. Cost-effectiveness of treating first-episode psychosis: five-year follow-up results from an Italian early intervention programme. Early Interv Psychiatry. 2011;5:203-11.
2. Hastrup LH, Kronborg C, Bertelsen M, Jeppesen P, Jorgensen P, Petersen L, et al. Cost-effectiveness of early intervention in first-episode psychosis: economic evaluation of a randomised controlled trial (the OPUS study). Br J Psychiatry. 2013;202:35-41.
3. McCrone P, Craig TK, Power P, Garety PA. Cost-effectiveness of an early intervention service for people with psychosis. Br J Psychiatry. 2010;196:377-82.
4. McCrone P, Knapp M, Dhanasiri S. Economic impact of services for first-episode psychosis: a decision model approach. Early Interv Psychiatry. 2009;3:266-73.
5. Mihalopoulos C, Harris M, Henry L, Harrigan S, McGorry P. Is early intervention in psychosis cost-effective over the long term? Schizophr Bull. 2009;35:909-18.
6. Serretti A, Mandelli L, Bajo E, Cevenini N, Papili P, Mori E, et al. The socio-economical burden of schizophrenia: a simulation of cost-offset of early intervention program in Italy. Eur Psychiatry. 2009;24:11-6.

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Cocchi et al, 2011 Italy Cost effectiveness analysis	Early intervention services (EIS) Standard care (SC) (any specialized mental health provision not offering interventions specifically aimed at treating the first-episode of psychosis)	Population: people with schizophrenia and related disorders, aged 17-30 years Study design: prospective cohort study Source of effectiveness data: prospective cohort study [n=46] Source of resource use estimates: prospective cohort study [n=46] and Department of Health records Source of unit costs: previous studies, local sources	Costs: outpatient, admissions, community residential and semi-residential facilities Mean costs per person: • EIS €39,671 • SC €42,810 Primary outcome: improvement on the Health of the Nation Outcome Scales (HoNOS) Change in HoNOS score from entry to 5-year follow-up: • EIS decrease of 37.5% • SC decrease of 19.3%, p=ns	Cost effectiveness: EIS dominant EIS favourable irrespective of cost discount rate	Perspective: Italian NHS Currency: Euro€ Cost year: 2006 Time horizon: 5 years Discounting: sensitivity analysis costs discounted at 3% and 5% Applicability: partially applicable Quality: potentially serious limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Hastrup et al, 2013 Denmark Cost effectiveness analysis	Early intervention services (EIS) Standard care (SC) (community mental health centres)	Population: people with schizophrenia spectrum disorders, aged 18-45 years Study design: RCT Source of effectiveness data: RCT [n=547] Source of resource use estimates: RCT [n=547], national registers Source of unit costs: national sources	Costs: admissions, outpatient, accident and emergency, GPs, psychiatrists, psychologists, medications, supported housing 5-year discounted costs per person: • EIS €111,924 • SC €137,638, p=ns Primary outcome: difference in Global Assessment of Functioning (GAF) scores Mean GAF score per person year 2: • EIS 55.16 • SC 51.13, p<0.05 Mean GAF score per person year 5: • EIS 55.35 • SC 54.16, p=ns	Cost effectiveness: EIS dominant Probability EIS cost effective at WTP=€0 for extra point increase on GAF scale 0.953; at WTP=€2,000 probability EIS cost effective 0.965 Results robust to changes in: staff costs, case-load, unit of supported housing	Perspective: public sector payer Currency: Euro€ Cost year: 2009 Time horizon: 5 years Discounting: costs 3% Applicability: partially applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
McCrone et al, 2010 UK Cost effectiveness analysis	Early intervention services (EIS) Standard care (SC) (community mental health teams)	Population: people with psychosis (67-72% schizophrenia), mean age 26 years, male 55-74% Study design: RCT CRAIG2004B Source of effectiveness data: RCT [N=144] Source of resource use estimates: RCT [n=129], hospital administrative system, prison service annual report and accounts, other published sources Source of unit costs: national sources	Costs: GPs, psychiatrists, other doctors, psychologists, healthcare assistants, counsellors/therapists, social workers, community mental health nurses, occupational therapists/vocational workers, day care, admissions, residential care, drug and alcohol advisors, police, police cell/prison, medications Mean costs per person excluding criminal justice sector costs: • EIS £11,682 • SC £14,034 • Difference: -£2,352 Mean difference in costs (including criminal justice sector) adjusted for baseline characteristics: -£1,756, p=ns Primary outcomes: improvement in Manchester Short Assessment of quality of Life (MANSA) score and vocational recovery MANSA: • EIS 59.3 • SC 53.3, p=0.025 Vocational recovery: • EIS 32.8% • SC 21%, p=ns	Cost effectiveness: EIS dominant If WTP=£0 for someone making vocational recovery probability EIS cost effective 0.760 If WTP=£0 for unit difference in MANSA score probability EIS cost effective 0.920	Perspective: NHS/PSS and criminal justice sector Currency: UK£ Cost year: 2003-4 Time horizon: 18 months Discounting: not needed Applicability: directly applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
McCrone et al, 2009 UK Cost analysis	Early intervention services (EIS) Standard care (SC) (specialised mental health provision which does not offer any intervention specifically intended to treat first episode psychosis)	Population: people with first episode psychosis Study design: modelling study Source of effectiveness data: review of RCT, audit data, DoH, expert judgement, other published sources Source of resource use estimates: review of RCT, other published sources Source of unit costs: national sources	Costs: admissions, psychiatrists, social workers, community mental health nurses Expected costs per person at year 1: • EIS £9,422 • SC £14,394 • Difference: -£4,972 Expected costs per person at year 3: • EIS £26,568 • SC £40,816 • Difference: -£14,248	Cost effectiveness: NA Sensitivity analyses: Sensitive to readmission rates: • Increasing readmission probabilities in EIS by 50% never results in EIS exceeding base-case SC cost • Reducing readmission probabilities in SC by 50% costs break even	Perspective: NHS and PSS Currency: UK£ Cost year: 2006-7 Time horizon: 1 year and 3 years Discounting: none Applicability: directly applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Mihalopoulos et al, 2009 Australia Cost effectiveness analysis	Early intervention services (EIS) Standard care (SC) (inpatient treatment with a community based follow-up care)	Population: people with schizophrenia 45%, schizophrenia form disorder 12%, schizoaffective disorder 10%, bipolar disorder 13%, depression (with psychotic features) 12%, delusional disorder 2%, psychosis 6% Study design: prospective cohort study, historical controls Source of effectiveness data: prospective cohort study, historical controls [n=65] Source of resource use estimates: registration system, clinical records, prospective cohort study, various nationwide databases Source of unit costs: national sources	Costs: inpatient, outpatient care, medications Expected annual costs per person: • EIS $3,445 • SC $9,503, p<0.01 Primary outcome: reduction in Brief Psychiatric Rating Scale (BPRS) positive symptom scale BPRS positive symptoms score at follow up: • EIS 1.8 • SC 4.6, p=0.007	Cost effectivenesss: EIS dominant EIS less costly and more favourable in 100% of cases Sensitivity analysis: Results robust to unit costs	Perspective: public mental health service sector Currency: Australian$ Cost year: 2000-1 Time horizon: 1 year up to 7.2 years Discounting: 3% on costs; benefits none Applicability: partially applicable Quality: potentially serious limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Serretti et al, 2009 Italy Cost analysis	Early intervention services (EIS) Standard care (SC) (care by local community mental health centres)	Population: people with schizophrenia Study design: modelling study Source of effectiveness data: retrospective prevalence-based multi-centre study [n=100], other published sources Source of resource use estimates: published sources, assumptions Source of unit costs: unclear	Costs: specialist visits, psychotherapy, prescriptions, socialising, interventions regarding occupation, supportive/other interventions, inpatient care, laboratory tests and procedures Expecetd mean costs: • EIS €8,329 • SC €8,861 • Difference: -€601	Cost effectiveness: NA Sensitivity analyses: Bootstrapping of costs showed that EIS was less costly in 75% of cases	Perspective: Italian NHS Currency: Euro€ Cost year: 2006 Time horizon: 1 year Discounting: not needed Applicability: partially applicable Quality: potentially serious limitations

Team and service level interventions I- community based

Community mental health teams.

References to included studies

1. McCrone P, Craig TK, Power P, Garety PA. Cost-effectiveness of an early intervention service for people with psychosis. Br J Psychiatry. 2010;196:377-82. **[For the evidence table see: Team and service level interventions I- community based (Early intervention services)].**

Team and service level interventions I- community based

Intensive case management

References to included studies

1. Harrison-Read P, Lucas B, Tyrer P, Ray J, Shipley K, Simmonds S, et al. Heavy users of acute psychiatric beds: randomized controlled trial of enhanced community management in an outer London borough. Psychol Med. 2002;32:403-16.
2. Karow A, Reimer J, Konig HH, Heider D, Bock T, Huber C, et al. Cost-effectiveness of 12-month therapeutic assertive community treatment as part of integrated care versus standard care in patients with schizophrenia treated with quetiapine immediate release (ACCESS trial). J Clin Psychiatry. 2012;73:e402-8.
3. McCrone P, Killaspy H, Bebbington P, Johnson S, Nolan F, Pilling S, et al. The REACT study: cost-effectiveness analysis of assertive community treatment in north London. Psychiatr Serv. 2009;60(7):908-13.
4. Slade EP, McCarthy JF, Valenstein M, Visnic S, Dixon LB. Cost savings from assertive community treatment services in an era of declining psychiatric inpatient use. Health Services Research 48(1):195-217.
5. Udechuku A, Olver J, Hallam K, Blyth F, Leslie M, Nasso M, et al. Assertive community treatment of the mentally ill: service model and effectiveness. Australasian Psychiatry. 2005;13:129-134.

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Harrison-Read et al, 2002 UK Cost minimisation analysis	Intensive case management (ICM) (defined as asserive community management) Standard care (SC) (local psychiatric services)	Population: people with schizophrenia and related diagnoses, aged 16-64 years Study design: RCT HARRISON-READ2002 Source of effectiveness data: RCT [n=193] Source of resource use estimates: RCT [n=193] Source of unit costs: local and national sources	Costs: inpatient, outpatient, day hospital, community mental health teams Mean costs per person year 1: • ICM £8,310 • SC £7,868 • Difference: £441, p=ns Mean costs per person year 2: • ICM £6,968 • SC £7,316 • Difference: -£347, p=ns Total costs per person over 2 years: • ICM £15,278 • SC £15,184 • Difference: £94	Cost effectiveness: interventions are simillar in terms of costs and clinical outcomes	Perspective: NHS and PSS Currency: UK£ Cost year: 1995-6 Time horizon: 1 and 2 years Discounting: not needed Applicability: directly applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Karow et al, 2012 Germany Cost-utility	Intensive case management (ICM) (defined as assertive community treatment) Standard care (SC) (inpatient wards, day clinics, an outpatient centre, private psychiatrists)	Population: people with schizophrenia spectrum disorders, mean age 31-37 years, male 56-57% Study design: prospective cohort study Source of effectiveness data: prospective cohort study [n=120] Source of resource use estimates: prospective cohort study [n=120] Source of unit costs: national sources	Costs: admissions, outpatient, medications, ACT team, psychiatrists Mean costs per person: • ICM €12,995 • SC €15,497 • Difference: -€2,502, p=ns Primary outcome: QALYs (EQ-5D, UK valuations) Mean QALYs per person: • ICM 0.76 • SC 0.66 • Difference: 0.1, p<0.01	Cost effectiveness: ICM dominant Probability ICM cost effective at €50,000/QALY 0.995	Perspective: public sector payer Currency: Euro€ Cost year: 2007 Time horizon: 1 year Discounting: not needed Applicability: partially applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
McCrone et al, 2009 UK Cost effectiveness analysis	Intensive case management (ICM) (defined as assertive community treatment) Standard care (SC) (care from community mental hospital teams)	Population: people with schizophrenia, schizoaffective disorder, bipolar disorder, or other psychotic illness; mean age 39- 40 years; male 55-62% Study design: RCT KILLASPY2006 Source of effectiveness data: RCT [n=251] Source of resource use estimates: RCT [n=166] Source of unit costs: national sources	Costs: mental health workers, inpatient care, residential care, emergency care, psychiatric and other outpatient, day treatments, GP, lawyer, court, probation, police, incarceration, informal care Mean costs per person excluding criminal justice sector costs and informal care: • ICM £33,272 • SC £29,449 • Difference: £3,823 Primary outcome: satisfaction with services on Gerber and Prince's scale Mean satisfaction scores: • ICM 79.4 • SC 71.7 • Difference: 7.6, $p<0.05$	Cost effectiveness: ICER £503/extra unit of satisfaction produced by ICM (based on costs excluding criminal justice sector costs and informal care) Probability ICM cost effective at WTP=£0 for one unit of improvement in satisfaction score 0.21; at WTP=£1,000 probability ICM cost effective 0.78; at WTP=£2,500 probability ICM cost effective 0.95	Perspective: societal Currency: UK£ and US$ Cost year: 2003-4 Time horizon: 18 months Discounting: not needed Applicability: partially applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Slade et al, 2013 US Cost analysis	Intensive case management (ICM) (defined as assertive community treatment) Standard care (SC) (service without ICM component)	Population: people with schizophrenia or bipolar disorder; mean age ~50 years; 90% male Study design: observational study Source of effectiveness data: observational study [n=6,030] Source of resource use estimates: observational study [n=6,030] Source of unit costs: national sources	Costs: intervention, inpatient (acute), residential rehabilitation, other outpatient, partial hospital, outpatient specialty clinic Mean costs per patient: • ICM $28,881 • SC $27,520 • Difference: $1,361 (p=0.038)	Cost effectiveness: NA Sensitivity analysis: Living near hospital with ACT programme had no siggnificant effect on health care utilisation and costs Varying year of entry into ACT programme had no siggnificant effect on costs	Perspective: mental health service payer Currency: US$ Cost year: unclear Time horizon: 1 year Discounting: not needed Applicability: partially applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Udechuku et al, 2005 Australia Cost analysis	Intensive case management (ICM) Standard care (SC) (service without ICM component)	Population: people with schizophrenia, schizoaffcetive disorder, bipolar affcetive disorder; mean age 38 years; 56% male Study design: pre-, post-observational study Source of effectiveness data: pre-, post-observational study [n=31] Source of resource use estimates: pre-, post-observational study [n=31] Source of unit costs: local sources	Costs: ICM programme provision, inpatient and outpatient care Mean costs per patient: • 12-months prior ICM $38,060 • 12-months during study $24,221 • Difference: -$13,838	Cost effectiveness: NA	Perspective: mental health service payer Currency: Australian$ Cost year: unclear Time horizon: 1 year Discounting: not needed Applicability: partially applicable Quality: potentially serious limitations

Team and service level interventions II– alternatives to acute admission

Crisis resolution and home treatment teams

References to included studies

1. McCrone P, Johnson S, Nolan F, Pilling S, Sandor A, Hoult J, et al. Economic evaluation of a crisis resolution service: a randomised controlled trial. Epidemiol Psichiatr Soc. 2009;18:54-8. (Study A)
2. McCrone P, Johnson S, Nolan F, Pilling S, Sandor A, Hoult J, et al. Impact of a crisis resolution team on service costs in the UK. Psychiatric Bulletin. 2009;33:17-19. (Study B)

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
McCrone et al, 2009 (Study A) UK Cost effectiveness analysis	Crisis resolution and home treatment teams (CRHTTs) Standard care (SC) (community mental health teams, inpatient care, crisis houses)	Population: people with schizophrenia/schizoaffective disorder 25%, bipolar affective disorder 10%, other psychosis 7%, unipolar depression 30%, personality disorder 13%, other nonpsychotic disorder 4%, substance misuse 5%; mean age 38 years Study design: RCT JOHNSON2005 Source of effectiveness data: RCT [n=260] Source of resource use estimates: RCT [n=260] Source of unit costs: national sources	Costs: crisis team, psychiatrists, inpatient, residential care, crisis house, drug/alcohol rehabilitation, GPs, other doctors, psychologists, drug/alcohol advisors, councellors, duty team, case managers, day care, accident and emergency, prison, police cell, other mental health Costs with inpatients costs per person: • CRHTTs £6,204 • SC £8,893 • Difference adjusted for baseline costs: -£2,438, p<0.01 Costs without inpatients costs per person: • CRHTTs £3,439 • SC £2,869 • Difference adjusted for baseline costs: £768, p<0.01 Primary outcome: number of days not on psychiatric ward Days not on psychiatric ward per person: • CRHTTs 126.8 days • SC 129.9	Cost effectiveness: £246/avoided inpatient day Probability CRHTTs cost effective at WTP=£0 for avoided inpatient day is <0.10; at WTP=£25 probability CRHTTs cost effective 0.41; at WTP=£100 probability CRHTTs cost effective 1.00	Perspective: NHS/PSS and criminal justice Currency: UK£ Cost year: 2003-4 Time horizon: 6 months Discounting: not needed Applicability: directly applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
McCrone et al, 2009 (Study B) UK Cost analysis	Crisis resolution and home treatment teams (CRHTTs) Standard care (SC) (acute wards, crises houses, community mental health teams, liaison team based in the local casualty department)	Population: schizophrenia/ schizoaffective disorder 33-36%, bipolar affective disorder 16-25%, other psychotic illness 4-11%, unipolar depressive illness 21-24%, personality disorder 8-12%, other non-psychotic illness 2-8%; aged 18-65 years; male 46-50% Study design: pre-, post-observational study Source of effectiveness data: pre-, post-observational study [n=200] Source of resource use estimates: pre-, post-observational study [n=181] Source of unit costs: local and national sources, published literature	Costs: CRHTTs, GPs, psychiatrists, other clinicians, accident and emergency care, day care, community mental health nurses, inpatient, social workers, arrest, solicitor, court, police, probation, police cell/prison, crisis house, residential care, psychologists, practice nurses Mean cost per person baseline: • CRHTTs £2,854 • SC £8,094 Mean cost per person follow-up: • CRHTTs £4,769 • SC £9,746 Adjusting for baseline differences, cost difference: - £1,681, p=ns	Cost effectiveness: NA Sensitivity analyses: If CRHTTs contact unit cost was £40, cost difference - £1,807, p<0.1 Sub-goup analysis: If groups defined according to whether any CRHTTs contact has taken cost savings £2,189 (p<0.1)	Perspective: NHS/PSS and criminal justice Currency: UK£ Cost year: 2001 Time horizon: 6 months Discounting: not needed Applicability: partially applicable Quality: minor limitations

Vocational rehabilitation

References to included studies

1. Dixon L, Hoch JS, Clark R, Bebout R, Drake R, McHugo G, et al. Cost-effectiveness of two vocational rehabilitation programs for persons with severe mental illness. Psychiatr Serv. 2002;53:1118-24.
2. Howard LM, Heslin M, Leese M, McCrone P, Rice C, Jarrett M, et al. Supported employment: randomised controlled trial. Br J Psychiatry. 2010;196:404-11.
3. Heslin M, Howard L, Leese M, McCrone P, Rice C, Jarrett M, et al. Randomized controlled trial of supported employment in England: 2 year follow-up of the Supported Work and Needs (SWAN) study. World Psychiatry. 2011;10:132-7.
4. Knapp M, Patel A, Curran C, Latimer E, Catty J, Becker T, et al. Supported employment: cost-effectiveness across six European sites. World Psychiatry 2013;12:60-68.

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Dixon et al, 2002 US Cost effectiveness analysis	Individual placement and support (IPS) programme Standard care (SC) (enhanced vocational rehabilitation programme)	Population: people with schizophrenia, schizoaffective disorder, bipolar disorder, recurrent major depression or borderline personality disorder Study design: RCT Source of effectiveness data: RCT [n=152] Source of resource use estimates: RCT [n=149], service logs Source of unit costs: local and national sources	Costs: inpatient care, family therapy, medications, case management, group therapy, vocational rehabilitation Mean costs per person: • IPS $29,087 • SC $25,119 • Difference: $3,968, p=ns Primary outcomes: number hours/weeks of competitive work; combined earnings Number hours/weeks of competitive work: • IPS 326/15 • SC 28/1, p<0.001 Combined earnings: • IPS $1,997 • SC $2,005, p<0.001	Cost effectivenesss: IPS cost $13/$283 per additional hour/week of competitive work IPS costs more and provides more competitive work in 91% cases IPS dominated by SC when combined earnings are used as an outcome	Perspective: public sector Currency: US$ Cost year: 1995 Time horizon: 18 months Discounting: not needed Applicability: partially applicable Quality: minor limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Howard et al, 2010 Heslin et al, 2011 UK Cost effectiveness analysis	Individual placement and support (IPS) programme Standard care (SC) (psychosocial rehabilitation and day care programmes)	Population: people with psychotic disorder 72-78%; mood disorder 22-28%; aged 18-65 years Study design: RCT HOWARD2010 Source of effectiveness data: RCT [n=219] Source of resource use estimates: RCT [n=188] Source of unit costs: national sources	Costs: employment experts, psychiatrists, doctors, district and community mental health nurses, occupational therapists, psychologists, admissions, day care/education, social care, GPs, medications Mean costs per person year 1: • IPS £3,525 • SC £5,701 • Difference: -£2,176, p<0.05 Mean costs per person year 2: • IPS £9,571 • SC £11,932 • Difference: - £2,361, p=ns Primary outcome: % in competitive employment year 1 and 2 % competitive employment year 1: • IPS 13% • SC 7% • Difference: 6%, p=ns % competitive employment year 2: • IPS 22% • SC 11% • Difference: 11%, p=ns	Cost effectivenesss: IPS dominant If WTP=£0 for extra person gaining employment, probability IPS cost effective 0.90 at year 2	Perspective: NHS and PSS Currency: UK£ Cost year: 2006-7 Time horizon: 1 and 2 years Discounting: not needed Applicability: directly applicable Quality: potentially serious limitations

Study ID **Country** **Study type**	**Intervention details**	**Study population** **Study design** **Data sources**	**Costs: description and values** **Outcomes: description and values**	**Results: Cost effectivenesss**	**Comments**
Knapp et al, 2013 UK Cost effectivenes; partial cost benefit analysis	Individual placement and support (IPS) programme Standard care (SC) (day care or residential care)	Population: people with schizophrenia, schizophrenia-like disroder, bipolar disorder, depression with psychotic features Study design: international RCT BURNS2007 (London, Ulm, Rimini, Zurich, Groningen, Sofia) Source of effectiveness data: RCT [n=312] Source of resource use estimates: RCT [n=229]; site specific unclear Source of unit costs: national sources	Costs: intervention, accomodation, inpatient and outpatient care, community based services, community-based professions, medication Mean total costs per person at 18 months (London centre) • IPS £7,414 • SC £10,985; • Difference: -£3,769, p<0.05 Primary outcomes: number of days worked in competitive settings; percentage of sample members who worked at least 1 day Worked at least 1 day: • IPS 55% • SC 28%	Cost effectiveness: London cost perspective**:** IPS dominant using both outcomes Probability IPS cost effective at WTP=£0-1,000 for additional 1% of clients working for at least 1 day or for additional day of work is ~1.00 IPS dominant in Ulm, Rimini, Zurich and Sofia Groningen cost perspective: ICER £30 per additional 1% of people working at least 1 day; £10 per additional day worked Partial cost benefit: Difference in NB between IPS and SC of £17,005 in favor of IPS	Perspective: health and social care Currency: UK£ Cost year: 2003 Time horizon: 18 months Discounting: not needed Applicability: directly applicable Quality: minor limitations