

Supplementary Table . Detailed descriptions of cost components and data sources used

Author	Country	Direct medical cost	Data source used in utilization data	Direct non-medical cost	Data source used in utilization data	Indirect cost	Data source used in utilization data
<b>AFRICA</b>							
Amoo 2005	Nigeria	1. Laboratory investigations 2. Physical treatments (drugs/ECT) 3. Feeding/ bedding 4. Registration fees 5. Occupational therapy	1. Questionnaire	1. Transportation 2. Pocket money given to patients or nurses 3. Hotel accommodation 4. Feeding of visiting relatives 5. Food and non-food items brought for patients	1. Questionnaire	1. Lost earnings by patients and care givers.	1. Questionnaire
Suleiman 1997	Nigeria	1. Clinic consultation 2. Other health professionals 3. Medications	1. Interview questionnaire	1. Transportation for patients and accompanying relatives	1. Interview questionnaire	1. Loss of earnings by patients and caregivers 2. Financial aspect of crime 3. Accidents and damages associated with illness	1. Interview questionnaire
<b>ASIA PACIFIC</b>							
Carr 2003	Australia	1. Professionals - general practitioners, psychiatrists, psychologists 2. Mental health services - ambulance, emergency/crisis, inpatient, outpatient/community, rehabilitation, medication	1. Literature	1. Accommodation 2. Voluntary and NGO sector	1. Literature	1. Patient and family - time loss (mortality and morbidity), out-of-pocket expenses 2. Transfer payments 3. Tax forgone 4. Legal costs 5. Administration of benefits	1. Literature
Fitzgerald 2007	Australia	1. Hospital care, including medications 2. Psychiatric outpatient and community services 3. Medicare services 4. Hospital pharmacy 5. Community pharmacy medication 6. Ambulance	1. Psychiatric Record Information System Manager Database 2. Hospital pharmacy database 3. Health Insurance Commission (HIC) database	NA	NA	1. Legal 2. Social benefits 3. Tax foregone 4. Productivity cost	1. SCAP Health Questionnaire 2. Census 3. Australian Tax Office 4. Publication
Hall 1985	Australia	1. All treatment-related	1. Case register kept in the state of New South Wales 2. NSW Hospital Morbidity Reports, Australian Bureau of Statistics 1981a 3. Literature	NA	NA	1. Forgone earnings	1. Labor statistics 1980, Australian Bureau of Statistics

Langley-Hawthorne 1997	Australia	1. Inpatient 2. Psychiatrist consultation 3. General practitioner consultation 4. Medication 5. Outpatient visit 6. Community service	1. Literature 2. Government report	1. Sheltered accommodation	1. Literature 2. Government report	1. Lost income 2. Disability support pension	1. Literature 2. Government report
Zhai 2013	China	1. Treatment cost 2. Other cost of medical services	1. Questionnaire	1. All other resource use related to a disease	1. Questionnaire	1. Value of damaged properties 2. Costs due to lost working days and disability - patients, caregivers 3. Mortality cost - productivity loss due to suicide and related mortality	1. Questionnaire
Grover 2005	India	1. Total drug cost 2. Cost of treatment from other sources 3. Healthcare provider 4. Patient and family - investigations	1. Cost assessment questionnaire 2. Hospital bills	1. Patient and family - travel, food on the way to hospital	1. Cost assessment questionnaire	1. Day loss by patients - illness, attending the hospital 2. Day loss by caregivers - illness, attending the hospital 3. Other expenditure	1. Cost assessment questionnaire
Pahuja 2011	India	1. Cost of drugs 2. Hospitalization 3. Fees of nursing and other healthcare staff, food, etc. 4. Routine tests 5. Psychologists consultation 6. Psychiatrist consultation 7. Extra expenses following side-effects of drugs	1. Hospital records	NA	NA	NA	NA
Sado 2013	Japan	1. Health care cost under health insurance - inpatient, outpatient 2. Involuntary admission 3. The medical care and supervision act cost	1. Patient Survey, Ministry of Health, Labour and Welfare 2. Survey of Medical Care Activities in Public Health Insurance, Ministry of Health, Labour and Welfare 3. Mental Health and Welfare document	1. Social service cost	1. Mental Health and Welfare document 2. Literature	1. Morbidity - unemployment 2. Mortality	1. Labor Force Survey, Ministry of Internal Affairs and Communication 2. Literature

Chang 2008	South Korea	1. Outpatient care 2. Inpatient care 3. Pharmacy 4. Community mental healthcare centers 5. Rehabilitation	1. National Health Insurance Statistical Yearbook 2. Medical Aid Statistical Yearbook 3. Statistical Information System of National Health Insurance	1. Homeless shelters 2. Transport	1. Study by the Institute of Forensic Psychiatry Ministry of Justice 2. Government report 3. Publication	1. Unemployment 2. Reduced productivity at work 3. Premature mortality 4. Caregiver productivity loss 5. Incarceration 6. Sanatoria	1. Publications 2. Korea Institute for Health and Social Affairs 3. National Mortality Statistics
de Silva 2012	Sri Lanka	1. Medication 2. Investigations 3. Informal treatment	1. Interview	1. Travel 2. Meals 3. Lodging	1. Interview	1. Loss of income to patients or caregiver due to unemployment or poor attendance	1. Interview
Lang 2004	Taiwan	1. Treatment - inpatient and outpatient 2. Patients - inpatient and outpatient 3. Visits - inpatient and outpatient 4. Medication - inpatient and outpatient	1. Bureau of National Health Insurance Claims data	NA	NA	NA	NA
Lee 2008	Taiwan	1. Psychiatric services - acute ward, outpatient clinics, day hospital, ER 2. Drugs 3. Non-psychiatric medical services 4. Community services - home care, rehabilitation	1. Economic cost questionnaire	1. Transport 2. Community resources 3. Community services - shelter payment	1. Economic cost questionnaire	1. Time costs - patients, caregivers 2. Productivity loss - patients, caregivers	1. Economic cost questionnaire
Phanthunane 2012	Thailand	1. Medication 2. Non-medication 3. Hospitalization 4. Outpatient	1. Medical record review 2. Patients and caregivers interviews 3. Questionnaire	1. Travel expense	1. Patients and caregivers interviews 2. Questionnaire	1. Productivity loss of patient - absenteeism, presenteeism 2. Time cost of family member	1. Patients and caregivers interviews
<b>EUROPE</b>							
De Hert 1998	Belgium	1. Consultation 2. Hospitalization 3. Medication	1. Medical record 2. Interviews with patients and relatives	1. Sheltered housing	1. Interviews with patients and relatives	NA	NA
Mangalore 2007	England	1. Healthcare 2. Institutional costs	1. UK-Schizophrenia Care and Assessment Program survey (SCAP)	1. Social care 2. Institutional costs - accommodation for the homeless 3. Private expenditures 4. Social security payments	1. UK-SCAP 2. Department of Health and government publications. 3. Psychiatric	1. Productivity loss by patients - unemployment, absence from work, mortality 2. Productivity loss by caregivers - unemployment,	1. UK-SCAP 2. Published sources

				5. Social security administration	Morbidity Surveys	absence from work 3. Informal care 4. Criminal justice system	
Rouillon 1997	France	1. Cost of Medications 2. Cost of Consultations 3. Cost of Hospitalization 4. Treatment Costs in Intermediate Facilities	1. Questionnaire	1. Social assistance	1. Questionnaire	NA	NA
Sarlon 2012	France	1. Inpatient 2. Day clinics 3. Psychiatrist visits 4. Psychologist visits 5. GP visits 6. Other physician visits 7. Medication	1. Malin system	NA	NA	1. Productivity loss due to unemployment - patient	1. Clinician interview
Heider 2009	France Germany UK	1. Inpatient 2. Day clinic 3. Psychiatrist 4. Psychologist 5. General practitioner 6. Other physicians 7. Medications	1. Patient interviews 2. Malin system 3. Questionnaire	NA	NA	NA	NA
Frey 2014	Germany	1. Procedures and diagnostic service during in- and outpatient visits 2. Pharmaceutical prescriptions 3. Provision of medicinal substances 4. Provision of devices and assistive equipment 5. Rehabilitation 6. Nursing care services delivered in patient's homes 7. Patient's co-payments	1. Sickness fund statutory health insurance (SHI) data	1. Administration costs 2. Sick-leave compensation 3. Travel expenses (ambulance transportation, hospital relocation) 4. Other non-medical services 5. Hospital investments	1. SHI data 2. Publication	1. Lost productivity 2. Informal family care	1. Health insurance database 2. Publication
Salize 1996	Germany	1. Outpatient care 2. Rehabilitative care 3. Rehospitalization 4. Medication	1. Mannheim Service Recording Sheet (MSRS)	1. Sheltered accommodation	1. MSRS	NA	NA
Zeidler 2012	Germany	1. Medication 2. Outpatient 3. Remedies 4. Sick leave 5. Hospitalization 6. Rehabilitation 7. Other services	1. Insurance claims data	NA	NA	NA	NA

Behan 2008	Ireland	<ol style="list-style-type: none"> <li>1. Psychiatric units in general hospital</li> <li>2. Psychiatric hospitals</li> <li>3. Private hospitals</li> <li>4. Inpatient admission to general acute units</li> <li>5. Outpatients</li> <li>6. Day hospitals</li> <li>7. Residences - high, medium, low support</li> <li>8. Day center</li> <li>9. Primary care consultations</li> <li>10. Medication</li> </ol>	<ol style="list-style-type: none"> <li>1. National Inpatient Reporting System (NIPRS) records and reports</li> <li>2. Hospital Inpatient Enquiry system</li> <li>3. National census</li> <li>4. Survey and evaluation of community mental health services</li> <li>5. Catchment area information</li> <li>6. Publication</li> </ol>	<ol style="list-style-type: none"> <li>1. Homeless service</li> <li>2. Social welfare administration</li> </ol>	<ol style="list-style-type: none"> <li>1. Literature</li> </ol>	<ol style="list-style-type: none"> <li>1. Informal care</li> <li>2. Patients - unemployment, absence from work</li> <li>3. Cost of mortality</li> <li>4. Prison service</li> </ol>	<ol style="list-style-type: none"> <li>1. National census</li> <li>2. Unpublished resource utilization study</li> <li>3. Publication</li> <li>4. Statistical Yearbook 2006, Central Statistics Office</li> </ol>
Garattini 2001	Italy	<ol style="list-style-type: none"> <li>1. Hospital admissions</li> <li>2. Day hospitals days</li> <li>3. Daycare center days</li> <li>4. Outpatient</li> <li>5. Diagnostic procedures and laboratory test</li> <li>6. Home visits</li> <li>7. Drug therapy</li> </ol>	<ol style="list-style-type: none"> <li>1. Questionnaire</li> </ol>	NA	NA	NA	NA
Garattini 2004	Italy	<ol style="list-style-type: none"> <li>1. Admissions - PWGH, private hospitals</li> <li>2. Day hospital days</li> <li>3. Daycare center days</li> <li>4. Days in CRFs</li> <li>5. Outpatient</li> <li>6. Diagnostic procedures</li> <li>7. Laboratory test</li> <li>8. Home visits</li> <li>9. Drug therapy</li> </ol>	<ol style="list-style-type: none"> <li>1. Questionnaire</li> </ol>	NA	NA	NA	NA
Tarricone 2000	Italy	<ol style="list-style-type: none"> <li>1. CMHC interventions</li> <li>2. Living in CRFs</li> <li>3. Inpatient</li> <li>4. Pharmacological treatment</li> <li>5. Laboratory test</li> <li>6. Out-of-pocket expenditure</li> </ol>	<ol style="list-style-type: none"> <li>1. Questionnaire</li> </ol>	NA	NA	<ol style="list-style-type: none"> <li>1. Patients' time off (paid and unpaid) work</li> <li>2. Informal care - caregivers' time off work and leisure time forgone</li> </ol>	<ol style="list-style-type: none"> <li>1. Questionnaire</li> </ol>
Evers 1995	Netherlands	<ol style="list-style-type: none"> <li>1. General practitioners</li> <li>2. Hospitals</li> <li>3. General psychiatric hospitals</li> <li>4. Forensic psychiatric institutions</li> </ol>	<ol style="list-style-type: none"> <li>1. Publication</li> </ol>	<ol style="list-style-type: none"> <li>1. Sheltered residences</li> </ol>	<ol style="list-style-type: none"> <li>1. Report from Regional Institutes for Sheltered Residences</li> </ol>	<ol style="list-style-type: none"> <li>1. Absenteeism</li> <li>2. Disability</li> </ol>	<ol style="list-style-type: none"> <li>1. Cental Bureau of Statistics</li> </ol>

		5. Psychiatric day care 6. Outpatient 7. Drugs (outpatient)					
Knapp 2002	Netherlands Denmark UK Italy Spain	1. Inpatient 2. Outpatient 3. Community-based care 4. Day care	1. Client Sociodemographic and Service Receipt Inventory - European Version	1. Residential care	1. Client Sociodemographic and Service Receipt Inventory - European Version	NA	NA
Rund 1999	Norway	1. Outpatient clinics 2. Day units 3. Acute wards 4. Sub-acute wards 5. Long-term wards 6. Psychiatric nursing homes	1. Patient survey	NA	NA	NA	NA
Borquez 2005	Spain	1. Outpatient 2. Inpatient	NR	NA	NA	NA	NA
Haro 1998	Spain	1. Community out-patient services 2. Inpatient 3. Residential and tertiary services 4. Drugs 5. Laboratory and other medical examinations	1. Clinical chart 2. Health care databases 3. Subject and family interviews	NA	NA	1. Productivity loss of the patient 2. Time spent on care by family members	NR
Oliva-Moreno 2006	Spain	1. Hospital care - inpatient, emergency room, day hospital visits 2. Outpatient care - outpatient consultation, primary care consultation 3. Drugs	1. Ministry of Health Care and Consumer Affairs - Basic Minimum Hospital Data Set 2. Statistics on Inpatient Health Care Facilities, National Institute of Statistics 3. Information of catchment areas 4. Publication 5. Clinical history review	NA	NA	1. Informal care cost	1. Survey on Disabilities, Impairments and State of Health, National Institute of Statistics 2. Literature

Vazquez-Polo 2005	Spain	1. Casualty Department 2. Psychiatrist 3. Psychologist 4. Nurse 5. Group therapy 6. GP 7. Specialist 8. Alternative medicine 9. General Hospital Intensive Care Unit 10. Psychiatric Hospital Intensive Care Unit 11. Drug costs 12. Medium-long term residence unit 13. Institutions 14. Day-care hospital 15. Occupational therapy	1. Cost Evaluation Questionnaire	1. Social worker 2. Sheltered housing	1. Cost Evaluation Questionnaire	NA	NA
Salize 2009	Spain Netherlands UK Sweden Germany Switzerland	1. Inpatient hospital care 2. Psychotropic medication 3. Outpatient/day hospital services 5. CMHC/ daycare	1. Service Utilization Sheet Record	1. Sheltered accommodation	1. Service Utilization Sheet Record	NA	NA
Ekman 2013	Sweden	1. Outpatient 2. Inpatient 3. Pharmaceutical 4. Community mental healthcare	1. Electronic medical charts at Northern Stockholm Psychiatry 2. Prescribed Drug registry 3. Publication	NA	NA	1. Sickness absence 2. Early retirement	1. Social Insurance Statistics
Hertzman 1983	Sweden	1. Inpatient 2. Outpatient 3. Drugs	1. Statistics from sample-based survey 2. Statistics of National Board of Health and Welfare	NA	NA	1. Short-term illness 2. Permanent disability 3. Premature mortality	1. Annual statistical reports of Sweden
Lindstrom 2007	Sweden	1. Hospitalization 2. Drugs	NR	1. Sheltered homes	NR	1. Lost productivity	NR

Davies 1994	UK	1. Institutional/residential care 2. Hospital out-patient 3. Community-based support 4. Depot injection clinic 5. Drug therapy	1. Document from Department of Health 2. Literature	NA	NA	1. Unemployment 2. Lost production	NR
Guest 1999	UK	1. GP consultation 2. Community psychiatric nursing visits 3. Hospital admissions 4. Hospital attendance - day ward, outpatient clinic, day center 5. Antipsychotic 6. Adjunctive medications 7. Day centers	1. Publication 2. Expert interview	1. Local authority - accommodation	1. Publication 2. Expert interview	1. Unemployment 2. Premature death 3. Illness causing time off work 4. Carer unemployment 5. Home office - patient on remand, patient in prison	1. Publication 2. Expert interview
<b>AMERICA</b>							
Leitao 2006	Brazil	1. New admissions 2. Outpatient treatment 3. Long stay treatment	1. Literature 2. Electronic government data 3. Public medical services record 4. Expert opinion	NA	NA	NA	NA
Goeree 2005	Canada	1. Hospitalization - Non-acute and acute 2. Residential care facilities 3. Prescription medications 4. Psychiatric clinics/community mental health clinics 5. Professional billings	1. Canadian Institute for Health Information discharge abstract database 2. Statistics Canada 3. Government information	1. Attempted suicide, not including hospitalization 2. Suicide, not including hospitalization	1. Publication 2. Statistics Canada 3. Government information	1. Productivity losses - premature mortality, morbidity 2. Incarcerations 3. Administration costs of income assistance plans	1. Publication
Rubio-Stipec 1994	Puerto Rico	1. Cost of mental health services	1. Annual Report of Puerto Rico, by Mental Health Secretariat	NA	NA	1. Loss of income	1. Literature
Bartels 2003	US	1. Inpatient services 2. Non-physician outpatient services 3. Home- and community-based services 4. Pharmacy 5. Physician services 6. Other - Medicare durable medical equipment, Medicare hospice, Medicaid	1. Electronic eligibility files and records of all paid Medicaid and Medicare claims	NA	NA	NA	NA



		dental, and Medicaid HMO premiums					
Crown 2001	US	1. Inpatient 2. Outpatient 3. Drug expenses	1. MarketScan database of private sector inpatient, outpatient and prescription drug medical claims	NA	NA	NA	NA
Cuffel 1996	US	1. Hospital Services 2. Psychotherapy 3. Medication Management 4. Other Outpatient Services	1. Client Data System	NA	NA	NA	NA
Desai 2013	US	1. Hospital inpatient stays 2. Outpatient visits 3. Emergency room visits 4. Office-based medical provider visits 5. Home healthcare visits 6. Prescription medications	1. MEPS database	NA	NA	1. Restricted activity-associated productivity loss 2. Work-associated productivity loss 3. Premature mortality/suicide 4. Caregiver's cost	1. MEPS data 2. Patient report 3. Bureau of Labor Statistics 4. Literature
Dixon 2001	US	1. Individual therapy 2. Group therapy 3. Family therapy 4. Psychiatric somatotherapy	1. National Medicare claims data	NA	NA	NA	NA
Feldman 2014	US	1. Inpatient hospital 2. Physician services 3. Outpatient Hospital 4. Skilled nursing facility 5. Home health care 6. Hospice 7. Durable medical equipment	1. Medicare Standard Analytic Files (SAF)	NA	NA	NA	NA
Gunderson 1975	US	1. Inpatient 2. Outpatient and aftercare 3. Construction and staffing	1. Publication 2. Daily census of inpatients in state and county hospitals	1. Research	1. Literature reference	1. Loss of productivity 2. Public assistance	1. Literature reference
Leslie 1999	US	1. Inpatient 2. Outpatient	1. Claims data from MEDSTAT's MarketScan®	NA	NA	NA	NA
Martin 1998	US	1. Mental health service 2. Physicians 3. Outpatient 4. Inpatient 5. Nursing facility	1. Claims data from Medicaid	1. Transportation	1. Claims data from Medicaid	NA	NA

		6. Laboratory 7. Home Health					
McDonald 2005	US	1. Inpatient 2. Ambulatory/emergency care 3. Prescription drugs 4. Home healthcare visit	1. Medical Expenditure Panel Survey (MEPS)	NA	NA	NA	NA
Miller 2004	US	1. Physician 2. Prescription 3. Inpatient hospital 4. State long-term care facility (LTC) 5. Private LTC 6. CMHC 7. DHR hospital 8. Miscellaneous	1. Medicaid claims database 2. Treatment history file and the Hospital Medical Information System file of each of the State 3. psychiatric hospitals linked to Georgia 4. Medicaid Claims data	NA	NA	NA	NA
Wu 2005	US	1. Drugs 2. Outpatient care/professional fees 3. Hospital inpatient stays and services 4. Long-term care	1. Private insurance claims data 2. Paid claims data of the California Medicaid program	1. Research and training 2. Homeless shelters	1. National Institute of Mental Health 2. Literature	1. Unemployment 2. Reduced productivity at work 3. Premature mortality - suicide 4. Caregiver 5. Law enforcement	1. Literature 2. U.S. Bureau of Justice Statistics 3. Criminal Justice Institute 4. National Center for Health Statistics
Wyatt 1995	US	1. Inpatient 2. Outpatient 3. Nursing home, intermediate, domiciliary care 4. Medication 5. Substance abuse	1. Mean daily censuses 2. National Institute of Mental Health (NIMH) Epidemiologic Catchment Area (ECA) survey 3. Interviews 4. Literature	1. Shelters 2. Suicide 3. Research/training	1. Literature 2. Survey	1. Lost productivity - homemakers 2. Lost productivity - institutions 3. Lost productivity - suicide 4. Lost family, productivity 5. Lost compensation	1. NIMH ECA survey 2. Other Surveys