# International Journal of Technology Assessment in Health Care

# cambridge.org/thc

## **Assessment**

Cite this article: Ly A, Tremblay GA, Beauchamp S (2019). "What is the efficacy of specialised early intervention in mental health targeting simultaneously adolescents and young adults?" An HTA. International Journal of Technology Assessment in Health Care 35, 134–140. https://doi.org/10.1017/ S0266462319000084

Received: 19 June 2018 Revised: 19 October 2018 Accepted: 10 December 2018

#### Key words (MeSH):

mental health services; health services research; transition to adult care; adolescent; young adult; early intervention

#### Author for correspondence:

Angela Ly, E-mail: angela.ly@douglas.mcgill.ca

"What is the efficacy of specialised early intervention in mental health targeting simultaneously adolescents and young adults?" An HTA

Angela Ly<sup>1</sup>, Gilbert A. Tremblay<sup>1</sup> and Sylvie Beauchamp<sup>1,2</sup>

<sup>1</sup>Centre intégré universitaire de santé et de services sociaux de l'Ouest-de-l'Île-de-Montréal and <sup>2</sup>McGill University

#### **Abstract**

**Objectives.** Current service organization is not adapted for youth with or at risk of mental illness. Access, engagement and continuity of care are notorious challenges, particularly during transition from adolescence to adulthood, when youths are transferred to adult services. An HTA was initiated to evaluate the efficacy of programs for which admission is not a function of the legal age of majority.

**Methods.** A systematic review of systematic reviews identified literature published between 2000 and 2017 in 4 databases. To be selected, studies had to focus on specialised mental healthcare early intervention (EI) programs targeting both adolescents and young adults. Contextual and experiential data were collected through interviews with local leading experts. Article selection and quality assessment using ROBIS were conducted with inter rater agreement. The analytical framework developed includes 4 domains: access, engagement and continuity, recovery as well as meaningfulness and acceptability.

**Results.** 1841 references were identified. Following inclusion/exclusion criteria, 5 studies were selected, 3 of which focused on EI for psyschosis. EI programs alone do not seem to decrease duration of untreated psychosis. EI including a multi focus campaign were more successful. EI does, however, seem to decrease hospitalisation for psychosis. The experience of service users and professionals with inter agency collaboration and person-centred care models were analysed to identify facilitating and inhibiting implementation factors.

**Conclusions.** Healthcare policies need to support further research and development of EI where admission is not a function of the legal age of majority and diagnostic, particularly for youths at risk.

## Introduction

Youth populations, which include adolescents and young adults, are particularly affected by mental health disorders. An estimated 75% of disorders begin before the age of 25 (1). Traditional organization of mental health services separates child and adolescent services from adult services based on the legal age of majority (2). Problems with access, engagement and continuity have been acknowledged and service organisation may be inadequate for youths. In fact, while 18% of young people ages 15 to 24 suffer from a mental health disorder (3), only a quarter of them seek mental health services (4). Moreover, if treatment is delayed for too long, recovery can be seriously be compromised. For example persistent symptoms and poorer response to treatment have been observed (5, 6). The onset of a mental health disorder when youth must transfer from child and adolescent services to adult services is not without consequences. It can impact their coping skills and result in difficulties that go beyond clinical symptoms to affect various areas of their life trajectory, including their academic, professional or social integration.

To address the issue, programs intended simultaneously for both adolescents and young adults have been developed to meet their needs at every clinical stage of mental illness. While these services focus primarily on youth living with a psychotic disorder, there is a growing interest at both the clinical and organizational level to adapt these programs to other mental health disorders. The Douglas Mental Health University Institute, a specialised mental healthcare organisation, requested an HTA on the efficacy of such models and programs on youths with a mental health disorders or at risk of developing one. Mental health disorders of interest were mood, psychotic, anxiety or personality disorders. The HTA focus was on service organisation and not on specific interventions or therapy.

On this basis, a systematic review (SR) of systematic reviews was conducted to answer the following question: what is the efficacy of specialized models, programs and services targeting simultaneously adolescents and young adults with a mental health disorder or considered at risk of developing one?

© Cambridge University Press 2019



Table 1. Analytical framework for early intervention services for youth with mental health disorders

Access	Engagement & continuity	Recovery	Meaningfulness and acceptability
Population characteristics	Population characteristics	Clinical	Population characteristics
Duration of untreated illness	Engagement level	Functional	Traumatic episodes
Time to access	Continuity	Physical	Patients / clinician / managers experience and satisfaction
Pathway to access		Social	
		Existential	

Model developed by emergent design on the basis of models developed by Addington (7), Whitley and Drake (8) and Johanna Briggs (9)

# Analytic framework

An analytical framework for early intervention services was developed by emergent design using the performance measures identified by Addington (7), the recovery dimensions developed by Whitley and Drake (8), and the FAME (Feasibility, Appropriateness, Meaningfulness and Effectivenes) model developed by the Joanna Briggs Institute (9). This framework consists of four dimensions (Table 1): A) Accessibility; B) Engagement and continuity; D) Recovery; and D) Meaningfulness and acceptability.

#### **Methods**

#### Method - Scientific data

A SR of SRs was conducted to assess the scientific evidence regarding the effectiveness of early intervention models, programs and services intended for youth living with a mental health disorder. A search of the literature published in English or French was carried out in ASSIA, MEDLINE, Embase and CINAHL databases by a professional information specialist. Three key concepts were used: mental health disorders, mental health services and systematic review. The literature search strategies were tested using relevant studies found in an exploratory search. Articles published between January 2000 and January 2017 were retained, since the majority of research on early intervention services was conducted during this period. The selection was made by inter-rater agreement (AL and GAT).

Inclusion criteria and the PICOTS elements were:

- **Population**: Adolescents and young adults with a mental health disorder or at risk of developing one (mood, psychotic, anxiety or personality disorders)
- Intervention: Model, program or specialized services whose access is not based on having reached the age of majority
- Comparison: No restriction
- Outcomes: Accessibility, continuity, recovery, acceptability, satisfaction, engagement, early intervention, autonomy or suitability
- Time: No restriction
- **Setting**: No restriction

Exclusion criteria, based on the decision makers' needs, were as follows:

- Any model, program or service intended for a specific group based on age
- Studies evaluating transitional programs between child or adolescent services to adult services
- Primary care
- Clinical or support interventions that are program components

- Autism spectrum disorders, intellectual disability, etc.
- Documentary search in at least three database in the SR
- A selection diagram based on inclusion and exclusion criteria for the SR

We developed an extraction grid based on the analysis framework. Data extraction was performed by a first reviewer (AL) and then validated by a second (SB). Quality control was conducted through inter-rater agreement (AL and GAT) with the ROBIS tool (10).

## Method - Experiential and contextual data

An advisory committee of experts (researchers, clinicians, managers and users) was established to provide contextual and experiential data to complete scientific data. Seven group meetings were held with the advisory committee and six individual interviews were conducted. In addition, an exploratory research was performed to obtain contextual data on the organization of mental health services for youth.

## Data analysis and synthesis

The data was analyzed and synthesized in narrative form. The level of evidence for effectiveness was assessed by using the scientific data convergence method developed by the National Autism Center (11), and adapted by the *Institut national d'excellence en santé et services sociaux* (12) and Beauchamp et al. (13). For quality assurance purposes, the study was reviewed by two independent reviewers.

# **Results**

1,841 references were found in the four databases, for a total of 1,054 articles, after removing duplicates. Following selection based on titles and abstracts, 36 articles were read. After the final selection, five articles on SR were retained (Figure 1). Overall, the risk of bias of these studies is estimated at 20%, which we considered satisfactory. Not all primary studies selected in these SR provided relevant scientific data to the evaluation question. Data from 52 primary studies pertaining specifically to the evaluation question was extracted and analysed. Given that the selected SRs have different research questions and with no overlapping analytical framework categories, we assumed that results from the primary studies have not been reported in more than one selected SR. Lloyd Evans et al. (14) studied access, Cooper et al. focused on meaningfulness and acceptability (17), Randall et al. (15) analysed clinical recovery while Bond et al. (16) evaluated functional recovery.

136 Angela Ly *et al.* 

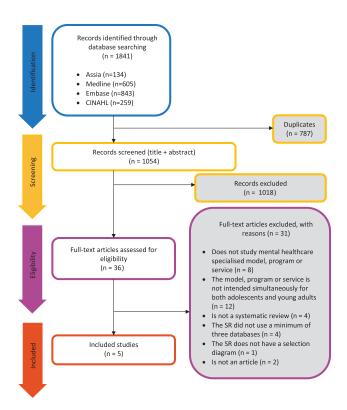


Figure 1. PRISMA selection diagram.

A synthesis of results from primary studies, following the analysis framework (Table 1), is presented in Table 2 to evaluate convergence of scientific data. The name of the model, program or service and the performance measures are identified. The ratio between the number of primary studies reporting a positive result (in support of the model, program or service) on the total number of primary studies is presented for studies with comparison group and studies with no comparison group. The number of primary studies reporting a positive and significant result (p < 0.05) is also presented.

# Impact of programs on access

The impact of implementing early intervention on access has been the subject of very few SRs. One SR, by Lloyd-Evans et al. (14), pertaining to the impact of early intervention for psychosis (EIP) on the duration of untreated psychosis (DUP) was identified. The DUP is the time between the onset of psychosis and the start of treatment. It is a commonly used indicator in mental health. Scientific data from five out of the 11 primary studies selected in this SR, all with a retrospective group, was extracted and analysed. Three programs are evaluated: a Norwegian specialized detection and treatment (TIPS), Prevention and Early Intervention Program for Psychosis (PEPP) in Canada and the Early Psychosis Prevention and Intervention Centre (EPPIC) in Australia. TIPS included the development of EIP in conjunction with a very large scale multi-focus campaign including newspaper, television, radio and cinema ads, combined with school visits with teachers, counselors and pupils as well as seminars for health professionals during four years. PEPP included a large scale awareness campaign, contacts with general practitioners and visits with school counsellors during two years. EPPIC focused on improved access and included a clear point of referral with

rapid intervention response. Small scale community-based networking and education initiatives are also mentioned (14). In the case of TIPS, the observed DUP was much lower compared to traditional services (Md 5 vs 26 weeks, p < 0.05) (18, 19)). For EPPIC, however, a higher DUP was observed compared to traditional services (Md 52 days vs 30 days, p < 0.05) (20) and PEPP (Md 24 vs 22 weeks, n.s., (21)). The number of references in the region for first episode psychosis did not increase following the implementation of TIPS and PEPP. Scientific evidence has not been established regarding the impact of a change of service configuration on DUP. The results appear to be more promising when services are deployed in conjunction with a large scale multi-focus campaign to encourage help seeking by young people.

# Impact of programs on engagement and continuity

No SR dealing with the impact of programs on engagement and continuity was identified.

# Impact of programs on recovery

Clinical recovery. Randall et al. (15) evaluated the effect of EIP on the use of hospital services in a SR. The EIP interventions retained were based on components of assertive community treatment (ACT), which includes a multidisciplinary team. Scientific data from all the primary studies selected from this SR (15/15) was extracted and analysed. All were cohort studies with a comparison group. Among the 15 studies, three randomized trials were found (22-24). The programs studied were OPUS in Denmark (25); Lambeth Early Onset (LEO) in England (26), Programma 2000 in Italy (27), Parachute in Sweden (28) PEPP in Canada (29), PEP in Australia (30), Early Treatment and Home-based Outreach Service (ETHOS) in England (31) and a program from Norway (32). Randall et al. (15) observed a significant decrease in the risk of being hospitalized at least once during the follow-up period for EIP participants in a meta-analysis of 13 primary studies (OR = 0.33; 95% IC = 0.18-0.63; p < 0.01). Randall et al. (15) also observed a significant decrease in the number of days hospitalised in a meta-analysis of 11 primary studies (SMD = -0.38; 95% IC = −0.53—0.24). Sensitivity analyses support a significant relationship in favour of EIP. However, no significant difference between EIP and traditional services was reported in the three randomized trials (22–24). The level of scientific evidence is established as promising.

Functional recovery: employment and education. Bond et al. (16) evaluated the impact of EIP programs on employment and enrolment in education. In this SR, results from youths aged 14 to 35 were analysed, with no distinction between adolescents and young adults. Scientific data from 20 out of the 28 primary studies selected by Bond et al. (16) was extracted and analysed. EIP with supported employment was also evaluated. Higher employment rates were observed in four primary studies comparing EIP with no identified vocational service component to traditional services (33-36). Bond et al. (16) observed that the impact of EIP is further increased when programs included supported employment, with seven out of eight primary studies identified using the individualized supported employment (IPS) model. The authors reported an employment rate (OR = 3.66 (1.93-6.93);p < 0.0001) and an increase in employment rate (OR = 4.97 (1.53-16.22); p < 0.008) significantly greater in EIP with supported employment compared to early intervention services without supported employment in the meta-analysis of four primary studies (22, 23, 37, 38). The level of scientific evidence is established as promising for employment rates.

Table 2. Synthesis of primary study results

Performance measures (Note 1)	Model, Program or Service	Nb of studies with comparison group and positive results/ Total nb of studies with comparison group	Nb of cohort studies with no comparison group and positive results/Total nb of studies with no comparison group	Nb of studies with significant positive results
ACCESS				
Duration of untreated psychosis	EIP vs traditional services	2 / 4	-	2
Duration of untreated psychosis	EIP vs community mental health team	1 / 1	-	0
Number of references in the region	EIP vs traditional services	1 / 2	-	0
Patient Sx severity at first contact	EIP vs traditional services	2 / 3	-	2
CLINICAL RECOVERY				
Number of hospitalisation	EIP vs traditional services	13 / 13		6
Number of days hospitalised	EIP vs traditional services	11 / 11	-	6
FUNCTIONAL RECOVERY				
Employment (%)	EIP with no supported employment vs traditional services	4 / 4	-	2
Employment (%)	EIP + IPS vs EIP	3 / 3	3 / 3	3
Enrolment in education (%)	EIP + IPS vs EIP with no supported employment	2 / 3	3 / 3	0
Employment or enrolment in education (%)	EIP with no supported employment vs traditional services	2 / 3	-	1
Employment or enrolment in education (%)	EIP + IPS vs EIP with no supported employment	1 / 1	1 / 1	1
MEANINGFULNESS & ACCEPTABILITY				
Partnership evaluation	Interagency collaboration model		1	n/a
Collaborator satisfaction (%)	Interagency collaboration model		1	n/a
Pertinence	Interagency collaboration model		1	n/a

Enrolment in education was evaluated in primary studies comparing EIP with supported employment with early intervention services with no supported employment. The SR by Bond et al. (16) yielded mixed results: higher enrolment in education for EIP with supported employment was reported in two primary studies (35% vs 24% (22), and 54% vs 41% (23)); while one study reported a lower enrolment rate (20% vs 24% (37)). No significant difference was reported in the meta-analysis of four primary studies (22, 23, 37, 38) conducted by Bond et al. (OR = 1.39 (0.86-2.24), p = 0.17 (16)). Scientific evidence is not established for enrolment in education.

When enrolment in education and employment are added together to form a single functional recovery measure, the impact of EIP on functional recovery remains unclear. In two out of the three primary studies retained, EIP with no supported employment obtained positive results compared to traditional services (39, 40) but only one which reported a significant difference (25).

# Impact of program on meaningfulness and acceptability

The meaningfulness and acceptability of the inter-agency collaborative model and the person-centred care model were evaluated in two SR (17, 41). The primary studies from these SR were qualitative and mostly focused on the identification of facilitating factors and constraining factors to the implementation of these models.

For the inter-agency collaborative model, scientific data from seven primary studies (42–48) out of the 33 primary studies selected by Cooper et al. in a SR. (17) was extracted and analysed. Based on Flexhaug's collaborative models of care (49), the programs studied follow a co-location and collaborative approach. Programs were briefly described in the primary studies and the level of collaboration could not be further defined. The majority of primary studies identified by Cooper et al. (17) focused on the organizational perspective of professionals (6/7). The effectiveness of the Children & Young People's (CYPMH) collaborative model was evaluated in two primary studies. Hamilton

138 Angela Ly *et al.* 

et al. (44) reported improved satisfaction of professionals involved following the implementation of the collaborative model. O'Herlihy et al. (42) highlighted the importance and the relevance of inter-agency collaboration for users and their family. The most reported facilitating factors (in more than three primary studies) in the SR by Cooper et al. are joint training, good understanding, support from upper management, the use of a collaboration protocol and, last but not least, a model focused on youth and their family. The most reported constraining factors are inadequate resources, poor communication, lack of acknowledgement and respect, cultural differences and confidentiality issues.

For the person-centred care model, five primary studies were identified (50–54) among the twenty-three primary studies identified in a SR by Gondek et al. (41). The most reported facilitating factors were good listening skills, respect and validation. The most reported constraining factors were lack of resources and confidentiality. This was also the case for the inter-agency collaborative model. Given the small number of SRs conducted on these models, the level of scientific evidence cannot be established.

#### **Discussion**

The results on recovery through EIP programs are promising. Indeed, young people in EIP programs were hospitalized less often. Furthermore, the advisory committee has observed other positive effects of EIP programs on clinical and functional recovery in their practice and experience. Randall et al. (15) suggest that variation in the intensity of EIP may have decreased hospitalisation by improving youth engagement in treatment and continuity of care in the community. An increase in the availability of treatment in the community could also have helped reduce the need for hospital inpatient services. In regards to functional recovery, Bond et al. (16) reported an increase in employment rates with EIP programs. According to the authors, this effect is stronger when EIP includes the IPS model of supported employment. However, EIP does not seem to have an impact on enrolment in education. Education, an important social indicator of health, marks an important step in the life trajectory of young people. Additional research is needed to determine how services could better support youth in their educational pursuits. Unfortunately, no SR was found for specific mental health disorders other than psychosis. The SR by Cooper et al. (17) and by Gondek et al. (41) cover mental health disorders in general. Experts from the advisory committee recommend looking into whether organisational components of EIP models could be adapted to other mental health disorders and other settings such as community services, as early intervention has generated positive results for psychosis.

While the impact of EIP programs on recovery is promising, their impact on access has yet to be determined. Effectiveness of early intervention can only be considered partial if it does not reach all youth with a mental health disorder or at risk of developing one. According to Lloyd-Evans et al. (14), EIP alone is not sufficient to decrease DUP. Observations by one expert on the advisory committee converge with these findings. The authors attribute the success of TIPS, compared to EPPIC and PEPP, to the intensity of their multi-focus campaign. According to Lloyd-Evans et al. (14), the campaign focused on promoting help seeking behaviors and changing attitudes about psychosis. This type of campaign should be implemented jointly with the development of early intervention services. The SR by

Lloyd-Evans et al. (14) included a first generation of primary studies on the development of early intervention services. Since publication of this SR in 2011, new models using a concerted community-based approach have emerged; these include Headspace in Australia and ACCESS (Adolescent /young adult Connections to Community-driven Early Strengths-based and Stigma-free services) in Canada.

Furthermore, the advisory committee recommends forging partnerships with the community and developing services for at-risk youth, more specifically through an at-risk youth evaluation service. The current context whereby services are being reorganized and integrated provides an interesting opportunity to improve mental health services for young people. These services would be anchored with specialized services such as early intervention, in order to improve access and treatment throughout the clinical stages of illness in a continuum of care. Given the non-linear progression of mental health disorders, the experts recommend that admission into services for at-risk youth be conducted regardless of diagnosis or whether or not the client has reached the age of majority. Instead of considering these programs as stand-alone services, perhaps we should consider them as entities part of a continuum of care and treat mental illness at every stage of its evolution. The facilitating and constraining factors identified by Cooper et al. (17) for the collaborative model should be taken into account when implementing partnerships.

While there are many primary studies dealing with the dimensions of engagement and continuity, no SRs have been identified for programs targeting simultaneously adolescents and young adults. The challenges are no less significant, and the facilitating and constraining factors identified for the person-centred care model (41) should be considered. Experts have highlighted the importance of developing youth-friendly services.

## Conclusion

Promising results were found in terms of recovery with EIP. Organisational components from such programs could be developed for youth exhibiting other mental health disorders, and, given the absence of evidence on such services, these models should continue to be evaluated through research. An integrated approach anchored within a continuum of care must be adopted to improve access to specialized services. The development of partnerships with primary care, community resources, social services and schools as well as the development of services for at-risk youth, regardless of diagnosis or age, are recommended to ensure that all young people exhibiting signs of psychological distress may obtain adequate services. Such service organisation would be more adapted to the maturation process of young people and the evolution of mental health disorders. Further research on the organisation and the integration of primary care and community services in the continuum of care is necessary. A multi-focus campaign should also be launched to advertise those services and encourage help-seeking by young people. Service development should build on the experience with EIP services.

**Acknowledgements.** The *Institut national d'excellence en santé et en services sociaux* of Quebec (Canada), for providing funding for this project.

## References

 Kessler RC, BP, Demler O, Jin R, Merikangas KR and Walters EE (2005) Lifetime prevalence and age-of-onset distributions of DSM-IV

- disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 6, 593-602.
- Davis M and Vander Stoep A (1997) The transition to adulthood for youth who have serious emotional disturbance: Developmental transition and young adult outcomes. J Ment Health Admin 24(4), 400–27. doi: 10.1007/bf02790503.
- Bédard M, Connolly D and Gravel R (2004) Canadian Community Health Survey - Mental Health and Well Being. Government of Canada.
- Bergeron E, Poirier L-R, Fournier L, Roberge P (2005) Determinants of service use among young Canadians with mental disorders. Can J of Psychiat 50, 629–36.
- Perkins DO, Gu H, Boteva K, Lieberman JA (2005) Relationship between duration of untreated psychosis and outcome in first-episode schizophrenia: a critical review and meta-analysis. Am J Psychiat 261 (10), 1785–804.
- Marshall M, Lewis S, Lockwood A, Drake R, Jones P and Croudace T (2005) Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: a systematic review. *Arch Gen Psychiatry* 62(9), 975–83.
- Addington D, McKenzie E, Addington J, Patten S, Smith H and Adair C (2005) Performance Measures for Early Treatment Services. Psychiatric Services 56, 1570–82.
- Whitley R and Drake R (2010) Recovery: A Dimensional Approach. Psychiatric Services 61, 1248–50.
- The Joanna Briggs Institute (2005) The JBI Model of Evidence-based Health Care: A Model reconsidered. Australia.
- Whiting P, Savović J, Higgins JPT, Caldwell DM, Reeves BC, Shea BJ et al. (2016) ROBIS: A new tool to assess risk of bias in systematic reviews was developed. J Clin Epidemiol 69, 225–34.
- National Autism Center (NAC) (2009) National standards report: The national standards project—Addressing the need for evidence-based practice guidelines for autism spectrum disorders. Randolph, MA: NAC.
- 12. Institut national d'excellence en santé et en services sociaux (INESSS) (2015) Cadre d'élaboration des guides de pratique dans le secteur des services sociaux. Document rédigé par Sylvie Beauchamp MD, Carmen Dione et Jean-Pierre Duplantie, Institut national d'excellence en santé et en services sociaux (INESSS), 1–81.
- Beauchamp S, Drapeau M, Dionne C. (2015) The Development of Practice Guidelines in the Social and Human Sciences. Can Psychol.
- Lloyd-Evans B, Crosby M, Stockton S, Pilling S, Hobbs L, Hinton M et al. (2011) Initiatives to shorten duration of untreated psychosis: systematic review. Brit J Psychiat 198(4), 256–63.
- Randall JR, Vokey S, Loewen H, Martens PJ, Brownell M, Katz AC et al. (2015) A Systematic Review of the Effect of Early Interventions for Psychosis on the Usage of Inpatient Services. Schizophrenia Bull 41(6), 1379–86.
- Bond GR, Drake RE and Luciano A (2015) Employment and educational outcomes in early intervention programmes for early psychosis: a systematic review. *Epidemiol E Psychiat S* 24(5), 446–57.
- Cooper M, Evans Y and Pybis J (2016) Interagency collaboration in children and young people's mental health: a systematic review of outcomes, facilitating factors and inhibiting factors. Child Care HIth Dev 42(3), 325–42.
- Johannessen JO, McGlashan TH, Larsen TK, Horneland M, Joa I, Mardal S et al. (2001) Early detection strategies for untreated first-episode psychosis. Schizophr Res 51(1), 39–46.
- Melle I, Larsen TK, Haahr U et al. (2004) Reducing the duration of untreated first-episode psychosis: Effects on clinical presentation. Arch Gen Psychiatry 61(2), 143–50.
- McGorry PD, Edwards J, Mihalopoulos C, Harrigan SM and Jackson HJ (1996) EPPIC: an evolving system of early detection and optimal management. Schiz Bull 22.
- Malla A, Norman R, Scholten D, Manchanda R, McLean TS (2005) A community intervention for early identification of First Episode Psychosis. Soc Psych Psych Epid 40(5), 337–44.
- Killackey E, Jackson HJ and McGorry PD (2008) Vocational intervention in first-episode psychosis: individual placement and support v. treatment as usual. *Brit J Psychiat* 193(2), 114–20.

- 23. Killackey EJ, Allott KA, Cotton SM, Chinnery GL, Sun P, Collins Z *et al.* (2012) Vocational recovery in first-episode psychosis: first results from a large randomized controlled trial of IPS. *Early Interv Psychiat* 6(13)
- 24. Garety PA, Craig TK, Dunn G, Fornells-Ambrojo M, Colbert S, Rahaman N (2006) Specialised care for early psychosis: symptoms, social functioning and patient satisfaction Randomised controlled trial. *Brit J Psychiat* 18, 8.
- 25. Bertelsen M, Jeppesen P, Petersen L, Thorup A, Øhlenschlæger J, Quach P (2008) Five-year follow-up of a randomized multicenter trial of intensive early intervention vs standard treatment for patients with a first episode of psychotic illness: the OPUS trial. Arch Gen Psychiatry 65.
- 26. Craig TK, Garety P, Power P, Rahaman N, Colbert S and Fornells-Ambrojo M (2004) The Lambeth Early Onset (LEO) Team: randomised controlled trial of the effectiveness of specialised care for early psychosis. BMJ Brit Med J 329, 1–5.
- Cocchi A, Mapelli V, Meneghelli A and Preti A (2011) Cost-effectiveness
  of treating first-episode psychosis: five-year follow-up results from an
  Italian early intervention programme. Early Interv Psychiat 5, 203–11.
- 28. Cullberg J, Levander S, Holmqvist R, Mattsson M and Wieselgren IM (2002) One-year outcome in first episode psychosis patients in the Swedish Parachute project. Acta Psychiat Scand 106(4), 276–85. Epub 2002/09/13. PubMed PMID: 12225494.
- 29. Goldberg K, Norman R and Hoch JS (2006) Impact of a specialized early intervention service for psychotic disorders on patient characteristics, service use, and hospital costs in a defined catchment area. . Can J Psychiat 51, 895–903.
- Petrakis M, Penno S, Oxley J, Bloom H, Castle D (2012) Early psychosis treatment in an integrated model within an adult mental health service. *Eur Psychiat* 27, 483–8.
- Singh SP, Grange T, Vijaykrishnan A, Francis S, White S, Fisher H et al. (2007) One-year outcome of an early intervention in psychosis service: a naturalistic evaluation. Early Interv Psychiat 1(3), 282–7.
- Grawe R, Falloon I, Widen J and Skogvoll E (2006) Two years of continued early treatment for recent-onset schizophrenia: a randomised controlled study. Acta Psychia Scand 114.
- Eack SM, Hogarty GE, Greenwald DP, Hogarty SS, Keshavan M (2011)
   Effects of Cognitive Enhancement Therapy on Employment Outcomes in Early Schizophrenia: Results From a Two-Year Randomized Trial. Res Soc Work Practice 21(1), 32–42.
- Henry L, Amminger G, Harris M, Yuen H, Harrigan S, Prosser A et al. (2010) The EPPIC follow-up study of first-episode psychosis study: effects on 10-year outcome. J Clin Psychiat 71, 716–28.
- Mihalopoulos C, Harris M, Henry L, Harrigan S, McGorry P (2009) Is Early Intervention in Psychosis Cost-Effective Over the Long Term? *Schiz Bull* 35(5), 909–18.
- 36. Penn DL, Uzenoff SR, Perkins D, Mueser KT, Hamer R, Waldheter E et al. (2011) A pilot investigation of the Graduated Recovery Intervention Program (GRIP) for first episode psychosis. Schizophr Res 125(2–3), 247–56.
- 37. Major BS, Hinton MF, Flint A, Chalmers-Brown A, McLoughlin K and Johnson S (2010) Evidence of the effectiveness of a specialist vocational intervention following first episode psychosis: a naturalistic prospective cohort study. Soc Psychiatr Psychiatr Epid 45(1), 1–8.
- 38. Nuechterlein KH, Subotnik KL, Ventura J, Turner LR, Gitlin MJ, Gretchen-Doorly D *et al.* (Submitted) Successful return to work or school after a fisrt episode of schizophrenia: the UCLA randomised controlled trial of Individual Place and Support and work place fundamentals module traning.
- Cullberg J, Mattsson M, Levander S, Holmqvist R, Tomsmark L, Elingfors C et al. (2006) Treatment costs and clinical outcome for first episode schizophrenia patients: a 3-year follow-up of the Swedish 'Parachute Project' and Two Comparison Groups. Acta Psychiatr Scand 114(4), 274–81.
- 40. Agius M, Shah S, Ramkisson R, Murphy S and Zaman R (2007). Three year outcomes of an early intervention for psychosis service as compared

140 Angela Ly *et al.* 

with treatment as usual for first psychotic episodes in a standard community mental health team - final results. *Psychiatr Danub* **19**(3), 130–8. PubMed PMID: 17914313.

- Gondek D, Edbrooke-Childs J, Velikonja T, Chapman L, Saunders F, Hayes D et al. (2016) Facilitators and Barriers to Person-centred Care in Child and Young People Mental Health Services: A Systematic Review. Clin Psychol Psychol 24(4)
- 42. O'Herlihy A, Oliva L, Evans Y and Cooper M. Parents'and carers' views of child and adolescent mental health services. (Unpubl data).
- England E, Lester H and Birchwood M (2009) Collaborating to Provide Early-Intervention Services to Persons in England With First-Episode Psychosis. Psychiat Serv 60(11), 1484–8. PubMed PMID: 19880466.
- 44. Hamilton J, Begley C, Culler R (2014) Evaluation of partner collaboration to improve community-based mental health services for low-income minority children and their families. Eval Program Plann 45, 50–60.
- 45. Holmesland A-L, Seikkula J and Hopfenbeck M (2014) Inter-agency work in Open Dialogue: the significance of listening and authenticity. *Journal of Interprofessional Care* 28(5), 433–9.
- McLean S (2012) Barriers to collaboration on behalf of children with challenging behaviours: a large qualitative study of five constituent groups. Child Fam Soc Work 17(4), 478–86.
- Rivard JC, Morrissey JP (2003) Factors Associated with Interagency Coordination in a Child Mental Health Service System Demonstration. Adm Policy Ment Hlth 30(5), 397–415.
- 48. **Spong S, Waters R, Dowd C and Jackson C** (2013) The Relationship between Specialist Child and Adolescent Mental Health Services

- (CAMHS) and School- and Community-based Counselling for Children and Young People.
- 49. Flexhaug M, Noyes S and Phillips R (2012) Integrated models of primary care and mental health and substance use care in the community: Literature review and guiding document. Victoria, BC: BC Ministry of Health.
- Idenfors H, Kullgren G and Renberg ES (2015) Professional Care as an Option Prior to Self-Harm A Qualitative Study Exploring Young People's Experiences. Crisis 36(3), 179–86.
- 51. Pycroft A, Wallis A, Bigg J and Webster G (2015) Participation, Engagement and Change: A Study of the Experiences of Service Users of the Unified Adolescent Team. Brit J of Soc Work 45(2), 422–39.
- Street C (2004) In-patient mental health services for young peoplechanging to meet new needs? J R Soc Promo Health 124(3), 115–8. Epub 2004/06/16. PubMed PMID: 15195450.
- 53. Simmons MB, Hetrick SE and Jorm AF (2011) Experiences of treatment decision making for young people diagnosed with depressive disorders: a qualitative study in primary care and specialist mental health settings. BMC Psychiatry 11(1), 194.
- Pelto-Piri V, Engström K and Engström I (2013) Paternalism, autonomy and reciprocity: ethical perspectives in encounters with patients in psychiatric in-patient care. BMC Med Ethics 14(1), 49.
- McGorry PD, Hickie IB, Yung AR, Pantelis C, Jackson HJ (2007) Clinical staging of psychiatric disorders: a heuristic framework for choosing earlier, safer and more effective interventions. Aust NZ J Psychiat 40(8), 616–22.
- Ontario Ministry of Health and Long-Term Care (2004) Program Policy Framework for Early Intervention in Psychosis. Toronto, Canada, 29p.