

Institution: University of Glasgow
Unit of Assessment: Unit 4, Psychology, Psychiatry and Neuroscience
Title of case study: Development of early intervention services for psychosis
<p>1. Summary of the impact</p> <p>Psychosis affects 3-4% of the UK population and is ranked as the third most disabling condition worldwide by the World Health Organisation. Research at the University of Glasgow has changed treatment and services for patients with psychosis by identifying therapies that improve emotional recovery and prevent psychosis relapse and by contributing to the development of early intervention services for individuals with a first episode of psychosis. This work has supported the inclusion of cognitive behaviour therapy (CBT) for psychosis in national clinical guidelines and the implementation of these guidelines via an expanded UK Department of Health programme. University of Glasgow research has also driven the development and expansion of local early intervention services for psychosis, the success of which has directly informed the current Scottish Government Mental Health Strategy.</p>
<p>2. Underpinning research</p> <p>Psychosis is a mental health problem characterised by a loss of contact with reality, with symptoms that include hallucinations and delusions. It often first presents in 16-35 year olds. Within 5 years of a first episode of psychosis, 80% of patients will have experienced a relapse. Most of the lifetime disability arising from psychosis is caused by relapse, which leads to more persistent and distressing psychotic experiences. Research at the University of Glasgow led by Professor Gumley (2001 – present) developed and refined therapies to prevent psychosis relapse and promote emotional recovery, and supported the design of service models that are responsive to the needs of service users (people accessing mental healthcare) who are at risk of relapse and poor outcomes.</p> <p><i>Psychological therapies research</i></p> <p>In 2003, Gumley conducted the first randomised controlled trial of CBT for psychosis relapse. CBT is an evidence-based form of psychotherapy that aims to educate patients about their condition and to provide them with the skills to manage it. Gumley’s research showed that CBT leads to a reduction in relapse and hospital admissions (15.3% in CBT compared to 26.4% in the treatment as usual group; <i>n</i>=72 participants in each group), and improvements in day to day functioning.¹ Gumley also showed that each subsequent relapse leads to increased emotional distress, especially feelings of shame and stigma about psychosis. However, users who received CBT experienced improved emotional outcomes.²</p> <p>These studies demonstrated that relapse emerges from how service users’ cope with the early signs and symptoms of a forthcoming relapse. By improving service users’ abilities to recognise, tolerate and cope with distressing experiences through CBT, service users can develop greater control and choice in their recovery.^{1,2} The connection between emotional recovery and relapse prevention first identified at the University of Glasgow has led to a fundamental adaptation of CBT for psychosis. This adaptation focuses on the development of skills to improve emotional regulation, and is published in a treatment manual released in 2006 in collaboration with Matthias Schwannauer (University of Edinburgh).³</p> <p>Between 2006 and 2010, a large UK, multi-site, randomised controlled trial (EDIE-2), with a substantial Glasgow contribution led by Gumley, provided further evidence that CBT can help to prevent relapses of psychosis.⁴ The trial showed that CBT reduces the severity of psychotic-like experiences, which are recognised risk factors for developing psychosis, and this finding had important implications for the design and development of services for the early detection of psychosis.</p> <p><i>Service design research</i></p> <p>Gumley’s research has been developed in close collaboration with an NHS early intervention service in Glasgow (ESTEEM). Between 2005 and 2008, Gumley evaluated the outcomes of ESTEEM’s comprehensive and dedicated early intervention service, which serves 16-35 year olds. The study, funded by the Chief Scientist Office, compared ESTEEM with adult community mental</p>

health services based in Edinburgh. Throughout this study, the duration of untreated psychosis was reduced in Glasgow compared with Edinburgh (13 versus 23 weeks), as was the delay before help-seekers were aided by the services (1 versus 3 weeks). Furthermore, the number of days spent as inpatients in Glasgow was fewer than half that seen in Edinburgh (33 versus 72 days) in the 12 months following a first episode of psychosis. This study demonstrated the value of a dedicated early intervention service over a community-level service.⁸

The University of Glasgow research has also explored the importance of attachment (the emotional tie between individuals that endures over time) and its role in recovery with service users and staff of the ESTEEM service. In 2011, Gumley's team used the 'gold standard' measurement of attachment, The Adult Attachment Interview, to assess and understand an individual's capacity to form useful and productive relationships and thus engage with the therapies and supports offered by mental health services.⁵ The team also demonstrated that avoidance of attachment relationships was associated with specific problems in service users' ability to regulate their emotions and that such avoidance is therefore a core predictor of relapse and poor outcome.⁵

Key researchers (Glasgow): Professor Andrew Gumley (Honorary Clinical staff, 1998-2001; Senior Lecturer, 2001-2008; Professor of Psychological Therapy, 2008-present). External collaborators: Matthias Schwannauer (Professor of Clinical Psychology, University of Edinburgh), Tony Morrison (Professor of Clinical Psychology, University of Manchester),⁴ Max Birchwood (Professor of Youth Mental Health, University of Birmingham).⁴

3. References to the research

1. Gumley, A.I., *et al.* (2003) [Early intervention for relapse in Schizophrenia: Results of a 12-month randomised controlled trial of Cognitive Behavioural Therapy](#). *Psychol Med.* **33**, 419-431. doi:10.1017/S0033291703007323
2. Gumley, A.I., *et al.* (2006) [Early intervention for relapse in schizophrenia: Impact of cognitive behavioural therapy on negative beliefs about psychosis and self-esteem](#). *Brit J Clin Psychol.* **45**, 247-260. doi:10.1348/014466505X49925
3. Gumley A.I. & Schwannauer M. *Staying Well After Psychosis: A Cognitive Interpersonal Approach to Recovery and relapse prevention*. Chichester: John Wiley & Sons. (2006) ISBN: 0470021853
4. Morrison AP, *et al.* (2012) Early Detection and Intervention Evaluation for people at risk of psychosis (EDIE-2): [A multisite randomised controlled trial of cognitive therapy for at risk mental states](#). *BMJ*. doi:10.1136/bmj.e2233
5. MacBeth A, *et al.* (2011) [Attachment states of mind, mentalisation and their correlates in first episode psychosis](#). *Psychol Psychother Theor Res Pract.* **84**, 42-57 doi:10.1348/147608310X530246

Reports to NHS GG&C and the Scottish Executive

6. Gumley *et al.* (2012) Outcomes following a First Episode of Psychosis in Glasgow and Edinburgh. *Funded by the Chief Scientist Office: Gumley A, et al. (2005-2008) Glasgow-Edinburgh first episode psychosis study: how does engagement with services mediate symptomatic outcomes after a first episode of psychosis?* £201,951 (CZH/4/295)

4. Details of the impact

Active psychosis can lead to significant personal trauma and socioeconomic costs that are exacerbated by repeated relapses, and is ranked as the third most disabling condition worldwide after quadriplegia and dementia. Professor Gumley's work has had local and national impact on psychosis treatment by supporting UK and Scottish government-backed strategies to improve access to psychological therapies, and the development and expansion of early intervention services in Scotland.

Psychological Therapies for psychosis

CBT is recommended by NICE guidelines for schizophrenia

Gumley's 2003 study on CBT¹ was one of several randomised controlled trials cited as evidence in the National Institute for Health and Clinical Excellence (NICE) 2009 clinical guidelines (CG82) for

Impact case study (REF3b)

schizophrenia.^a The evidence formed part of a meta-analysis of the value of CBT, based on which NICE recommended that CBT should be offered to all people with psychosis, as this treatment reduces the rate of hospitalisation. The study was one of five trials used in the NICE economic analysis, which concluded that CBT intervention for psychosis saves £989 (£751 conservatively) per patient receiving 16 week hospitalisation compared with standard care.^a

This recommendation led to the NICE evidence being used to drive UK government policy and support ministerial commitment to a 4 year plan ('Talking therapies') launched in 2011 alongside the mental health strategy 'No health without mental health'.^{b,c} The plan committed the National Health Service to expanding access to evidence-based psychology therapies for people with psychological conditions, and in September 2011, an existing scheme (Increasing Access to Psychological Therapies) was expanded to include 'Serious Mental Illness' (IAPT SMI). "*Since Professor Gumley's research forms a significant part of the 'evidence', his study has been scrutinized to ensure the effective components are rolled out nationally.*" – (National Advisor to IAPT-SMI).^b The IAPT-SMI programme ensures that the NICE guidelines are implemented across England, to allow all patients eligible for CBT to have access to this intervention.^c

Development of a competence framework for psychological therapies

To meet the requirements of wider access, IAPT-SMI commissioned a project (co-ordinated by University College London, UCL) to determine what competencies are required by therapists to deliver CBT and to develop a competence framework for clinicians and commissioners of mental health services. UCL invited Gumley to become a member of the Expert Reference Group (ERG) that oversaw the development of CBT competencies, due to his clinical and research experience in developing and researching CBT.^{d,e}

Gumley advised on developing a basic structure for the competence framework. Together with the ERG, he helped to identify the core and specific competencies and training needed for therapists and services to deliver CBT. These competencies were extracted from evidence-based interventions and treatment manuals, which included Gumley's research on CBT that also underpinned his treatment manual for therapists ('Staying Well After Psychosis', 2006),⁷ which sold 821 copies^f between 1st May 2008 and 31st July 2013.

The IAPT-SMI psychosis initiative has been implemented at two NHS Foundation Trust demonstration sites (Lancashire Care and South London and Maudsley) since November 2012.⁹

Widening access to psychological therapies in Scotland

The Scottish equivalent of IAPT is 'Widening Access to Psychological Therapies', the basis of which is a guidance document called '*The Matrix: A guide to delivering evidence-based Psychological Therapies in Scotland*', which is published jointly by the Scottish Government and NHS Education for Scotland (NES).^h In 2008 and 2011, Gumley contributed to the schizophrenia section of *The Matrix*, synthesizing the most up-to-date evidence on schizophrenia treatment, including his own research on CBT for relapse prevention. This information now underpins the current drive to improve access to CBT, as implemented through NES. *The Matrix* is a cornerstone of the psychological therapies implementation strategy at Scottish government level and is used extensively in service planning and as a benchmark for the delivery of evidence-based care.ⁱ

Operationalising psychological therapies in early intervention services for psychosis

The Glasgow ESTEEM early intervention service

ESTEEM aims to reduce the duration of untreated psychosis, improve patient recovery and prevent relapse. It provides a multidisciplinary approach to treatment, tailored to each of the 489 16–35 year olds seen each year who have experienced a first episode of psychosis. Gumley has advised ESTEEM since its inception in 2002. His research has both drawn upon the service and led to changes in practice at the service: '*The impact of the research has been to enshrine the value of collecting and exploring clinical outcomes as part of the service framework...and has helped to operationalize [sic] complex, theoretically driven interventions in such a way that has clinical utility for an NHS mental health service*' – ESTEEM lead.ⁱ

Gumley's research demonstrated the importance of facilitating emotional support following a first

episode of psychosis; this informed the development of the ESTEEM service, which since 2010 has placed attachment and emotional recovery at the heart of the service model. Although not all patients receive CBTp (as not all patients need it), each patient has a care plan that takes into account his or her attachment relationships, and thus the patient's ability to engage with therapy.^j Since 2008, Gumley has trained all 65 healthcare staff within ESTEEM in attachment theory and its use for developing individually tailored strategies for emotional and relationship-based adaptation to psychosis.

In 2012, Gumley presented the results of an evaluation of the outcomes of the ESTEEM service, from a study conducted by Gumley and funded by the Chief Scientist Office⁸, to the NHS GC&C health board. The report clearly showed the value of a dedicated service over a community-level service. The findings '*proved to be enormously valuable during service review and subsequently contributed to the decision to expand the service across the whole GG&C [Greater Glasgow & Clyde] area. It also sets the standard for other services to consider and demonstrate effective outcomes.*' – ESTEEM lead.^j

Early intervention included within Scottish Government mental health strategy

In response to Mental Health Strategy consultation documents circulated by the Scottish Government in 2011, Gumley presented the ESTEEM evaluation⁸ to the Head of Mental Health in the Scottish Government. The data led the Scottish Government to commission an independent review by Information Services Division Scotland, to corroborate these findings by performing a Scotland-wide check of psychiatric admission figures for 18-24 year olds by region, showing the lower admissions in Glasgow.^k Gumley's research on developing and demonstrating the efficacy of early intervention services led directly to a policy commitment to include early intervention delivery within the Scottish Government's Mental Health Strategy for Scotland (2012–2015).^l

'The research undertaken into the benefits of early intervention in respect of first episode psychosis is the sole reason the commitment was included within the strategy...we were persuaded by the data and similarly were able to use the research to support a direct commitment, focussed on the outcomes achieved for this client group. We are currently taking forward the commitment through data review which will be the basis for further intervention and engagement with local boards.' – Head of Mental Health, Scottish Government^m

5. Sources to corroborate the impact

- a. CG82: Schizophrenia - [Core interventions in the treatment and management of schizophrenia in primary and secondary care](#) (2009) NICE, Section 8.4, p.260-270.
- b. [Talking therapies: A four-year plan of action](#) (2011) Department of Health.
- c. Statement from the National clinical adviser, IAPT SMI; available on request.
- d. Roth, A.D. and Pilling, S. (2012) [A competence framework for psychological interventions with people with psychosis and bipolar disorder](#). University College London.
- e. Statement from co-ordinator of the UCL/IAPT-SMI competence framework; available on request.
- f. Sales data from Wiley-Blackwell publishers; available on request.
- g. [IAPT implementation](#): demonstration sites for psychosis.
- h. The Matrix: [Mental health in Scotland – a guide to delivering evidence-based Psychological Therapies in Scotland](#) (2011) NHS Education for Scotland and The Scottish Government (role: p.119; additional research included: ref. 32 (p.107), used on p.81).
- i. Statement from the Psychological Therapies Lead, NHS Education Scotland; available on request.
- j. Statement from the Head of Mental Health, NHS Glasgow South and ESTEEM service; available on request.
- k. Information Service Division, NHS Scotland data tables; available on request.
- l. [Mental Health Strategy for Scotland 2012-2015](#) (2012) The Scottish Government (Commitment 24, p.41).
- m. Statement from the Head of Mental Health, Scottish Government; available on request.