

## Impact case study (REF3)

<b>Institution:</b> University of Warwick		
<b>Unit of Assessment:</b> UOA2 – Public Health, Health Services and Primary Care		
<b>Title of case study:</b> Youth Mental Health Policy and Service Reform: Regional, National and International Impact		
<b>Period when the underpinning research was undertaken:</b> 1 January 2000 to 31 December 2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Professor Max Birchwood Professor Swaran Singh	Professor Youth Mental Health Professor of Social and Community Psychiatry	June 2013- present March 2006- present
<b>Period when the claimed impact occurred:</b> 1 August 2013 and 31 July 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> N		
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>One in four people in the UK will experience a mental health problem each year. One in ten children and young people (CYP) have a diagnosable mental health condition. Professors Birchwood and Singh's research into early intervention has improved quality of care, response time and access to services for people across the UK and internationally. As a result of their research and its implementation, over 79% of Early Intervention in Psychosis (EIP) teams now deliver NICE-compliant care within two weeks, improving patient outcomes while saving GBP5,536 per patient, per year for the NHS (total saving GBP15,862 per patient during EIP care). Singh and Birchwood's research into transition has been pivotal in the reform of youth mental health services, launching the first 0-25 years services in 10 cities in the UK, benefitting a combined population of over 8 million people nationally, and millions more internationally through replication in Australia, Ireland and Canada. Their work has directly changed national policy and guidance, including the training of psychiatrists across all 27 EU states. Birchwood is a founding member of the <a href="#">International Association for Youth Mental Health</a> which is promoting these reforms across the world. Singh and Birchwood are now implementing the early intervention paradigm in Low- and Middle-Income countries (LMIC), with Singh leading the World Psychiatric Association's Expert Working Group on EIP in LMIC</p>		
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>In the UK, approximately one in four people experience a mental health problem each year and one in ten children and young people have a diagnosable mental health condition. Research by Birchwood and Singh at the University of Warwick has demonstrated the gaps and pitfalls in mental health services that have an adverse effect on a patient's treatment and recovery and have pioneered structural changes to significantly improve services and enhance patient outcomes.</p> <p><b>Reducing treatment delay at the onset of psychosis:</b> Birchwood and Singh's 2013 research demonstrated that although the development of Early Intervention in Psychosis (EIP) services in the UK had significantly reduced treatment delay to appropriate care in early psychosis, one-third of patients still experienced a treatment delay of over 6 months, which is widely acknowledged from other studies to drastically reduce recovery outcomes. This delay was avoidable - it occurred once access to mental health services had taken place and could be reduced further with earlier access to EIP [3.1]. Birchwood and Singh conducted the UK's first public health trial in treatment delay in psychosis comparing the North and South of Birmingham, and demonstrated that creating an easy-access, low-stigma care pathway, co-designed with young people, together with a simple community campaign, could reduce treatment delay from 285 to 104 days [3.2]. Singh's <a href="#">ENRICH project</a> highlighted the impact of socio-cultural influences</p>		

on why ethnic minorities have poorer care pathways, a major national priority, and how collaborative working between health services, community groups, and faith organisations could improve mental health care for ethnic minority youth [3.3].

**Youth mental health service reform:** Singh conducted the first-ever examination of transition from child and adolescent (CAMHS, <17-18 years) to adult (AMHS 17-18+) mental health services reported in the seminal TRACK study (2006-2010). This four-stage project found that for the vast majority of service users, transition from CAMHS to AMHS was poorly planned, executed and experienced. Services rarely followed protocols, about 50% of young people fell through the transition gap between services, and less than 5% received optimal care during the process of transition [3.4, 3.5, 3.6]. An EU-funded MILESTONE study (2014-2019) led by Singh built on the findings of the TRACK study across 8 countries in Europe and mapped the CAMHS-AMHS interface across participating sites to determine structural and policy components of transitional care across the whole of EU [3.7]. A cluster randomised trial examined whether a managed transition is more effective than the current care available, having identified predictors for poor and good transitions. The results of the MILESTONE trial show there is almost a 50-fold variation in resources committed to youth mental health; those in the managed transition model have shown a greater improvement in their mental health than in the control arm; and the intervention is relatively cheap (GBP48.77 per patient) [3.7].

### 3. References to the research (indicative maximum of six references)

**[3.1]** Birchwood, M., C. Connor, H. Lester, P. Patterson, N. Freemantle, M. Marshall, D. Fowler, S. Lewis, P. Jones, T. Amos, L. Everard, and **S. P. Singh**. (2013) "Reducing Duration of Untreated Psychosis: Care Pathways to Early Intervention in Psychosis Services." *British Journal of Psychiatry*, 203(1), 58-64. doi:10.1192/bjp.bp.112.125500

**[3.2]** Connor C, Birchwood M, Freemantle N, Palmer C, Channa S, Barker C, and Singh, S. (2016) Don't turn your back on the symptoms of psychosis: the results of a proof-of-principle, quasi-experimental intervention to reduce duration of untreated psychosis. *BMC Psychiatry*, 16 (1). 127. doi:10.1186/s12888-016-0816-7

**[3.3]** Singh, SP., Brown, L, Winsper, C, Gajwani, R, Islam, Z, Jasani, R, Parsons H, Rabbie-Khan, F, and Birchwood, M (2015) Ethnicity and pathways to care during first episode of psychosis: the role of cultural illness attributions. *BMC Psychiatry*, 15 (1). 287. doi:10.1186/s12888-015-0665-9

**[3.4]** Singh SP, Paul M, Ford T, Kramer T, Weaver T. (2008) Transitions of Care from Child and Adolescent Mental Health Services to Adult Mental Health Services (TRACK Study): A study of protocols in Greater London. *BMC Health Serv Res* 8, 135 (2008). doi 10.1186/1472-6963-8-135

**[3.5]** Singh SP, Paul M, Islam Z, Weaver T, Kramer T, McLaren S, Belling R, Ford T, White S, Hovish K & Harley K (2010) Transition from CAMHS to Adult Mental Health Services (TRACK): A Study of Service Organisation, Policies, Process and User and Carer Perspectives. Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation R&D (NCCSDO): [http://www.netscc.ac.uk/hsdr/files/project/SDO\\_FR\\_08-1613-117\\_V01.pdf](http://www.netscc.ac.uk/hsdr/files/project/SDO_FR_08-1613-117_V01.pdf)

**[3.6]** Singh SP, Paul M, Ford T, Kramer T, Weaver T, McLaren S, Hovish K, Islam Z, Belling R, and White S. (2010) Process, outcome and experience of transition from child to adult mental healthcare: Multiperspective study. *British Journal of Psychiatry*, 197(4), 305-312. doi:10.1192/bjp.bp.109.075135

**[3.7]** Signorini, G, Singh, SP., Boricevic-Marsanic, V, Dieleman, G, Dodig-Ćurković, K, Franic, T, Gerritsen, SE, Griffin, JM., Maras, A, McNicholas, F, O'Hara, L, Purper-Ouakil, D, Paul, M, Schulze, U, Street, C, Tremmery, S, Tuomainen, H, Verhulst, F, Warwick, J and de Girolamo, G. (2017) Architecture and functioning of child and adolescent mental health services : a 28-country survey in Europe. *The Lancet Psychiatry*, 4 (9). pp. 715-724. doi:10.1016/S2215-0366(17)30127-X

### Grants

PI Singh, Transition from CAMHS to adult mental health services (TRACK): a study of policies, process and user and carer perspective, NIHR-SDO, June 2006- November 2008, GBP315,943

PI Singh, Managing the link and strengthening transition from child to adult mental health: MILESTONE project funded by EU FP7, February 2014- April 2019, GBP4,317,170

PI Birchwood, Youth Mental Health theme, NIHR CLAHRC (West Midlands), November 2013-September 2019, GBP1,066,557

PI Singh, CI Birchwood and India partners NIHR Global Health Research Group on Psychosis Outcomes: the Warwick-India-Canada {WIC} Network, The University of Warwick, NIHR, July 2017- October 2021, GBP1,940,109.93

PI Singh, CI Birchwood, Ethnicity, Detention and Early Intervention: Reducing Inequalities and Improving outcomes for Black and Ethnic Minority (BME) Patients, NIHR ENRICH: August 2007-January 2012, GBP944,272

#### **4. Details of the impact** (indicative maximum 750 words)

Research by Birchwood and Singh revealed that one in three patients accessing mental health services in the UK experienced over a 6-month delay in receiving treatment, drastically reducing recovery outcomes. Their research into youth mental health services also revealed that during the transition from CAMHS to AMHS, almost half of the young people accessing the service, particularly those with neurodevelopmental and emotional disorders, fell through the gap between services, with ethnic minority youth in particular having poorer access to care. Birchwood and Singh's research and interventions in these fields have resulted in health care service reform and policy and practice change internationally, crucially increasing access to mental health services for patients across the world.

#### **Reducing treatment delay at the onset of psychosis**

Birchwood and Singh's research findings [3.1, 3.2] demonstrated that treatment delay at the onset of psychosis could be halved by providing direct access to early intervention teams, rather than through generic community mental health teams. Birchwood was invited to act as a special advisor to the NHS England (NHSE) team developing the access standard 'Implementing the Early Intervention in Psychosis Access and Waiting Time Standard: Guidance' [5.1]. As a result of this guidance, from January 2016, all EIP teams are now required to monitor monthly access times in line with the guidance; since this monitoring has been implemented, over 79% (September 2019, [NHS data](#)) of EIP teams now deliver NICE care within 2 weeks of referral to mental health services, compared to 33% (June 2015) [5.2] and 58% (January 2016). With approximately 10,000 new cases of psychosis in England per year, the care of around 7,500 patients has been directly improved through this policy intervention, their treatment delay reduced by over half the time, from an average of 285 to 105 days, improving patient experience and clinical outcomes for this highly vulnerable group.

#### **Youth mental health service reform: the 0-25 model**

Following the adoption of Birchwood's EIP model in all NHS mental health trusts in England, and Singh's subsequent research on transition, Birchwood was invited by NHS Clinical Commissioning Groups to support the fundamental redesign of youth mental health services. The first 0-25 years' service was launched in Birmingham (Forward Thinking Birmingham) in October 2015 around an integrated early intervention model, which has since been replicated in 10 UK cities, impacting on populations in excess of 8 million people. Birchwood and Singh's evaluation of the first 0-25 service in Birmingham, which has been shared widely with commissioners and NHS England, has directly informed national policy-led reforms [5.3]. Following the success of the first ever dedicated 0-25 service in Birmingham, the West Midlands Combined Authority (WMCA), made up of 18 local authorities and 3 local enterprise partnerships, has established a mental health commission, in collaboration with Singh, to explore the ways in which global mental health evidence could influence regional policy, marking the 0-25 service in the Midlands as a landmark in world-leading mental health service reform.

Singh was appointed as Chair of the NICE's 2016 Guidelines Development Committee on 'Transition from child to adults health and social care', the first ever summation of evidence on transition to generate evidence-based guidelines [5.4]. Good transition in mental health care has since become a CQUIN and used by the CCQ as a measure of quality of care for young people [5.5]. The influential TRACK study and 'Forward Thinking Birmingham' 0-25 service model has been used as evidence to support the Department of Health and NHS England 2015 recommendation that transition to adult mental health services at 18 is often not appropriate for

young service users [5.6] and resulted in the implementation of additional, specialist provision for those in vulnerable groups. Subsequently, the NHS Long Term Plan (2019) promised, 'a new approach to young adult mental health services for people aged 18-25 will support the transition to adulthood' [5.7].

Singh and Birchwood worked directly with the Cabinet Office, Policy Unit and 10 Downing Street, where their research has informed government policy around young people and mental health provision. In 2017, they gave keynote talks at a one-day symposium with the Cabinet Office to help inform the Green Paper on "Transforming children and young people's mental health provision" (December 2017) which highlighted that respondents regarded transition as an area which was central to the improvement of the mental health service and advocated for a greater focus on transition periods in children and young people's lives [5.8]. The Commons Select Committee response to the Green paper "The Government's Green Paper on mental health: failing a generation" in May 2018, indicated that the recommendations do not go far enough, referencing the TRACK study and the 0-25 model in written and oral evidence to support the recommendation that the government should commit to a full assessment of current transition arrangements [5.9]. In February 2020, Singh led two national summits at 10 Downing Street attended by government officials and senior policymakers from Departments of Health and Social Care, Works and Pension, Education, the Race Disparity Unit and ONS to inform the mental health policies of the new administration.

### **International adoption of early intervention and 0-25yrs services**

The UK was the first country to develop and implement the EIP model across its healthcare system and to reform the existing CAMHS/Adult services into the 0-25 model. Warwick research on early intervention and transition has been at the forefront of the emergence of these innovative models of youth mental health that have since been adopted internationally. Mental health services have been reformed to create 0-25yrs services in Australia ([HEADSPACE/ORYGEN](#)), with almost 3 million occasions of service provided through over 110 national headspace centres, Ireland ([JIGSAW](#)) with 29,993 appointments offered to young people and 25,784 people taking part in youth mental health promotion workshops and courses around Ireland in 2019, and Canada ([ACCESS-OM](#)) who have 16 sites across the country.

Birchwood and Singh also contribute their expertise internationally. Birchwood and Singh are founding members of the International Association for Youth Mental Health (IAYMH); for which Singh was Vice-President (2018-21), and is promoting these reforms across the globe. Birchwood is special advisor to the Canadian youth mental health reform programme in Canada and has shaped the evaluation of the service through membership of advisory boards. Singh is a member of the 2019 Lancet Commission on Youth Mental Health, as well as the chair of the World Psychiatric Association's (WPA) International Expert Panel on Early Intervention for Low- and Middle-Income Countries (LMIC). Singh and Birchwood are leading large-scale NIHR-funded projects to contextualise and adopt EIP models developed in the West for resource poor-settings such as LMIC. Their ongoing work in India has shown that both early detection of emerging mental health problems in youth, and improved care for young people with early psychosis are achievable and are already making an impact on young people in New Delhi and Chennai (project sites) in India.

The European Union of Medical Specialists (UEMS), represents 1,600,000 medical specialists- which includes the child and adolescent psychiatry specialty subgroup. As a member of the working group 'Transition from child to adolescent to adult psychiatry', Singh continues to advocate for the delineation of child and adolescent from adult psychiatry and paediatrics. As a result, the group recommended that transition should be part of psychiatric training and should be synchronised across Europe with the President of the CAP Section of UEMS stating "We have used the findings of the study [MILESTONE] as one of a range of evidenced based knowledge to inform our future action plan" [5.10]. In 2017 GAMIAN-Europe and the European Brain Council released an expert policy paper 'Bridging the Gap: Optimising transition from child to adult mental healthcare' for which Singh was part of the Expert Working Group and the

recommendations for transitions drew heavily on his research [5.11]. He was also a keynote speaker at an event in January 2018 organised by GAMIAN.

Findings from MILESTONE across 8 countries in Europe have been incorporated into the UEMS guidelines on transitions across Europe. Haute Autorite de Sante (HAS) (French National Authority for Health), created by the French government, is an independent public body who carry out a range of activities and assessments to improve patient care. In June 2018 they published guidance on Psychiatry and mental health directly referencing the MILESTONE study and explicitly referencing a need for development in continuity of care between CAMHS and AMHS [5.12]. A training package was developed for clinicians to improve transitional care across all 27 EU states, in response to which France implemented an e-learning course about transition that is mandatory curriculum for all psychiatrists in their first year of training, as well as longer training in a post university diploma about early interventions (targeting adolescents and young adults). Four international dissemination events have been conducted in the UK 29/4/19; Italy 11-12/4/2019; France 26/3/2019 and Ireland 24/3/19 attended by a range of health-care professionals, psychiatrists, psychologists, nurses, CAMHS/AMHS clinicians, as well as student trainees in psychiatry or psychology and service users.

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

[5.1] NHS England and NICE guidance (2016) Implementing the early intervention in psychosis access and waiting time standard: Guidance <https://tinyurl.com/42tfwcv2>

[5.2] NICE, Quality standard, Psychosis and schizophrenia in adults (2015) <https://tinyurl.com/q8ae24kt>

[5.3] Impact and process evaluation of Forward Thinking Birmingham: Birchwood, M. J. et al. (2018) Impact and process evaluation of Forward Thinking Birmingham, the 0-25 Mental Health Service : Final Report University of Warwick ; University of Birmingham ; GIFT (Great Involvement Future Thinking) ; CLAHRC-WM. <http://wrap.warwick.ac.uk/100545/>

[5.4] Transition from children's to adults' services for young people using health or social care services NICE guideline [NG43] Published date: February 2016 <https://www.nice.org.uk/guidance/ng43>

[5.5] Care Quality Commission: Transitions out of Children and Young People's Mental Health Services CQUIN, Published date March 2018 <https://tinyurl.com/15ib592c>

[5.6] NHS England (2015) Future in mind: Promoting, protecting and improving our children and young people's mental health and wellbeing. London: Department of Health <https://tinyurl.com/rqn5k9ah>

[5.7] The NHS Long Term Plan: <https://www.longtermplan.nhs.uk/> section 3.30, p 51

[5.8] Green Paper, Transforming children and young people's mental health provision, (2017)- Updated July 2018 <https://tinyurl.com/y8vhv7v5>

[5.9] The Governments Green paper on mental health: failing a generation (2018) <https://tinyurl.com/5vspfrtx>

[5.10] Email from the President of the CAP Section of UEMS

[5.11] Bridging the Gap: Optimising transition from child to adult mental healthcare (expert policy paper by the Shire), GAMIAN-Europe and the European Brain Council (2017) <https://tinyurl.com/eydjsku9>

[5.12] Haute Autorite de Sante (France), Psychiatry and mental health (2018) [Written in French]