Institution: The University of Manchester

Unit of Assessment: 4

Title of case study:
NCISH: National Confidential Inquiry into Suicide and Homicide by People with Mental Illness

1. Summary of the impact

Suicide is one of the most serious adverse outcomes in mental health services. NCISH research is based on a comprehensive and internationally unique database (99,000 suicide deaths; 25,000 patient suicide deaths). NCISH impacts upon practice and policy by providing definitive figures on suicide to clinical services and government, producing data-driven safety recommendations and demonstrating that these recommendations reduce suicide. Based on NCISH research, overall patient suicide rates fell by 26% (2004-11), in-patient deaths fell by 58% (2001-2010), and individual recommendations may have prevented between 200-300 patient suicide deaths per year. A new vehicle for impact delivery is the social enterprise Safer Care Ltd (founded 2013), which has already reviewed 4 Trusts and, by reinvesting future income in the social enterprise, we will continue to meet the specific needs of mental health services.

2. Underpinning research

See section 3 for references 1-6; University of Manchester (UoM) researchers are given in bold.

The impact is based on research that took place at UoM from 1996-date, with the first major publications in 1999. The key researchers were:

- **Louis Appleby** (Professor, 1996-date)
- **Jenny Shaw** (Senior Lecturer, 1996-2003; Reader, 2003-2004; Professor, 2004-date)
- **Navneet Kapur** (Lecturer, 1997-2002; Senior Lecturer, 2002-2007; Reader, 2007-2008; Professor, 2008-date)
- **Kirsten Windfuhr** (Deputy Project Manager, 2002-2004; Research Fellow/Senior Project Manager, 2004-date)

Background to the research: The aim of the research was to recommend changes to clinical practice and policy that would reduce the risk of suicide in mental health patients. We maintain a national register of all suicides occurring in the UK, collecting more detailed information directly from clinical teams on people who have been in contact with services in the previous 12 months. Our response rates from clinicians have been around 95% for the last 13 years. Our core database is the largest clinical database of suicide internationally (99,000 general population suicides; 25,000 mental health patient suicides).

Key findings: NCISH has generated key data on suicide by mental health patients that are widely quoted:

- 1,200 people (25% of all suicides occurring in the general population) are in contact with mental health services in the 12 months prior to suicide (1-3);
- of this group, half are in contact with services in the week before death (2,3).

Over the 10 year period 2001-2010:

- approximately 10% of patient suicides occur during an in-patient admission and the commonest cause of death is by hanging (2-4); 25% of deaths occur after patients abscond from the ward (2);
- nearly 20% of patient suicides occur within 3 months of discharge from in-patient care; the highest risk period is the first week after discharge, particularly the first 1 to 3 days (2,3,5);
- 14% of patients are non-adherent with drug treatment in the month prior to suicide; 26% missed their final contact with mental health services prior to suicide (2,3);
- receiving enhanced aftercare is a protective factor (5).
- In the *Lancet* 2012 paper (6) we showed that the implementation of our recommendations was

associated with a fall in patient suicide between 1997-2006, which guided the continuity of the impact during this assessment period. Specifically, suicide rates decreased to a greater degree in services which implemented more of the safety measures than those which implemented fewer. Three recommendations in particular (24-hour crisis teams, dual diagnosis policies, multi-disciplinary reviews following patient suicide) were associated with falls in suicide after implementation (6). There was also evidence that recommendations designed for particular patient sub-groups (e.g., mental health in-patients; patients recently discharged) produced specific reductions in suicide of between 11-32% (6).

3. References to the research

NCISH research has been published in top general medical and psychiatry journals internationally. In terms of volume of outputs in the field of suicidal behaviour over the last 5 years we are 3rd worldwide (n=119), and 3rd worldwide in the average number of citations per output (6.2) (Source: Scopus).

Key publications:

1. **Appleby L, Shaw J**, Amos T, McDonnell R, Harris C, McCann K, Kiernan K, Davies S, Bickley H, Parsons R. Suicide within 12 months of contact with mental health services: national clinical survey. *BMJ*. 1999;318(7193):1235-9. DOI: 10.1136/bmj.318.7193.1235
2. The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Annual Report 2013: England, Northern Ireland, Scotland Wales (July 4 2013). http://www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/nci/reports/ National Report.
3. **Windfuhr K, Kapur N**. Suicide and mental illness: A clinical review of 15 years findings from the UK National Confidential Inquiry into Suicide. *British Medical Bulletin*. 2011;100(1):101-21. DOI:10.1093/bmb/ldr042
4. **Kapur N**, Hunt IM, **Windfuhr K**, Rodway C, Webb R, Rahman MS, **Shaw J, Appleby L**. Psychiatric in-patient care and suicide in England, 1997 to 2008: A longitudinal study. *Psychological Medicine*. 2013;43(1):61-71. DOI:10.1017/S0033291712000864
5. Bickley H, Hunt IM, **Windfuhr K, Shaw J, Appleby L, Kapur N**. Suicide within two weeks of discharge from psychiatric inpatient care: A case-control study. *Psychiatric Services*. 2013;64(7):653-9. DOI:10.1176/appi.ps.201200026
6. While D, Bickley H, Roscoe A, **Windfuhr K**, Rahman S, **Shaw J, Appleby L, Kapur N**. Implementation of mental health service recommendations in England and Wales and suicide rates, 1997-2006: A cross-sectional and before-and-after observational study. *The Lancet*. 2012;379(9820):1005-12. DOI: 10.1016/S0140-6736(11)61712-1

4. Details of the impact

See section 5 for corroborating sources S1-S9.

Context

- Since the inception of NCISH in 1997, reporting of suicides by mental health patients has increased from 20% to 95% of cases.
- NCISH is internationally unique in mental health care in terms of the depth and breadth of information that we can provide to inform clinical practice and suicide prevention policy (locally, nationally, internationally).

Pathways to impact (see also figure 1 below)

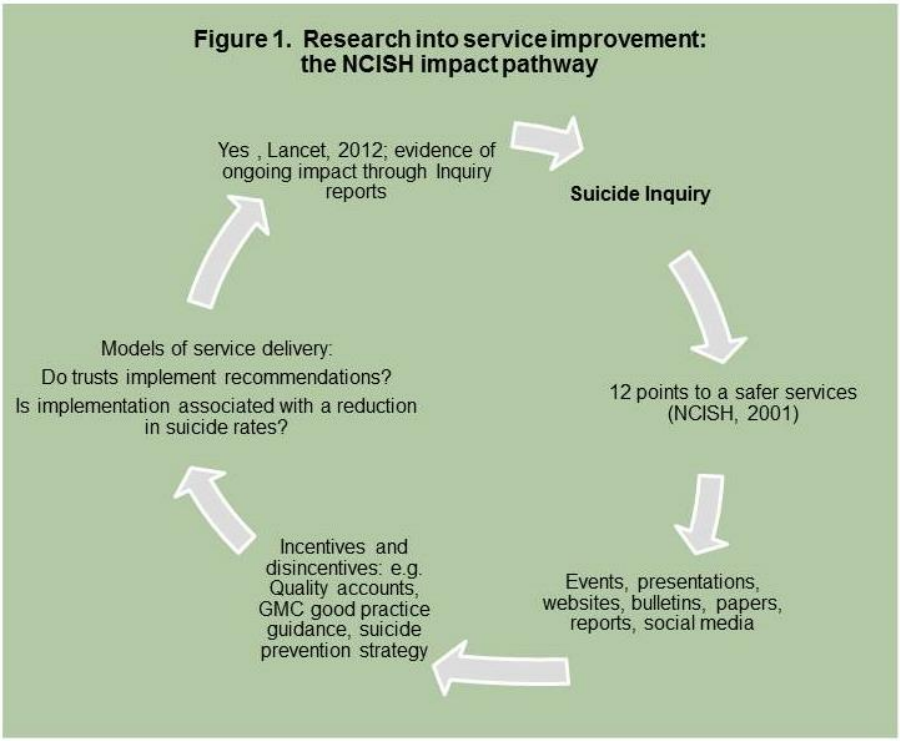
NCISH has provided, and continues to provide, new information to health services and the wider community on suicide in mental health patients. Based on this information, NCISH has made specific recommendations for preventing suicide in services in our reports, “12 points to a Safer Service” (S1) two iterations of the national suicide prevention strategy for England (2002 and 2012) (S2) and international policy documents (S3, S4). Unique to mental health services, implementation of NCISH recommendations to clinical practice and policy has led to a reduction in suicide rates that is ongoing and sustainable. As of 2013, additional delivery of NICSH impact on practice and policy is carried out via the social enterprise Safer Care Ltd.

Reach and significance of the impact

Impact on policy nationally and internationally

A major impact of NCISH research has been to inform policy through national policy documents and answers to parliamentary questions (S5). Our research underpins section 1 of the national suicide prevention strategy for England (2012), *Preventing suicide in England: A cross-government outcomes strategy to save lives*, which has reduced suicide in high risk groups (S2). Section 1.13 makes specific reference to NCISH recommendations as providing key guidance for mental health services; 2 NCISH publications are also referenced in the Strategy. Internationally, our work has informed surveillance schemes in Ireland (e.g., the National Suicide Research Foundation (NSRF)) and Norway (S3, S4). Our research has also led recently to national tools for quality improvement. Our safer mental health services toolkit (launched January 2013) has been downloaded approximately 1,300 times to date (S6). A further example of recent impact is the requirement for NHS Trusts to demonstrate their adherence to Inquiry recommendations – the first Quality Accounts began in 2010/11 (S7).

Figure 1. Research into service improvement: the NCISH impact pathway



Impact on services

- NCISH's focus on in-patient safety has been associated with a halving in the number of in-patient suicide deaths. We demonstrated that three of the NCISH recommendations were significantly associated with a reduction in suicide rates in the NHS Trusts that had implemented them, with no significant reduction in suicide rates in Trusts that did not implement recommendations. Implementation of 24-hour crisis teams, dual diagnosis policies and multi-disciplinary reviews following a patient suicide were associated with 200-300 fewer patient deaths per year. The cost of each suicide death is around £1.5 million (*Journal of Crisis Intervention & Suicide* (2007) 28:89-94). Based on these figures, 300 fewer suicide deaths in England and Wales represent a potential cost saving of £450 million annually.

- NCISH impact continued during the assessment period (see also wider and emerging impact). NCISH's 2013 Annual Report (3) showed a 26% fall in overall patient suicide rates in England (2004-2011). We also reported sustained improvements in in-patient safety – in-patient suicide fell by 58% (2001-10) particularly in those who died by hanging (likely to have been as a result of NCISH recommendation to remove ligature points). Service changes informed by NCISH research have continued to be implemented, and two of the recommendations (relating to crisis teams and dual diagnosis policies) were associated with some the biggest

falls in UK suicide between 1997-2011 - differential falls in suicide between implementing and non-implementing services of 30% and 12% respectively (S8).

Wider and emerging impact

Safer Care Ltd. (2013) (company number 08598105) (S9) is a social enterprise formed in response to NHS Trusts requesting our expertise to address local aspects of patient safety and suicide prevention. We forecast a £40,000 turnover in the first full year of operation. Through Safer Care Ltd., NCISH provides: expert scrutiny of individual cases and service documentation (SUI reports, service policies) identified by services, identify themes arising from cases, place local services in the national context and provide a training seminar to all staff about their local issues and the national picture.

5. Sources to corroborate the impact

S1. http://www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/nci/reports/safety_first_full_report.pdf
S2. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216928/Preventing-Suicide-in-England-A-cross-government-outcomes-strategy-to-save-lives.pdf
S3. Suicide Support and Information System. National Suicide Research Foundation (NSRF), Ireland. http://www.nsrf.ie/reports//Reports_2012/SSISReport2012.pdf
S4. Norwegian Centre for Violence and Traumatic Stress Centre. Report 4 (2011). http://www.nkvts.no/biblioteket/Publikasjoner/Violence-prevention-in-Norway-Activities-and-measures-to-prevent-violence-in-close-relationships.pdf
S5. Example of Hansard entry. All mentions of NCISH work available via www.parliament.uk http://www.publications.parliament.uk/pa/cm201212/cmhansrd/cm120110/debtext/120110-0001.htm#12011048000016
S6. NCISH toolkit for mental health services. http://www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/nci/toolkits/
S7. The National Health Service (Quality Accounts) Regulations 2010. http://www.legislation.gov.uk/uksi/2010/279/contents/made
S8. Report, Patient suicide: the impact of service change. Forthcoming, November 28 2013. *Available from UoM on request.*
S9. Safer Care Ltd. Company number 08598105. Companies House http://www.companieshouse.gov.uk