

<b>Institution:</b> The University of Manchester		
<b>Unit of Assessment:</b> 2 (Public Health, Health Services and Primary Care)		
<b>Title of case study:</b> Risk assessment and suicide prevention: Improving skills and confidence of frontline workers internationally through STORM training		
<b>Period when the underpinning research was undertaken:</b> 2000 - 2006		
<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>
Linda Gask	Emerita Professor Honorary Professor Professor of Primary Care	2014 - present 2013 - 2014 2000 - 2013
Gillian Green	Honorary Research Fellow Research Project Manager	2016 - present 2000 - 2016
Louis Appleby, CBE	Professor of Psychiatry	2000 - present
Richard Morriss	Senior Lecturer	2000 - 2003
<b>Period when the claimed impact occurred:</b> August 2013 - July 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> Y		
<b>1. Summary of the impact</b>		
<p>In 2019 there were more than 6,700 suicides registered in the UK and approximately 800,000 worldwide. Training professionals is essential for suicide prevention. The University of Manchester (UoM) developed and evaluated skills-based training for frontline professionals to assess and manage people at risk of self-harm and suicide. Since 2014, STORM (Skills Training on Risk Management) Skills Training CIC's turnover is in excess of GBP1,200,000 in a competitive global environment. It has supported six permanent staff and has trained 323 facilitators, who have subsequently trained over 90,000 frontline professionals in the UK and internationally. STORM's financial surplus supports <i>pro bono</i> national and international work - a core STORM principle is that no-one should profit from another person's distress.</p>		
<b>2. Underpinning research</b>		
<p>Our impact is based on research that took place at UoM from 2000 to 2006, with the first major publication in 2000. The group is unique internationally in having established a robust academic research base to underpin its training package.</p> <p>The STORM research programme involved the following interlinked projects:</p> <ul style="list-style-type: none"> <li>• STORM demonstrated that it is possible to significantly improve the attitudes, confidence and skills of a range of health and social care professionals in assessing and managing people at elevated risk of harming themselves and of dying by suicide. The professionals who were trained included doctors, nurses, psychologists, social workers, occupational therapists, health care assistants and other allied workers. Improvements were achieved through interactive education, consisting of brief, focussed presentation of the key knowledge required by the frontline workers, demonstration of specific tasks to be carried out, and developing skills to assess and</li> </ul>		

manage suicide risk. This was followed by discussion, role play and video-feedback of recorded therapist-patient interactions in small groups to enhance learning.

- Our research showed that STORM could be disseminated regionally by training and supervising a team of trainers to deliver it locally in general practices, hospitals and community settings. This 'cascade' model enhances reach while ensuring fidelity of training to the core principles of STORM [1].
- Our research indicates that training clinicians alone is insufficient to change a community's suicide rate, as suicide risk is influenced by many factors [2]. Nevertheless, training is a necessary component of any suicide prevention strategy, providing the essential skills for professionals both to communicate effectively with people who are in crisis and engage in redesigning services.
- Research across the North West of England [3] and Scotland [4] identified several organisational barriers to the dissemination and implementation of training. These barriers included the level and type of support that is provided within health and social care organisations for the delivery of skills training to employees.
- Since completion of the underpinning research, extensive national and international dissemination has taken place with ongoing evaluation. Training has been delivered successfully in a range of health and social care settings, including mental health services, accident & emergency and primary care. This has also been extended successfully to educational settings and the prison system [5].

### 3. References to the research

The research has received peer-reviewed funding from the Medical Research Council and the NHS in the North West and resulted in several papers in highly rated health services research journals.

1. **Appleby L, Morriss R, Gask L**, Roland M, Perry B, Lewis A, Battersby L, Colbert N, **Green G**, Amos T, Davies L, Faragher B. An educational intervention for front-line health professionals in the assessment and management of suicidal patients (The STORM Project). *Psychological Medicine* 2000; 30(4):805-12. doi: [10.1017/S0033291799002494](https://doi.org/10.1017/S0033291799002494) (93 citations, WoS, 12 January 2021).
2. **Morriss R, Gask L**, Webb R, Dixon C, **Appleby L**. The effects on suicide rates of an educational intervention for front-line health professionals with suicidal patients (the STORM Project). *Psychological Medicine* 2005; 35(7):957-60. doi: [10.1017/S0033291705004502](https://doi.org/10.1017/S0033291705004502) (30 citations, WoS, 12 January 2021).
3. **Gask L**, Dixon C, **Morriss R, Appleby L, Green G**. Evaluating STORM skills training for managing people at risk of suicide. *Journal of Advanced Nursing* 2006; 54(6):739-50. doi: [10.1111/j.1365-2648.2006.03875.x](https://doi.org/10.1111/j.1365-2648.2006.03875.x) (58 citations, WoS, 12 January 2021).
4. **Gask L, Lever-Green G**, Hays R. Dissemination and implementation of suicide prevention training in one Scottish region. *BMC Health Services Research* 2008; 8:246. doi: [10.1186/1472-6963-8-246](https://doi.org/10.1186/1472-6963-8-246) (15 citations, WoS, 12 January 2021).
5. Hayes AJ, Shaw JJ, **Lever-Green G**, Parker D, **Gask L**. Improvements to suicide prevention training for prison staff in England and Wales. *Suicide and Life-Threatening Behavior* 2008; 38(6):708-13. doi: [10.1521/suli.2008.38.6.708](https://doi.org/10.1521/suli.2008.38.6.708) (15 citations, WoS, 12 January 2021).

#### 4. Details of the impact

##### Context

Suicide is among the leading contributors to total Potential Years of Life Lost (PYLL) in western countries (Gunnell, Middleton *The Lancet* 2003; 362: 961-962). Training for health and social care professionals and other frontline workers has been a key component of national suicide prevention strategies. Personalised risk assessment is a recognised critical component of clinical standards for suicide reduction (National Confidential Inquiry into Suicide and Safety in Mental Health, NCISH - UoM). In designing STORM, our research group built on extensive experience in the development and delivery of skills training in mental health and primary care settings to develop the first fully evaluated suicide prevention skills training package.

##### Pathways to Impact

In 2016 STORM purchased the IP from UoM to become a fully independent social enterprise. STORM maximises its reach to a wide audience through training, influencing policy and reinvesting profit into promotional activities, community engagement and evaluation. More than 900 staff working with vulnerable people in the community have attended free events organised and funded by STORM. The benefits of STORM are made as accessible as possible by designing bespoke training packages and offering eligible not-for-profit organisations either subsidised or *pro bono* training sessions.

STORM partners with a range of organisations regionally and nationally including the NCISH and the Royal College of Psychiatrists [A]. STORM training is recommended by Public Health England [B] and NCISH, and its largest customer base is NHS Trusts.

##### Reach and significance of the continued impact 2013-2020

##### Scope of the STORM project

- STORM became a social enterprise in 2012, independent of UoM in 2016 and currently employs six permanent staff.
- STORM utilises a 'cascade' model. Organisations purchase licenses, and their staff are trained as STORM facilitators by one of STORM's 21 'consultant' trainers. An 18-month support package for facilitators is also offered under the license agreement.
- Surplus income is reinvested in line with UoM's Social Responsibility mission, by funding further research, development and dissemination through community engagement events, as well as *pro bono* training to organisations and groups who are unable to self-fund. Social responsibility initiatives are co-ordinated by a specific STORM team member. These include holding 12 free seminars and conferences since 2014 to showcase the latest research evidence and examples of good practice in helping people who self-harm. Since 2014, STORM's turnover is in excess of GBP1,200,000 (an increase of GBP1,100,000 since 2013) and a turnover of GBP2,000,000 is forecast by 2021.
- 35 new license agreements and contracts have been signed with NHS Trusts since 2014.
- STORM has extended its range of operations since 2014 on organisations outside health and social care. It has contracted with charity and community projects (14), councils and government agencies (13), educational establishments (11) and international organisations, as described below.

**UK and international reach 2013-2020**

- 69 more contracts and licence agreements have now been completed since 2014 with health, social care and other relevant organisations, totalling 229 since STORM's inception.
- We have supported another 323 training facilitators (now totalling 903), an increase of 56% since 2014.
- An estimated 90,000 additional frontline workers have been trained in the UK and internationally. This estimate is based on the number of trainers we have supported in organisations and their expected delivery over time, as well as those directly trained by STORM.
- If each trained person has mitigated risk of suicide in only two people, this will have resulted in an impact on an additional 180,000 people at risk of suicide since 2014.
- In Plymouth bespoke STORM training is given to all employees (e.g. toll booth operators) and contractors (e.g. construction workers and engineers) working at the Tamar Bridge crossing between Devon and Cornwall. *"Prior to STORM skills training it would be very rare for staff to engage with vulnerable people. We would contact police and monitor the situation using CCTV. Now, we can dispatch a STORM trained staff member to engage with the vulnerable person until police arrive"* [C]. More than 100 employees and contractors have now completed the bespoke course.
- In Scotland STORM was included in the national Choose Life initiative to train 50% of frontline staff in suicide prevention nationally. *"Our frontline staff are delighted by the STORM training which has assisted them in building on their existing skills"* [D].
- In the Republic of Ireland STORM training is now mandatory for all new paramedics joining the Irish Ambulance Service [E]. *"Among the most important skills that a paramedic possess [sic] are their communication skills, sometimes over and above their technical skills. They need to gain the patient's trust, in order to provide effective treatment. STORM has enhanced our staff communication skills to the point it has impacted on other aspects of their job and goes beyond just suicide prevention"* [F]. STORM has also been rolled out in the Irish Probation Service [G] with four staff trainers, and 30 probation officers trained so far to date.
- Training has been delivered on a *pro bono* basis internationally for 240 participants at events in South Korea, the United Arab Emirates, Pakistan and the Falkland Islands.

Training has been provided for 1,322 welfare staff in 163 secondary schools across Australia (over 10% of the national total) serving approximately 9,500 students, *"enabling wellbeing staff in school to have more confidence to ask questions and support young people who may be suicidal"* [H].

**Significance of STORM 2013-2020**

- STORM was awarded a place on the UnLtd Fast Growth programme for 2015, a programme that works in partnership with Santander, the UK Government Cabinet Office and the Coutts Foundation in tackling socioeconomic inequality. UnLtd supports social ventures that have compelling evidence of impact and make a positive difference to people's lives. This particular award recognised the success of

STORM above other social enterprises across the UK in creating a fast-growing and sustainable business with compelling evidence of impact.

- STORM featured in the ASTP-Proton Impact Report for Europe 2015, as an example of the impact of European research on health through the translation of academic research into services that impact patients' lives [I]. ASTP is an international organisation committed to improving the impact that public research has on the economy and society. STORM was chosen from several European businesses nominated for being a socially impactful business originating from an academic institution.
- Public Health England's guidance on mental health training [B] advises that "*STORM training methods have been researched and proven to improve attitudes to suicide and self-harm, increase confidence, and more importantly, develop the essential skills to risk assess and safety plan*" and that "*All frontline staff can benefit from STORM training.*"
- Several organisations, such as Coventry & Warwick Partnership Trust and Pennine Care NHS Foundation Trust, have now made training mandatory for staff and report positive and specific benefits on attitudes, skills and confidence in relation to suicide prevention. Frontline NHS staff report that STORM "*reduces staff anxiety and stress levels in dealing with situations. Staff can show evidence that we followed the training and asked the right questions and that really helps staff feel more confident. Before STORM training was implemented, self-harm wasn't looked at in detail and STORM has really helped staff to explore self-harm and suicide*" [J].

#### 5. Sources to corroborate the impact

- A. [Government Response to the Health Select Committee's Inquiry into Suicide Prevention](#) (in support of national impact of STORM) (2017-Page 16).
- B. [Public Health England Report \(2016\) Mental health promotion and prevention training programmes](#) (in support of national impact of STORM).
- C. Quote from the Tamar Bridge Operations Manager, Tamar Crossings UK (commenting on ability of staff at Tamar Bridge to help people in distress).
- D. Quote from a Consultant Nurse and Training Coordinator, NHS Argyll and Bute Scotland (describing the impact of STORM on frontline mental health staff after 'Choose Life' training).
- E. Paramedic Training in Suicide Awareness (in support of the international reach of STORM) <https://emergency-services.ie/wp-content/uploads/2016/01/Ambulance-Service-2.pdf>.
- F. Quote from the Education and Competency Assurance Officer, Irish Ambulance Service (describing the wider impact of STORM- on communications skills of paramedics).
- G. The Minister for Justice and Equality in Ireland, Deputy Charles Flanagan, parliamentary questions (in support of the international reach of STORM) (2017). <http://www.justice.ie/en/JELR/Pages/PQ-07-11-2017-473>.
- H. Quote from the Training Project Officer at Headspace, Australia (in support of the impact of STORM training on school wellbeing staff teams in Australia).
- I. [ASTP-Proton Impact Report for Europe (2015) (in support of European impact of STORM as an example of a socially impactful business originating from a university). <https://www.astp4kt.eu/download/impact-report-for-europe-2015/>.
- J. Quote from a Consultant Nurse, Cumbria, Northumberland, Tyne and Wear NHS Trust. STORM trainer (highlighting the impact of STORM training on staff confidence to explore self-harm and suicide).