1. The Welsh Ambulance Services NHS Trust welcomes the opportunity to submit evidence to Committee on this important topic.

2. This evidence comprises two elements: a general summary of the organisation’s work in the broad realm of mental health and suicide more particularly, coupled with a detailed submission based on research by the Welsh Ambulance Service’s Head of Research and Innovation, and Advanced Paramedic Practitioner, Nigel Rees.

3. Sadly, it is not uncommon for ambulance service staff to attend incidents of suicide. It is similarly the case that attendances to patients experiencing mental distress are also rising.

4. Caring for patients with a mental health problem demands a particular set of skills which can be quite different from those required for more what might be considered as more traditional types of emergency care, for example trauma.

5. Additionally, working collaboratively with other emergency services, notably the police, and the wider NHS system is crucial in ensuring that patients receive the right service for them, and that the voices of this vulnerable group of patients are heard.

6. Importantly, the mental well-being of ambulance service staff cannot be overlooked and, as an organisation, we are committed to developing support services for colleagues in order that they have access to any support required, regardless of whether that need is the result of distress experienced as a function of their professional experiences or because of matters outside work.

7. In the interests of brevity, included with this submission is a copy of the Welsh Ambulance Service’s Mental Health Improvement Plan 2017-2019 which outlines the organisation’s approach to developing both the way we care for patients with mental ill health and also support our staff and the wider system as we adapt our services to cope with this increasing demand.

8. Detailed below is a detailed submission written by the Welsh Ambulance Service’s Head of Research and Innovation, Nigel Rees, who has discrete knowledge of, and academic interest in mental health and self-harm paramedic care.

9. It is hoped that the information included in this submission is helpful to Committee and that it will help inform both questioning at the forthcoming oral evidence session and the outcome of the inquiry.
Summary
The Health, Social Care and Sport Committee is currently undertaking an inquiry into suicide prevention in Wales. This paper serves as the detailed response to this inquiry from the Welsh Ambulance Services NHS Trust (WAST). The response has been prepared by Nigel Rees, who is an Advanced Practitioner and Head of Research & Innovation for WAST. Nigel has been exploring paramedics’ perceptions of care for people who self-harm as part of his PhD in Medical and Health Studies at Swansea University. The paper is informed by unpublished work from this PhD and the most up-to-date available research evidence in this area, including three peer reviewed publications which constitute the only published research on paramedic care for people who self-harm.

The paper presents the following findings and recommendations, along with more detailed information underpinning the recommendations:

Findings
- At approximately 5% of all calls to emergency ambulance services, self-harm far exceeds calls for major trauma and cardiac arrest combined.
- Duncan et al (2017) found that 4% of people who self-harm died within the year of their 999 ambulance service contact, and that 35% of these were recorded as suicide. Also, up to four times more people die in Wales by suicide than in road traffic collisions (ONS 2014 a, 2014 b).
- People who self-harm are up to 100 times more likely than the general population to die by suicide, and it has been found that one person in every 100 appearing in hospital following self-harm dies by suicide within a year, and five per cent in the following decade. One study found 4% of people who self-harm presenting to one ambulance service died within the year of their 999 ambulance service contact, and that 35% of these were recorded as suicide.
- The quality of care and attitudes from health care staff towards people who self-harm or die by suicide have previously been reported as being unsatisfactory.
- Studies have revealed how patients avoid services for fear of being detained under the Mental Health Act (1983).
• Ambulance staff and police face difficult legal and ethical challenges when caring for people who self-harm or have thoughts of suicide.
• Research has demonstrated that invalidated suicide risk prediction scores are commonly used in emergency care. Such scales perform no better, and sometimes worse, than clinician or patient ratings of risk. The limited clinical utility of such risk scores may be leading to a waste in valuable resources.
• Assessment in which the patients’ views are taken seriously, participation in decisions about their care and treatment, and provision of clear explanations for decisions are highly rated.
• Policy and guidelines recognise the role ambulance staff must play in the care of people who self-harm and in suicide prevention. The role of ambulance staff needs to be supported by greater support, referral pathways and advice from a wide range of professionals and groups.
• A range of initiatives have been introduced to UK Ambulance Services to support staff in caring for people who self-harm or have thoughts of suicide. These include local pathways, telephone advice from mental health professionals and joint police/mental health responses. Despite this, there is limited published evidence of the effectiveness of such initiatives, and what does exist suggests more progress and research is needed.
• Significant challenges and variations exist in terms of availability of pathways, support for ambulance staff, and consistent approaches for people who present after having consumed alcohol. Resourcing the development, delivery and maintenance of these new ways of working is also challenging.
• Finally, there appears to be limited consistency of audit and reporting processes across Wales to assess the effect of any such new ways of working or interventions.

Recommendations
• Guidelines and policy should continue to acknowledge the role of ambulance staff in caring for people who self-harm and preventing suicide. Greater emphasis should be placed on avoiding variation in support for ambulance staff, and a consistent, national approach should be considered for allocation of appropriate resources, for improved care, reporting and audit.
• Mental health literacy should be considered key to improving ambulance service care for people who self-harm or have thoughts of suicide. Whilst this should include
educating patients and carers in how to respond during crisis, it should also include ambulance staff education for greater understanding of self-harm.

- Scales to predict risk of suicide should not be used to determine patient management or to predict suicide.
- Tailored, context specific and multi professional education and training should be developed for ambulance staff in order to give greater understanding of self-harm, suicide prevention and improve competence and confidence. This must include appropriately interpreting and applying mental health legislation.
- Support mechanisms for ambulance staff caring for people who self-harm and suicide prevention, such as the referral pathways, and the emerging street/mental health models, are to be welcomed; however, they need to be rigorously evaluated.
- Future development of legislation around self-harm and suicide prevention should consider the role of ambulance staff and the complexity of paramedic care for people who self-harm.
- High quality research is urgently needed on the ambulance service role in suicide prevention and the care of people who self-harm.
Introduction
Scale of Self-Harm presenting to ambulance services
Self-harm is one of the five top causes of acute hospital admissions in the United Kingdom (U.K.) (RCP 2010), and is increasing by 10% every three years (NHS information Centre 2011, HSCIC 2015) with 98.8% being emergency admissions (HSCIC 2015). Duncan et al (2017) conducted a retrospective cohort study of patients attended by the Scottish Ambulance Service in 2011, and found 9014 calls to be with ambulance clinician attendance codes relating to ‘psychiatric emergency’ or ‘self-harm’, and of these, almost half (n=3238, 48%) made at least one repeat call. These figures may, however, under-represent the scale of self-harm calls to the ambulance service, as another UK study led from Wales scrutinised narrative sections of ambulance clinical records, and found that up to 10.7% of 999 calls to ambulance services relate to mental health problems, and of these 53% are related to self-harm (INVENT 2013). Therefore, at approximately 5% of calls to emergency ambulance services, self-harm far exceeds calls for major trauma and cardiac arrest combined; indeed, up to four times more people now die in Wales by suicide than in road traffic collisions (ONS 2014 a, 2014 b). These figures do not, however, reflect the true scale of self-harm, as only 10-20% of those who engage in self-harm present to hospital (Pages et al. 2004, Ystgaard et al. 2003, Doyle et al 2015), leading to suggestions that there is a hidden population of distressed individuals, who may benefit from access to mental health services (Ystgaard, et al 2003). The true scale is estimated to be 1 in 130 people, as many make efforts to avoid A&E because of the unsympathetic response they expect there (MIND 2004).

One person in every 100 appearing in hospital following self-harm dies by suicide within a year, and five per cent in the following decade (Hawton & Fag 1998). Self-harm elevates risk of suicide 50 to 100-fold within the year following self-harm (Chan et al, 2016), and those who self-harm are also 100 times more likely than the general population to die by suicide (NICE 2004). Duncan et al (2017) found that 4% of people who self-harm died within the year of their 999 ambulance service contact, and that 35% of these were recorded as suicide.
What do patients think of care?

The quality of care and attitudes from health care staff have previously been reported as being unsatisfactory (NICE 2004, MIND 2004, Warm, Murray, & Fox 2002), and patients have also reported negative and hostile reactions from ambulance staff (Mental Health Foundation 2006). Studies have revealed how patients avoid services for fear of being detained under the Mental Health Act (1983), as the person’s actions may bring them to the attention of the police and to a place of safety (NCCMH 2004). However, assessment in which the patients’ views are taken seriously, participation in decisions about their care and treatment, and provision of clear explanations for decisions are highly rated (Taylor et al, 2009).

Challenges with Self-Harm and Suicide presentations to ambulance services

Risk of further harm or death of a patient by suicide is of concern to paramedics, but sometimes such care is refused by people who self-harm (Rees et al 2016). RCP (2008) advises if a person refuses care and is mentally capable of making the decision, it must be respected, even if refusal risks injury to health or premature death (unless the Mental Health Act 1983 can be applied). When considering application of the MHA (1983) ambulance staff need support of professionals with statutory responsibilities within this act such as the police, medical personnel and approved social workers.

Section 136 of the MHA (1983) is sometimes applied in scenarios involving self-harm or concerns of suicide (Rees et al 2016). However, there have been challenges over improper application of section 136 of MHA (1983) in such circumstances (Webley v St George 2014, Seal v Chief Constable of South Wales Police 2007, Rees et al 2016). The England and Wales Independent Police Complaints Commission (2015) found examples of unlawful section 136 detentions, with people being detained in private premises; interviewees talked about individuals who had been ‘enticed’ outside then detained under section 136. It was stated that this was generally done because officers were either: concerned about the welfare of the individual; did not feel they had time to wait for a warrant to be obtained under section 135 of the MHA (1983) in order to lawfully detain someone in a private premise; or did not feel they had any alternative options for detaining the individual. Such scenarios challenge ambulance staff who feel they lack the support to provide effective care for people who self-harm and refuse to accept help (Rees et al 2016).
Ambulance staff are often the first health professionals contacted following self-harm or suicide (Rees et al 2014), and whilst paramedic clinical practice guidance (JRCALC 2016) covers aspects of self-harm care, there are limited paramedic specific education or training programs focussing on self-harm and suicide prevention. Calls have been made for qualitative research focusing on occupational groups such as paramedics to better understand care delivered to those who self-harm (NICE 2004, RCP 2010. Warm, Murray, & Fox 2002). The author of the document has conducted previous metasyntheses and systematic reviews of the literature (Rees et al 2014, 2015), which have highlighted the challenges and opportunities which exist in paramedic care for people who self-harm, but also the limited nature of published evidence and lack of tailored education and support for paramedics in caring for people who self-harm.

Assessing risk of suicide
Risk scores for use in predicting suicide are common in emergency care. Quinlivan et al (2014) found a wide range of invalidated tools in use, and advises that such tools were not intended to replace clinical assessments or face-to-face communication. The Royal College of Psychiatrists (RCP 2010) also holds that prediction of suicide risk is virtually impossible, and that ‘tick box’ assessment: “removes staff from people, devalues engagement and impairs empathy... empathic listening and talking have key therapeutic benefits” (RCP 2010 p79). This was recently emphasised by Quinlivan et al (2017) who found that such scales performed no better, and sometimes worse, than clinician or patient ratings of risk, and recognised their limited clinical utility, leading to a waste in valuable resources. In line with guidelines (RCP 2010), Quinlivan et al (2017) advised that risk scales should not be used to determine patient management or to predict suicide. It is, therefore, argued that such scales should not be relied upon by ambulance services, rather targeted education is key to understanding and managing such clinical complexity in caring for people who self-harm, along with developing empathetic understandings.

Policy context
A raft of policy and guidelines recognises the role ambulance staff must play in the care of people who Self-Harm or those who die by suicide (RCP 2006, NICE 2004, Mental Health Crisis Care Concordat 201, Talk to me 2 2015). Such guidelines call for Ambulance services to work with other organisations to develop care pathways, including service users being taken directly to mental health units, primary care, crisis intervention teams or to social services. They suggest that ambulance trusts, emergency departments and mental health trusts
should develop locally agreed protocols for alternative care pathways for people who have self-harmed. These policies also call for ambulance staff to have access to telephone advice from crisis resolution teams, from approved doctors and social workers, regarding the assessment of mental capacity and the possible use of the Mental Health Act. Policy also advocates involving patients in decisions over care, and offering alternatives to the Emergency Department, but despite this it is reported that this is not happening (Rees et al 2016), which is backed up research which indicates conveyance rates to hospital [usually the Emergency Department] for self-harm to be between 89 and 95%, even when a paramedic has not recorded suicidal intention (Duncan et al 2017, INVENT 2013). Challenges exist in patients who have consumed alcohol with reports of mental health services refusing referral of patients who have consumed alcohol (Rees et al 2016). This is problematic, as there is strong association with suicidal behaviour and alcohol, with up to 46.1% of SH patients having consumed alcohol within six hours of their self-harm incident (Haw et al 2005).

The Welsh Ambulance Services NHS Trust has worked collaboratively to develop alternative ways of working in caring for people who self-harm or have thoughts of suicide. Despite this, significant challenges and variations exist in terms of availability of pathways, support for ambulance staff, clear and consistent approaches for people who present after having consumed alcohol and resources to develop, deliver and maintain these new ways of working. Finally, there appears to be limited consistency of audit and reporting processes across Wales to assess the effect of any interventions.

Opportunities to improve care for people who Self-Harm

Improving care for people who self-harm or have thoughts of suicide must recognise the influence of ambulance service staff on opportunity for intervention. Help-seeking intentions decrease with increasing suicidal ideation (so-called help-negation) (Rickwood et al 2005), and embarrassment or shame felt by individual or family members and friends, who might help the at-risk individual may also result in fewer opportunities for intervention (Ahmedani 2011, 2013). Individuals are said to seek mental health services in stages, first for problem recognition, then deciding to seek help, and finally, service selection, and these stages can be influenced by factors such as attitudes and beliefs about suicide, health literacy, internal and external barriers, and perceived need for treatment (Gould 2004, 2006). Stigma, both self and induced by others, is believed to reduce likelihood an individual will seek help to resolve a suicidal crisis (Batterham et al 2013, Ben-Zeev et al 2012). Calear et al (2014) highlighted importance of mental health literacy (knowledge of the symptoms, causes and treatment of a
disorder) and stigma (negative attitudes towards individuals with a disorder) in the help-seeking process in suicide prevention. High suicide literacy and low suicide stigma, however, are significantly associated with more positive help seeking attitudes and greater intentions to seek help (Caleara, et al 2014). This is supported elsewhere in community-based research, where low mental health literacy and high stigma were found to be associated with an unwillingness to accept help from mental health professionals, a lack of treatment adherence and a tendency towards inappropriate service use (Reynders et al. 2014).

Ambulance staff therefore need support to care for, and signpost at risk individuals to appropriate support care; these people may otherwise avoid services. Some countries have developed legislative powers for paramedic involuntary detention of people with self-harm and mental health problems. The Australian Mental Health Act (2000) section 33-35 (p.47-49) authorises police officers and ambulance officers to make emergency examination orders and detain patients in mental illness and an imminent risk of significant physical harm to the person or someone else. Despite this, there is confusion over its enactment (Shaban et al 2005). Extending legislative powers to UK paramedics may address some of these issues, but will require careful consideration. Any such changes to mental health legislation or policy should consider the challenges ambulance staff face in caring for people who self-harm and in suicide prevention. Mental Health literacy should therefore be considered key to improving ambulance services care for people who self-harm. Whilst this should include educating patients and carers in how to respond during crisis, it should also include paramedic education for greater understanding of self-harm to reduce stigma.

Joint mental health and police mobile response units have been implemented in a small number of other countries, including Canada (Forchuk et al. 2010; Kisely et al. 2010), and the US (Lamb et al. 2002; Scott 2000; Zealberg et al. 1992). In Australia, a joint police-mental health response unit referred to as a Police and Clinical Early Response (Huppert 2015) was introduced. Suicide was the largest patient group faced by PACER at 33%. Introduction of PACER resulted in reducing the time to assessment for patients with mental health problems, was less costly than standard care, and resulted in fewer patients being transported to hospital ED for care (19% of cases with PACER; 82% of cases with usual care). In the U.K., street triage schemes have been introduced due to the increased involvement of police forces with individuals suffering from poor mental health. They involve dedicated mental health professionals collaboratively working with police officers, attending scenes and offering more tailored interventions, in order to ensure individuals receive the most appropriate care.
Initiatives such as these involving the police, paramedics and mental health workers in improving care for people who self-harm report varying degrees of success, yet there is little published research reporting on their effectiveness (Lee et al 2015, NIHR 2016), and there is a need for further research into this.

**Limitations:**

This paper has been informed by the best available evidence relating to self-harm and suicide prevention in an ambulance service context. It is recognised that pre-hospital and ambulance services care has a limited evidence base, and therefore studies in this response were often conducted in a non-ambulance service context. Those studies which have explored self-harm within pre-hospital and ambulance care context are of low quality, with small samples. It is therefore strongly recommended that more high quality research is needed to explore these issues further.

**Conclusion**

Ambulance services respond to significant numbers of people who self-harm or have thoughts of suicide, and are therefore key to improving care and preventing suicide. Policy and guidelines recognise this role, and recommend that ambulance services should be supported by a range of stakeholders and organisations to deliver care. Patients have reported that attitudes from staff and care provided is unsatisfactory, and therefore avoid care, whilst ambulance staff have reported limited support and education in caring for people who self-harm or have thoughts of suicide. Despite significant collaboration and progress being made in recent years, more work is required to support ambulance staff in their care for self-harm and in suicide prevention.

The Welsh Ambulance Services NHS Trust welcomes the opportunity to contribute to the important work of the Health, Social Care and Sport Committee inquiry into Suicide Prevention in Wales. It is hoped that the findings and recommendations in this response will be well received by the committee and considered in its work in preventing suicides in Wales.
References


NHS information Centre (2011). NHS Information Centre report shows 10.6% increase in intentional Self harm hospital admissions in 3 years. Available from http://www.nhsconfed.org/Networks/mentalhealth/latestnews/Archive/Pages/nhsinformationcentrereport


Seal v Chief Constable of South Wales Police (2007) UK HL 31


Webley v St George (2014) Webley v St George’s Hospital NHS Trust and anr [2014] EWHC 299


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