

**NORTHUMBERLAND, TYNE AND WEAR NHS FOUNDATION TRUST**  
**BOARD OF DIRECTORS' MEETING**

**Meeting Date:** 25 November 2015

**Title and Author of Paper:**

Comparative Analysis of unexpected deaths in NTW and NCISH

**Paper for Debate, Decision or Information:**

Information

**Key Points to Note:**

This paper attempts to benchmark the NTW experience of suicides between 2010-14 against national data presented in the 2015 report of the National Confidential Inquiry into Suicide and Homicides in People with Mental Illness. Limitation of the comparison are noted.

The local experience is, in most cases, either similar to, or better than, the national data would suggest. The only area which is highlighted for concern in deaths in young people aged under 25 where the number of deaths in men aged 20-25 is higher than nationally.

It is suggested that this, or a similar, analysis is repeated each year in September/October following the publication of the NCISH report in July. This would be supplemented by an interim analysis of local data only in March/April each year.

**Outcome required:**

Note the content, and advise on the suggestion.

**COMPARATIVE ANALYSIS OF FIVE YEARS OF UNEXPECTED DEATHS IN  
NORTHUMBERLAND,  
TYNE AND WEAR FOUNDATION TRUST AND THE 2015 REPORT OF THE  
NATIONAL CONFIDENTIAL INQUIRY OF SUICIDES AND HOMICIDES.**

(ANALYSIS UNDERTAKEN ON DATA EXTRACTED FROM SAFEGUARD ON 12<sup>th</sup> MAY 2015)

## CONTENTS

- 1) Purpose
- 2) NTW data analysis
- 3) NCSIH data analysis
- 4) Suicides in patients
- 5) Suicides in males
- 6) People aged under 25
- 7) Patients with alcohol and drug misuse
- 8) Crisis resolution / Home treatment teams
- 9) In-patient suicide
- 10) Patients recently discharged from hospital
- 11) Summary

## 1) PURPOSE

This document attempts to provide some benchmarking of NTW unexpected and unnatural death data against the national data published annually by the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH).

As outlined later, this comparison must be treated with caution, as there are significant methodological differences in the data sources, definitions and analyses, as well as the time series available in each dataset. Nonetheless, the comparison provides some useful insights in respect of trends and gives an indication of whether the experience within NTW is similar, or not, to the national experience.

## 2) THE NTW DATA ANALYSIS

This analysis was undertaken on data extracted from NTW SafeGuard on 12<sup>th</sup> May 2015. As this is a live database, which is continually updated with results from coroner verdicts, the data, and consequently the analysis, will change on a daily basis.

The analysis covers unexpected deaths reported through the IR1 system over the five year period from January 1st 2010 to December 31<sup>st</sup> 2014. Cases are allocated to a year based on the date of death, where known, or notification. Cases are allocated to a service line based on the entry in SafeGuard, which is derived from information provided on the IR1 form.

An **unexpected death** is one which occurs in the absence of ill health which led to a predictable death. Where that death occurred as the result of a natural pathological process (e.g. heart attack/stroke/pneumonia etc), it is termed a **natural unexpected death**. Where death was otherwise caused, often through own intent and/or the involvement of an external agent, it is termed an **unnatural unexpected death**.

Coroner verdict outcomes are obtained from the coroner's office after the inquest has been held. This may be several months after a death has occurred, although this time gap is currently falling. The data provided in SafeGuard is a direct quote from the coroner office report.

For the purpose of undertaking this analysis some reclassification of the coroner verdict is necessary.

- 1) Where a coroner has used a standard form of verdict this is the term used. This includes **Suicide**, **Open**, **Misadventure**, and **Accident**.
- 2) Where the coroner has used a short narrative verdict the following reclassification has been used.
  - Where the words drug(s) and/or alcohol appear the verdict is reclassified as **Drug/Alcohol**.

- Where there is an indication that the person has killed themselves, but no indication of intent is apparent, the verdict is reclassified as ***Killed Self***.
- 3) Where the coroner has given a long narrative verdict this is reclassified as ***Narrative***.
  - 4) There are a small number of cases where it is not possible to determine the coroner verdict. These cases are classified as ***Other***.
  - 5) Where the coroner has not yet given a verdict the cases is classified as ***Pending***.

The term ***Death by own Hand*** is used to describe all events where it is likely that the person killed themselves, whether they had intended to do so or not. This includes all *Suicide* verdicts, all deaths re-classified as *Killed Self* and all *Open* verdicts (conventionally included in analyses of suicide cases).

This is an interim analysis as there are a significant number of verdicts still pending, particularly for deaths occurring in 2014. Many of these may be returned as either natural deaths, or due to accident/misadventure. Therefore, it cannot be concluded, at this stage, that they represent persons who died by own hand. There is a balance to be drawn between an early analysis which is timely and spots developing patterns, and a later analysis which is accurate and allows informed interpretation. National data which can be used to benchmark NTW data is not available until at least one year behind Trust data.

In many cases, particularly the analyses on individual services, the number of events in any time period are small and subject to random variation. Therefore, caution is needed in interpreting short term trends; for example, year to year differences.

### 3) THE NCISH DATA ANALYSIS

The latest report of the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH) was published in July 2015. The Inquiry Report provides data on suicides and homicides in each of the four UK countries separately, and has published a series of annual reports dating from 2003.

The NCISH takes its source data from the Office of National Statistics based on the outcome of coroner inquests. Cases are included in the dataset where the coroner verdict was suicide or open, and, more recently, cases where the narrative verdict indicates intent. This is similar to the NTW dataset in that the local definition of unnatural death also includes deaths where intent is indicated, but the datasets are not necessarily identical in this respect.

In addition, contact with mental services is defined within NCISH as contact with mental health services within 12 months prior to death; this is significantly different to the NTW methodology where contact is defined as being within 6 months, in line with STEIS reporting requirements. It is therefore likely that the NCISH dataset contains some former NTW service users who died between 6 and 12 months following their latest contact.

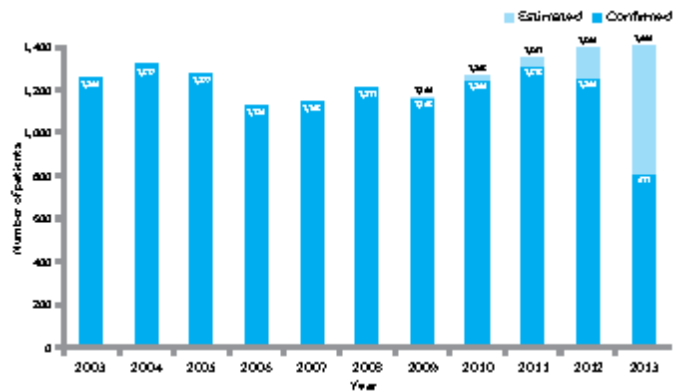
For each death reported to the NCISH a detailed questionnaire is sent to the service users last known consultant, and requests information relating to the incident itself and demographic, social and medical background, some of which is opinion rather than fact based. Again, this differs from the NTW process where the data is entirely factual and limited in scope.

Another major difference is the time series of data available. The NCISH report published in 2015 relates to national data available up to 2013, and is incomplete for some of the data for the latest year. This is due to the length of time taken to collect the data. NTW data is more current; data is available in 2015 for the full year up to the end of 2014, but is also incomplete for the more recent years depending on the time taken for coroner conclusions to be issued.

#### 4) Suicides in patients

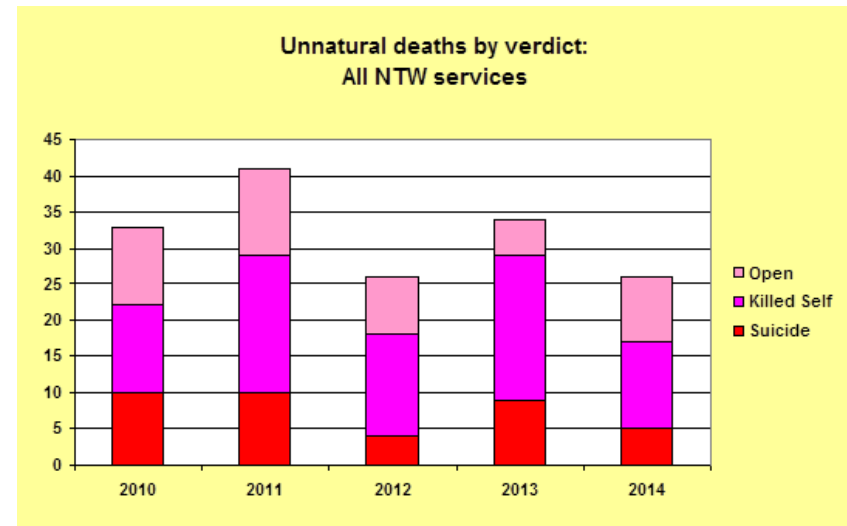
##### NCISH:

- During 2003-2013 28% of general population suicides were identified as patient suicides i.e. the person had been in contact with mental health services in the 12 months prior to death (*para 57*).
- There was an overall increase between 2003 and 2012 in the number of patient suicides (...) (*para 58*).



##### NTW:

- At the time of analysis there had been 160 coroner confirmed cases of death by own hand. This included 38 suicides (24%), 77 “killed self” (48%) and 45 open (28%).
- In addition, there were 25 deaths with verdicts still pending; 2 for deaths occurring in 2012, 7 for deaths occurring in 2013, and 16 for deaths occurring in 2014.
- There was no evidence over the period for an increase in the number of such deaths

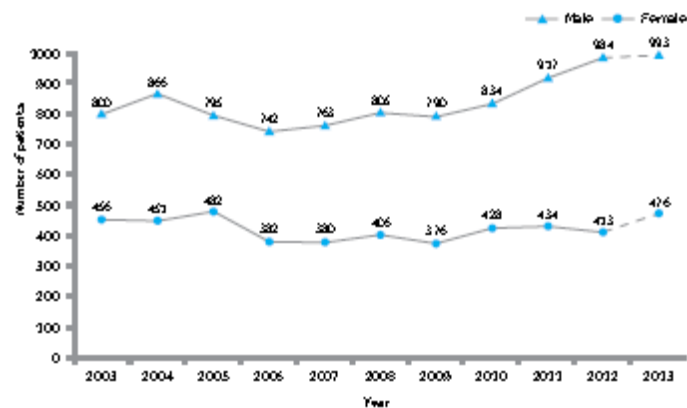


## 5) Suicides in men

### NCISH:

- The annual number of suicides in male patients has been increasing since 2006 while for females the number has fallen between 2003 -2012. The rise in male patients since 2006 is 34% whereas the general population rise in males is 15% (*para 59*).

Figure 7: Number of patients suicides, by gender

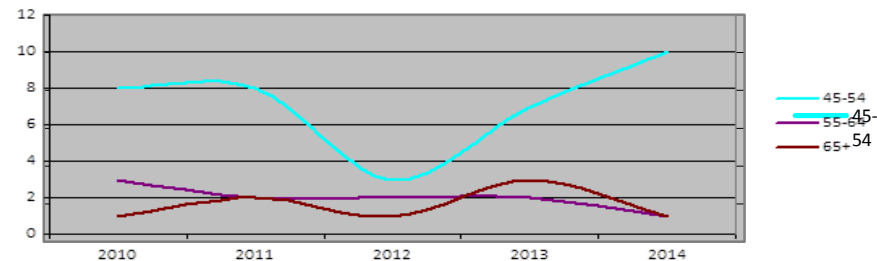


- There was an increase in the number of male suicides in those aged 45-54, 55-64 and 65+. The annual number of suicides in male patients aged 25-34 has fallen in the report period and there has also been a fall in female patients aged 65+. The rise in male patients aged 45-54 has been particularly striking, around 90% since 2006. (*para 60*).

### NTW:

- In NTW there has been a similar increase in suicides in men aged 45-54, though the numbers are small and there is year to year variation.

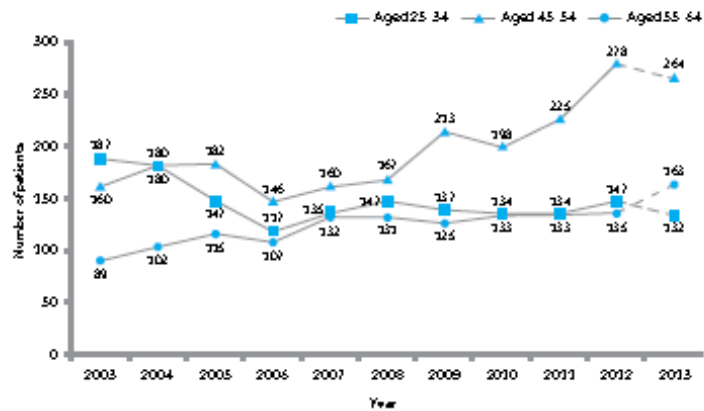
### Suicide deaths in males by age



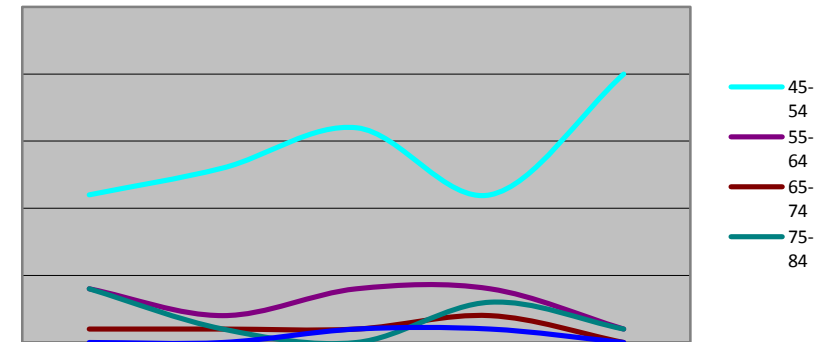
- Looking at all unnatural deaths there has been a similar trend. In 2013 there was a drop compared to the previous and subsequent year, but there has been a new peak in 2014



Figure 8: Patient suicide: number of male suicides in those aged 25-54, 45-54 and 55-64



## Unnatural deaths in males by age

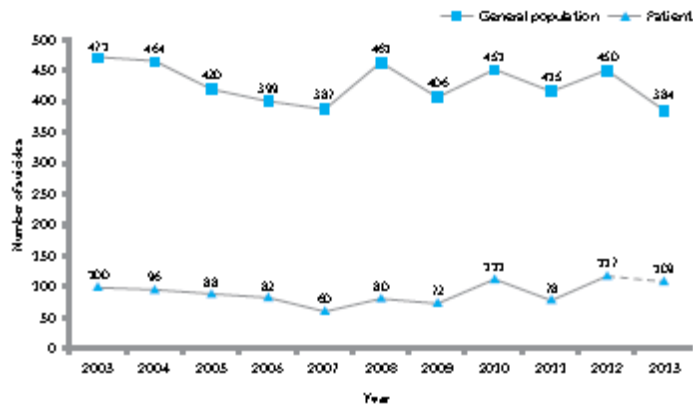


## 6) People aged under 25

### NCISH:

- During 2003-2013 there were 4,708 suicide in the general population in people aged under 25, 10% of all suicides (*para 69*).
- 993 of those under 25 were patients, 7% of patient suicides and 21% of all suicides in this age group (*para 70*).
- Patient suicides in under 25s decreased until 2007 after which there has been an increase. The peak number was in 2012 (*para 71*).

Figure 12: Number of general population and patients suicides in those aged under 25



### NTW:

- 19 people aged under 25 received a coroner verdict indicating suicide out of a total of 160 cases. This represents 12% of all patient suicides over this time period.
- This appears higher than the national data.
- The youngest service user was aged 19, and the number of deaths was fairly equally distributed across each year between 20 and 25.
- 17 of these deaths were in male service users; only 2 deaths were in female service users
- The numbers each year are too small to inform trends.

## 7) Patients with alcohol and drug misuse

### NCISH:

- Between 2011 -2013, 249 (7%) patients were under drug services and 268 (7%) were under alcohol services (*para 81*).

### NTW:

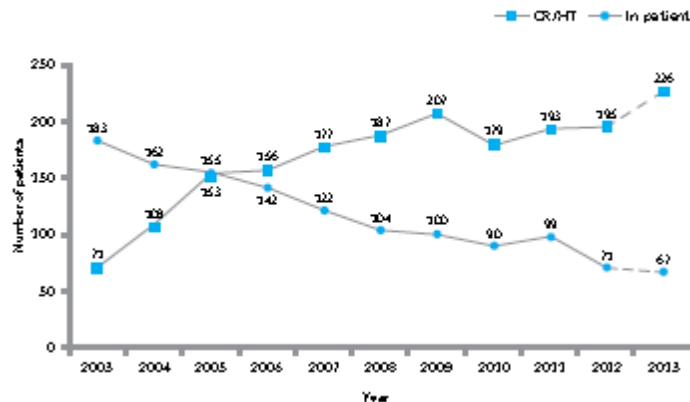
- The NTW dataset does not differentiate between alcohol and drug services
- 14 out of 160 suicides occurred in service users using addiction services (8.8%); this is less than expected from national data.
- This compares with 92 out of 395 of all unnatural deaths (23.3%); the commonest category of coroner verdict is misadventure

## 8) Crisis resolution/Home treatment teams

### NCISH:

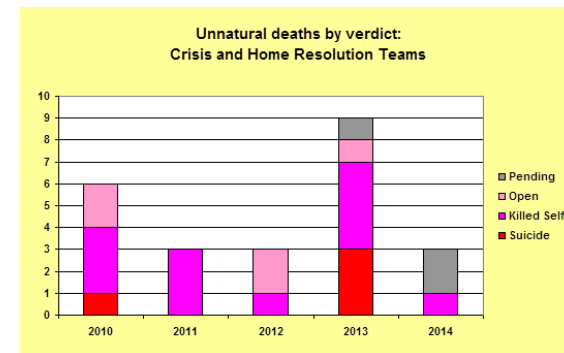
- There were 1,852 suicides in patients under crisis resolution/home treatment (CR/HT) teams, 14% of the total sample (...) (*para 91*).
- Overall, the annual number of suicides under CR/HT increased over the report period (...) (*para 92*).
- Since 2005 there have been more patient suicides under CR/HT than in-patient care reflecting a change in the nature of acute care. (*para 93*)

Figure 1.7: Patients suicide: number under crisis resolution/home treatment services and mental health in-patients



### NTW:

- Over the five year period 13% (21 out of 160) of services users who received a verdict of suicide, killed self or open were under CRHT care
- The number of such cases rose substantially in 2013, mirroring the predicted rise in NCISH, but fell significantly in 2014.

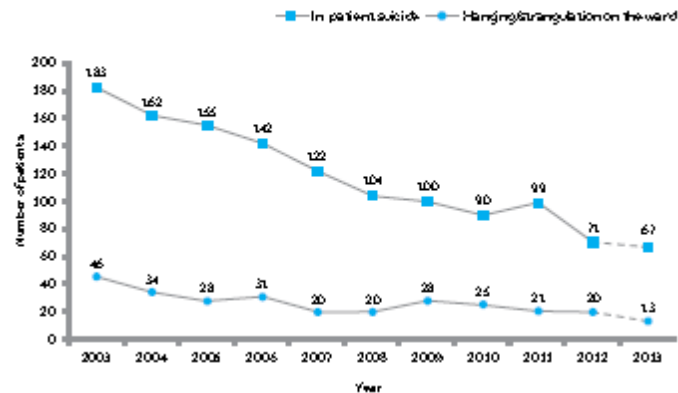


## 9) In-patient suicide

### NCISH:

- There were 1,295 in-patient deaths by suicide in 2003-2013, 9% of patient suicides (*para 86*).
- From 2003 to 2012 there was a 61% fall in the number of in-patient suicides (...) (*para 87*).

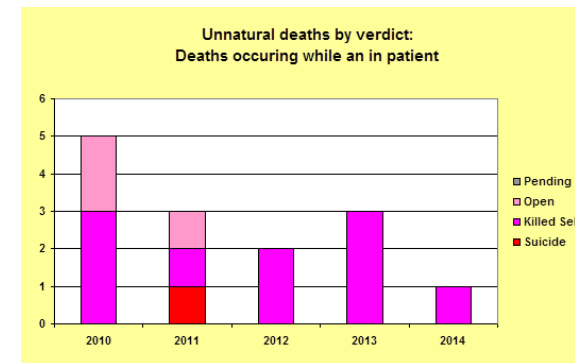
Figure 1.6: Patient's suicide: number of mental health in-patients; number who died by hanging and strangulation on the ward



- There were 351 suicides in detained in-patients, 27% of all in-patient suicides (...) (*para 89*).
- 282 in-patients died after absconding from the ward, 22% of all in-patient suicides (...) (*para 90*).

### NTW:

- There were 14 in-patient deaths by own hand, 8.8% of all such deaths
- Three of these deaths were in detained in-patients, 21% of all in-patient deaths
- There has been an ongoing downward trend in the number of in-patient deaths

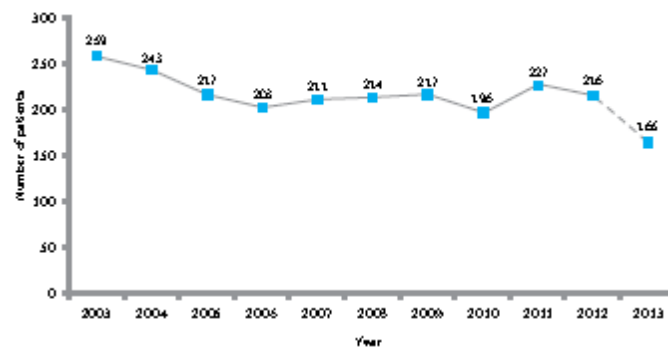


## 10) Patients recently discharged from hospital

### NCISH:

- There were 2,368 suicides within 3 months of discharge from in-patient care, 17% of all patient suicides and 19% of suicides in community patients (...) (*para 97*).
- There was an overall fall in the annual number of post-discharge suicides between 2003-2012 (...) (*para 98*).

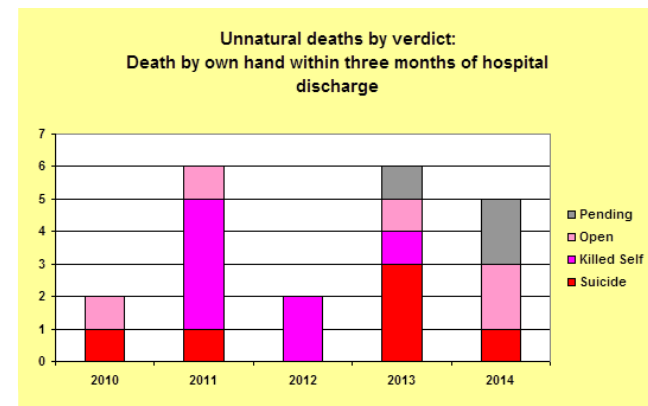
Figure 18: Patients suicide: number who died within 5 months of in-patient discharge



- Post discharge suicides were most frequent in the first week after leaving hospital (...) 15% of all suicides within 3 months of hospital discharge (*para 99*).

### NTW:

- Over the five year period, 18 NTW service users died by own hand within 3 months of discharge from in-patient care, 11% of all patient deaths.
- The annual number of post-discharge deaths was small and did not show a clear trend over the five year period



- The highest risk of death was in the first week following discharge

## 11) Summary

The differences in the methodology used in the NCISH and NTW analyses must be borne in mind when attempting to draw any conclusions from this comparison. In particular, the NCISH dataset is much larger and therefore able to identify trends with more validity than the local dataset.

While the NCISH has shown an increase in patient suicides, particularly over the period 2009 to 2013, the local data does not mirror this. Excluding a peak number of such deaths in 2014, the number of deaths each year has remained constant between 26 and 34 deaths each year.

In both sets, males aged 45-54 appear to have higher, and increasing, rates of suicides, although the number within NTW remains too small to draw clear conclusions.

There is a suggestion that the proportion of patient suicides in NTW who are aged under 25 (12% of all) is higher than the national rate (7% of all). This is not due to suicide in children, but due to deaths in young men aged 20-25. This is an area which may warrant further investigation, though the numbers are small (19 in total).

Suicide in people in contact with alcohol and drug services appears less common than in the national data. This may be due to local variation in coroner practice as in the North East deaths in users of alcohol and drug services are likely to receive a diagnosis of misadventure.

The NCISH raised concerns about an increasing number of suicides in users of crisis resolution / home treatment teams. There was a peak number of such deaths in NTW in 2013, but the number fell significantly in 2014. Over the five year period of the NTW analysis, the proportion of all suicides occurring in users of these services was similar (13%) to that in the NCISH study (14%).

In line with the NCISH data, the number of in-patient deaths has fallen and the proportion of these occurring in detained patients was less.

A smaller proportion of NTW patients died within 3 months of discharge of hospital (11%) than nationally (17%). The number has fluctuated between 2 and 6 deaths each year.