NORTHUMBERLAND, TYNE AND WEAR NHS FOUNDATION TRUST

BOARD OF DIRECTORS MEETING

Meeting Date: 27 April 2016

Title and Author of Paper:
Interim analysis of six years of unexpected unnatural deaths (2010 to 2015) in NTW

Paper for Debate, Decision or Information: Information

Key Points to Note:

- This is an interim analysis of unexpected unnatural deaths recorded in the NTW SafeGuard system for the six calendar years 2010 to 2015. The data extract was undertaken on 4th April 2016.
- In 2015 there were 74 currently confirmed unnatural deaths but a significant number of pending conclusions remain (31) which may yet prove to be of natural cause. The eventual figure is likely to lie between that seen in 2013 and 2014.
- At the point of data extraction there were 23 coroner confirmed deaths in 2015 with a conclusion of suicide, *killed self*, or open. A significant number of conclusions are outstanding. There has been a shift towards suicide verdicts becoming more common but this is likely to be a recording issue.
- The total number of deaths occurring in all community services is comparable to previous years but it is too early to make comment about the number attributed to death by own hand. The majority of deaths occurred amongst service users in Community Mental Health Teams (CMHT) for working age adults, addiction services and Crisis Resolution and Home Treatment (CRHT) services.
- The number of deaths occurring within three months of discharge from hospital has continued to fall since a peak seen in 2013. In 2015 there were no more than eight such deaths (one conclusion pending). The number of *deaths by own* hand was similar to previous years.
- The number of deaths of service users while an in-patient is small and has continued to fall. Only one in-patient died in 2015; the death occurred while on planed leave and was due to suicide.

Outcome required:
Debate

Northumberland, Tyne and Wear NHS
NHS Foundation Trust

INTERIM ANALYSIS OF SIX YEARS OF UNEXPECTED UNNATURAL DEATHS (2010 TO 2015)

NORTHUMBERLAND TYNE & WEAR FOUNDATION TRUST

(ANALYSIS UNDERTAKEN ON DATA EXTRACTED FROM SAFEGUARD ON 4th April 2016)

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Group Medical Director Specialist Care
Deputy Medical Director - Safety

With the assistance of Antony Gray
Head of Safety and Patient Experience

April 2016

1) SUMMARY AND MAIN FINDINGS

- This is an interim analysis of unexpected unnatural deaths recorded in the NTW SafeGuard system for the six calendar years 2010 to 2015. The data extract was undertaken on 4th April 2016.

- This report is interim in that there are a significant number of coroner conclusions outstanding for the year 2015; the analysis for this year is therefore only provisional but will be revisited in the full report due in September/October 2016.

- While it forms part of an ongoing series of such reports there has been an extensive data quality check on this occasion which means that the data is not directly comparable with previous reports.

- In 2015 there were 74 currently confirmed unnatural deaths but a significant number of pending conclusions remain (31) which may yet prove to be of natural cause. The eventual figure is likely to lie between that seen in 2013 and 2014.

- At the point of data extraction there were 23 coroner confirmed deaths in 2015 with a conclusion of suicide, *killed self*, or open. A significant number of conclusions are outstanding. There has been a shift towards suicide verdicts becoming more common but this is likely to be a recording issue.

- The number of deaths occurring across all community services is comparable to previous years but it is too early to comment on the number attributed to *death by own hand*. The majority of deaths occurred amongst service users in Community Mental Health Teams (CMHT) for working age adults, addiction services and Crisis Resolution & Home Treatment (CRHT) services.

- Following a year on year increase in deaths in adult and older peoples CMHTs there was a reduction in the total number of such deaths in 2015, and a marked decrease in deaths by own hand (bearing in mind pending conclusions).

- After a fall in 2014, there was an increase in unnatural deaths in addiction services in 2015, largely due to an increase in misadventure conclusions.

- The number of potential unnatural deaths in CRHTs in 2015 has exceeded the final year figure for 2014, with several conclusions still pending. The number of *deaths by own hand* increased to five.

- The number of deaths occurring within three months of discharge from hospital has continued to fall since a peak seen in 2013. In 2015 there were no more than eight such deaths (one conclusion pending). The number of *deaths by own hand* was similar to previous years.

- The number of deaths of service users while an in-patient is small and has continued to fall. Only one in-patient died in 2015; the death occurred while on planed leave and was due to suicide.

- There is considerable variation year on year in the number of deaths of service users detained under the Mental Health Act. In 2015 there were two such deaths, both in the community and in service users under Community Treatment Orders

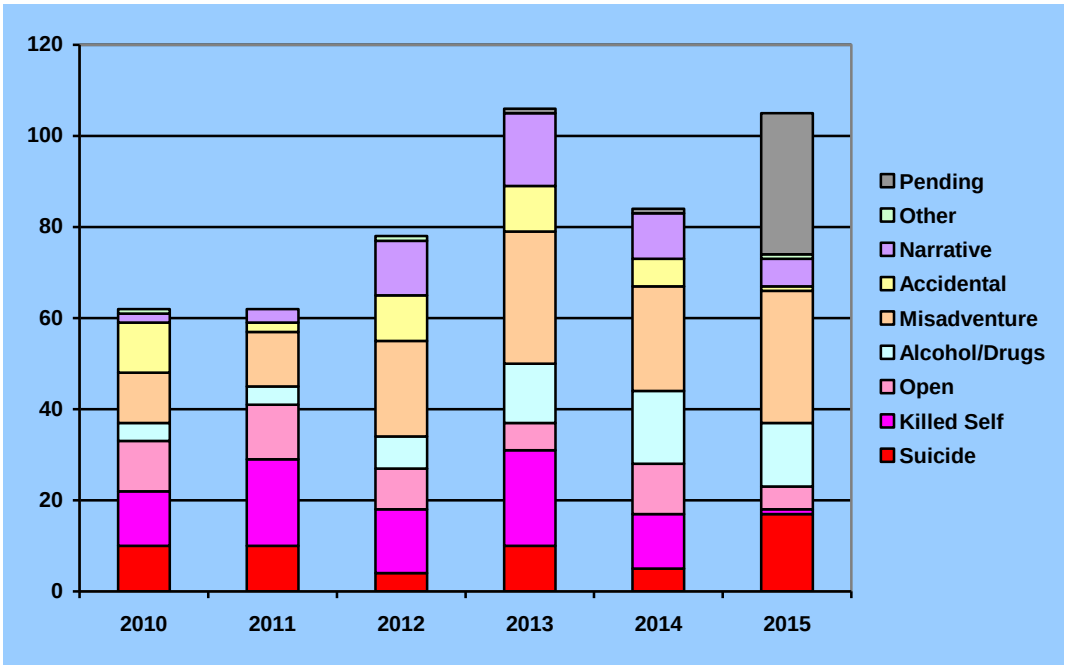
2) UNNATURAL DEATHS IN ALL SERVICES.

Over the six year period there were 497 potentially unnatural deaths reported. At the time of data extraction (4th April 2016) conclusions were pending in 33 cases, so unnatural death had been confirmed in 464 cases.

There were no pending conclusions for deaths occurring in 2010 to 2012. One conclusion was pending for each of 2013 and 2014, and 31 conclusions pending for deaths occurring in 2015. It is likely that some deaths will be classified as being of natural causes at inquest so caution is required in interpreting data for time periods for which conclusions are still outstanding.

The number of potential unnatural deaths increased year on year between 2010 and 2013, but decreased in 2014 (see graph 1). In 2010 there were 62 coroner confirmed unnatural deaths, 62 in 2011 and 78 in 2012. In 2013 there were 105 confirmed unnatural deaths with one conclusion pending. This fell to 83 confirmed unnatural deaths in 2014.

In 2015 there are currently 74 confirmed unnatural deaths but a significant number of pending conclusions remain (31) which may yet prove to be of natural cause. The report due in October 2016 will provide updated information.



Graph 1: Unnatural deaths by coroner conclusion across all NTW services. Source: NTW SafeGuard, accessed April 4th 2016.

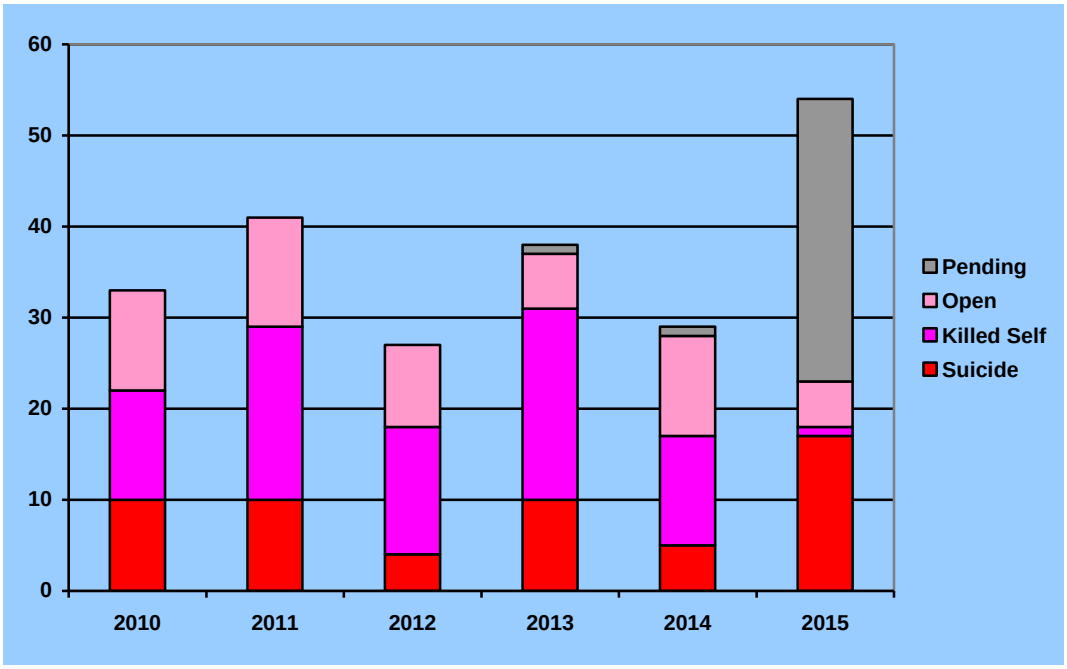
3) DEATHS BY OWN HAND IN ALL SERVICES

Deaths classified as those *by own hand* include those where the coroner conclusion is either suicide, open, or indicative of being the consequence of self-applied cause but without evidence of intent to die (termed *killed self*). The latter is derived from the nature of short form conclusions.

At the time of analysis there had been 189 coroner confirmed cases of death by own hand. This included 56 suicides (30%), 79 *killed self* (42%) and 54 open (28%). In addition, there are 33 deaths with conclusions still pending, 31 of which relate to deaths in 2015.

It is notable that for those conclusions so far available relating to deaths in 2015 there has been a marked change in the pattern of conclusions given. Of the 23 conclusions currently available, 17 have received a definitive suicide conclusion (74%); across the five previous years suicide accounted for only 25% of deaths by own hand conclusions. This has occurred at a time when the number of narrative conclusions has substantially fallen – so far only one narrative conclusion has been given for 2015 deaths compared to an average of 15 each year previously. This probably reflects recent guidance to coroners (Chief Coroner Guidance No17) urging them to stick to standard short form conclusions (such as open or suicide), rather than a change in the nature of the self-harm act itself.

The number of cases of *death by own hand* shows less trend over the six year period (see graph 2). This is due in part to the relatively small number of events. Even including potential cases which still have pending conclusions there is no increasing trend though 2010 to 2014. The significant number of conclusions pending for 2015 means it is currently unreliable to comment on the likely number of *deaths by own hand* cases for this year.

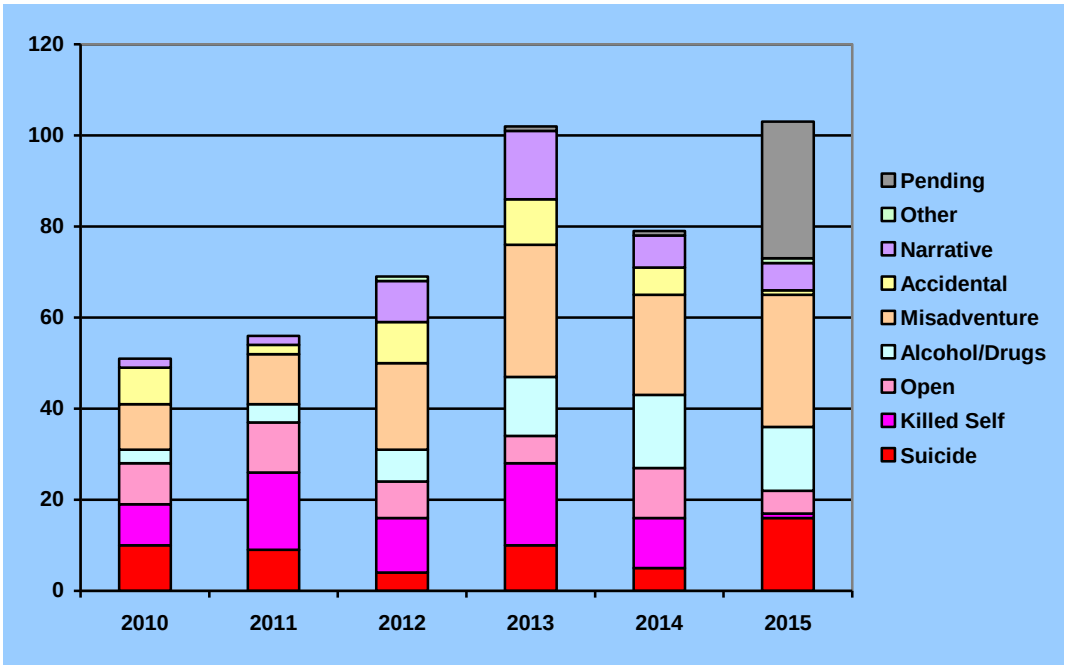


Graph 2: Deaths by own hand across all NTW services.
Source: NTW SafeGuard, accessed April 4th 2016

4) UNNATURAL DEATHS ACROSS ALL COMMUNITY BASED SERVICES.

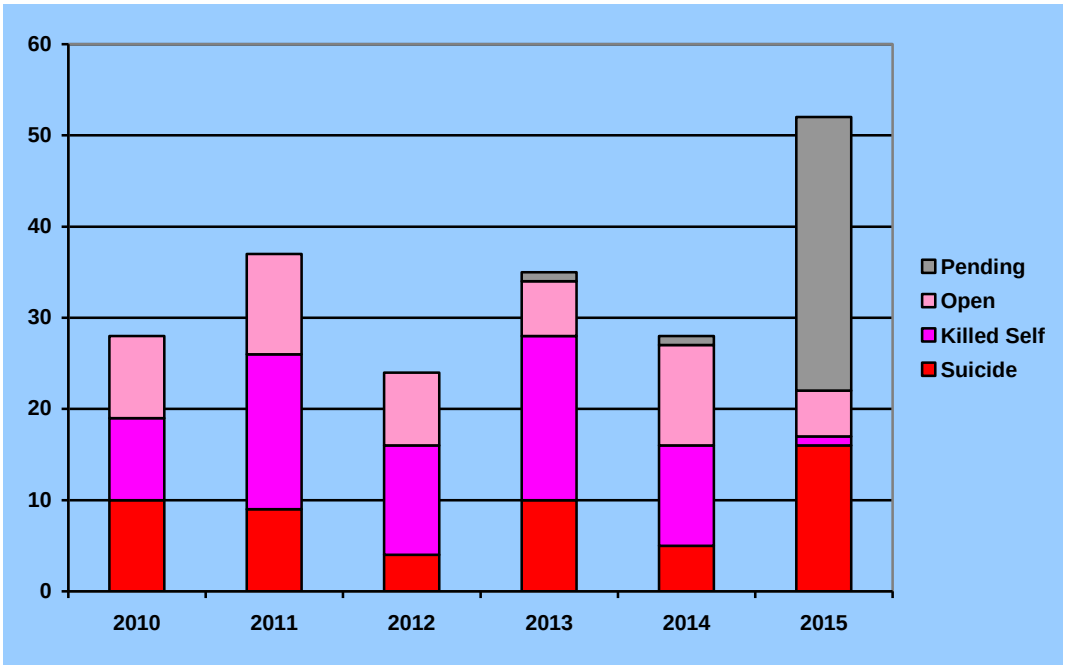
Over the four year period there were 462 potential unnatural deaths across all community based services, including specialist community services (see graph 3). Conclusions are pending in 33 cases (1 from 2013 and 2014, 31 from 2015). Therefore, 429 cases currently have coroner confirmed unnatural cause conclusions.

A third of coroner confirmed conclusions (155 cases, 36%) were misadventure or accidental deaths. Death by own hand accounted for 174 cases (41%); this included 54 suicides, 69 killed self, and 51 open conclusions (see note above regarding increase in use of suicide as a conclusion)



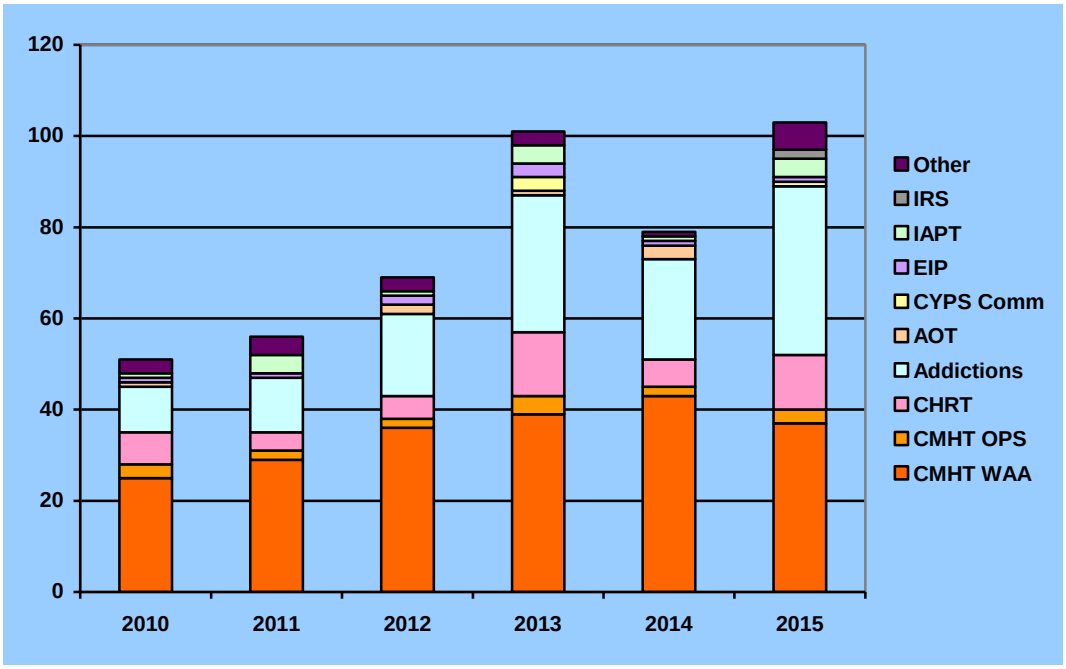
Graph 3: Unnatural deaths by coroner conclusion across all community based services. Source: NTW SafeGuard, accessed April 4th 2016.

The number of unnatural deaths increased each year from 2010 to 2013 before falling in 2014. In 2015 the final number will probably lie between the numbers reported in 2013 and 2014. The number of *deaths by own hand* is harder to interpret (see graph 4). The high number of pending conclusions in 2015 makes interpretation for this year unreliable. The increase in use of suicide as a conclusion is apparent.



Graph 4: Deaths by own hand across all community based service. Source: NTW SafeGuard, accessed April 4th 2016.

Graph 5 shows that the majority of deaths occurred amongst service users in community mental health teams for working age adults (N=209, or 45%), addiction services (N=129, or 28%) and crisis resolution and home treatment services (N=48, or 9%).

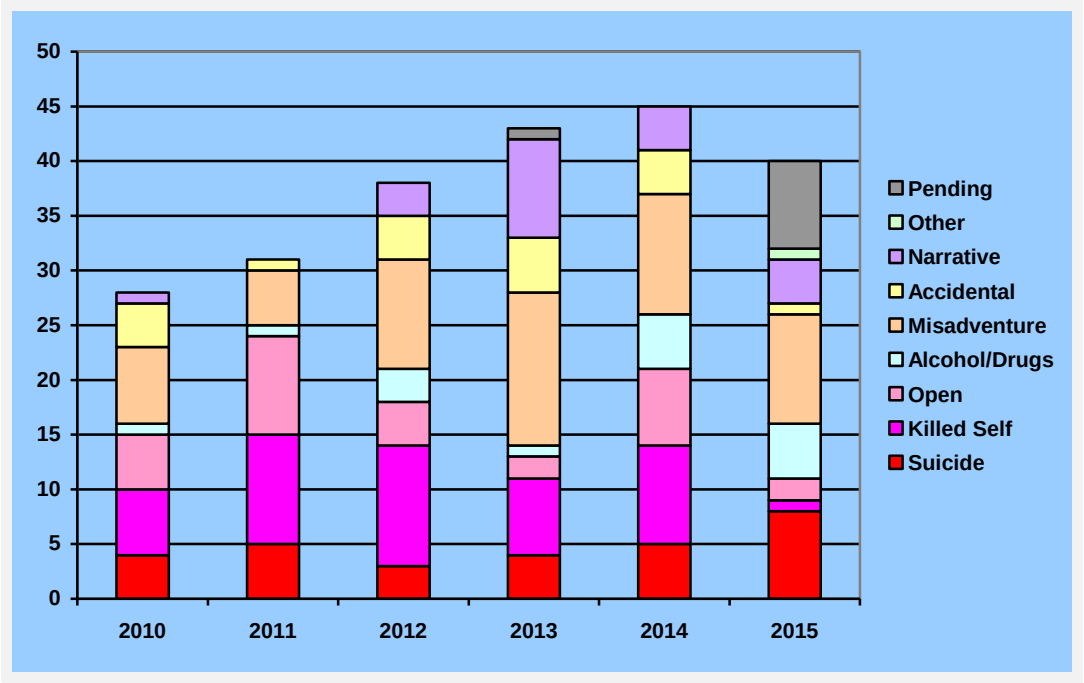


Graph 5: Unnatural deaths across all community based services, by service type. Source: NTW SafeGuard, accessed April 4th 2016.

The number of such deaths increased between 2010 and 2013 but has decreased in 2014. In 2015 the number and service type of unnatural deaths was similar to that seen in 2013 largely due to an increase in deaths in addictions services.

- **Community Mental Health Teams (CMHTs)**

Following several years of increasing numbers of potentially unnatural deaths occurring within Working Age Adult and Older Peoples CMHTs there has been a slight fall in 2015. There were 40 potential unnatural deaths with 8 conclusions still pending (Graph 6). The number of deaths currently attributed to own hand is also less than in previous years, though a greater proportion were given a conclusion of suicide rather than "killed self"



Graph 6: Unnatural deaths by conclusion in Community Mental Health Teams. Source: NTW SafeGuard, accessed April 4th 2016.

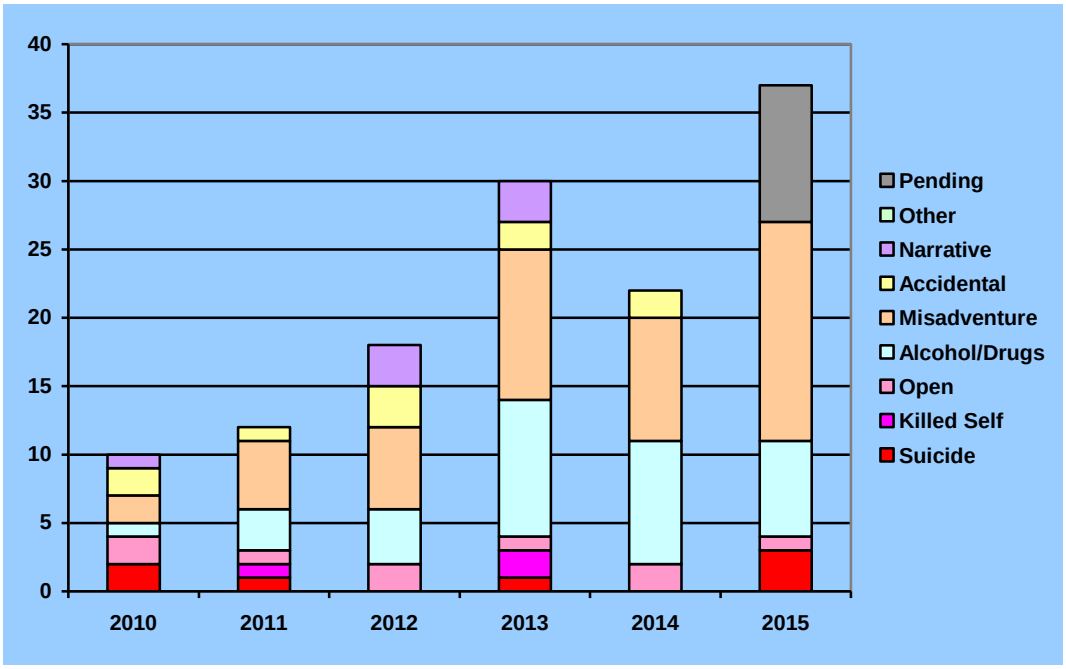
- **Addiction Services**

In this analysis addiction services were defined as those where the word "addiction" appears in the "department" field in SafeGuard.

The total number of unnatural reported in addiction services over the six year period was 129. Of these 10 still have conclusions pending.

The total number of deaths has increased over the period, with the exception of a fall in the single year 2014. This increase is associated with new addiction services being incorporated into the Trust and so may not reflect an increased risk of death in individual service users.

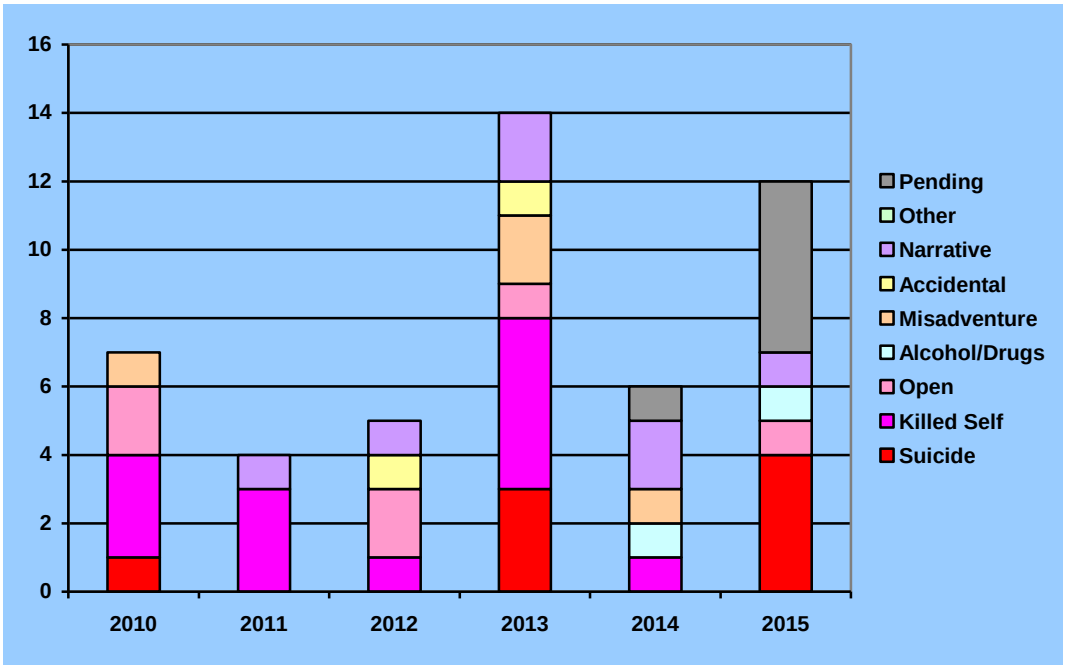
Misadventure and accidental death accounted for almost half of all coroner confirmed unnatural deaths (59 cases, 46%), while a further 34 cases were attributed to alcohol or drugs. Nineteen cases were deaths by own hand (7 suicide, 3 killed self and 9 open), and this shows no trend over the four year period.



Graph 7: Unnatural deaths in community addiction services.
Source: NTW SafeGuard, accessed April 4th 2016.

- **Crisis and Home Resolution Teams (CRHTs)**

The number of potential unnatural deaths in CRHTs rose in 2013 to a peak of 14 deaths but fell significantly to 6 deaths in 2014 (see graph 8). The number of deaths in 2015 will lie between these two figures having already exceeded the final year figure for 2014. The number of deaths by own hand increased to five deaths.



Graph 8: Unnatural deaths by conclusion in Crisis Resolution & Home Treatment teams.
Source: NTW SafeGuard, accessed April 4th 2016.

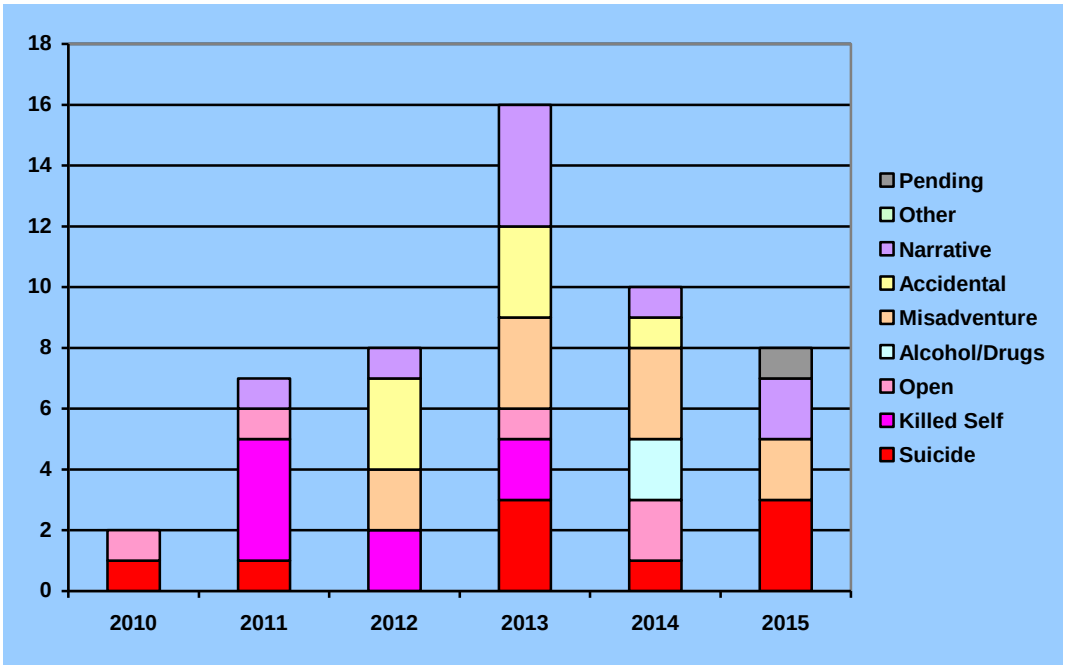
- **Other Services.**

Over the six year period there were seven deaths in assertive outreach (AOT) services, nine deaths in early intervention in psychosis (EIP) services and fifteen deaths in IAPT services. There were four deaths in CYPS services.

Deaths in other services were small with only one or two deaths over the six year period. These included community treatment team for learning disability, psychology services, primary care, gender dysphoria, and rehabilitation services.

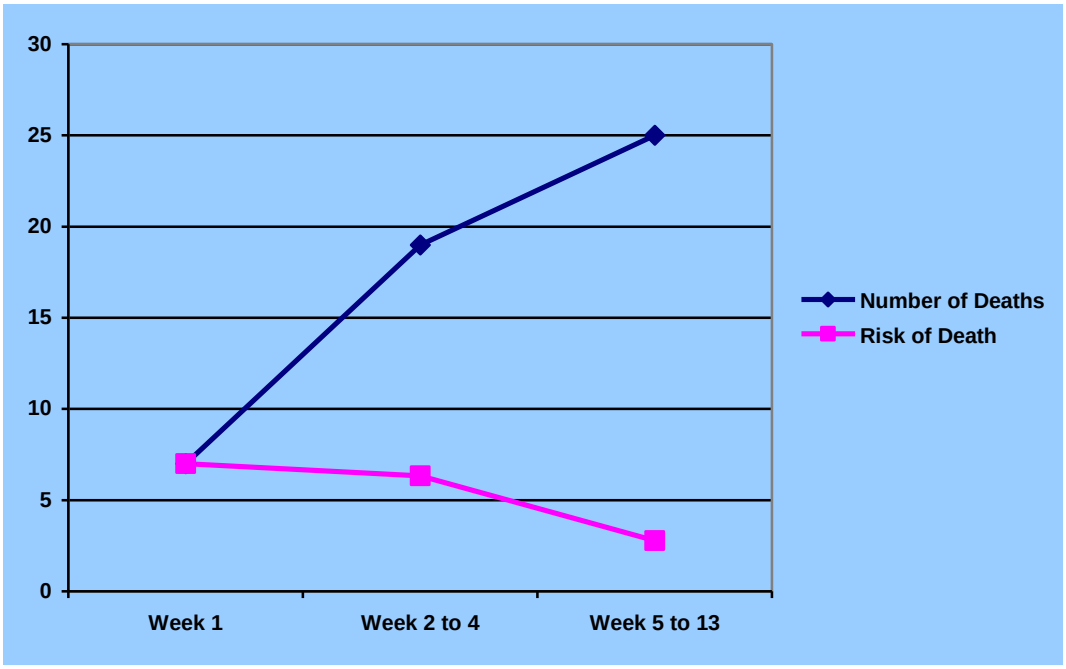
5) UNNATURAL DEATHS WITHIN THREE MONTHS OF DISCHARGE FROM HOSPITAL.

The number of deaths occurring within three months of discharge from hospital has continued to fall since a peak seen in 2013. In 2015 there were no more than eight such deaths (one conclusion pending). The number of *deaths by own hand* was similar to previous years.



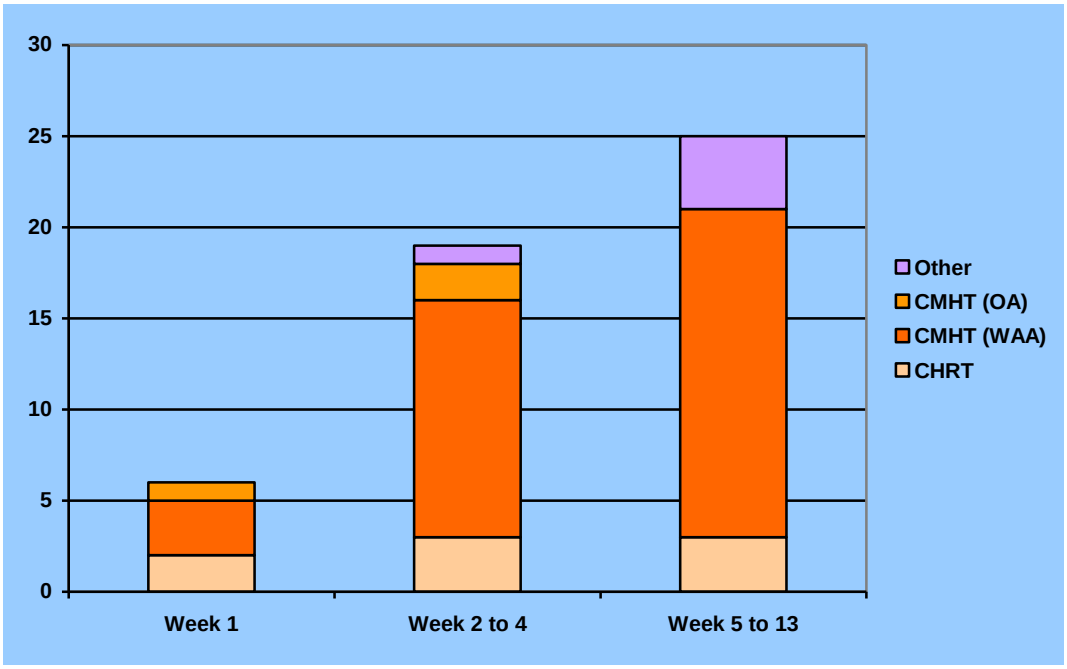
Graph 9: Unnatural deaths within three months of discharge.
Source: NTW SafeGuard, accessed April 4th 2016.

Most deaths occurred in the period from week 5 to week 13 after discharge (see graph 10). However, the period when service users were at highest risk of death, measured by the incidence rate, was in the first week followed closely by weeks two to four.



Graph 10: The number and risk of unnatural death following discharge from hospital. Source: NTW SafeGuard, accessed April 4th 2016.

Graph 11 shows which service the patient was under at the time of death. Of the 50 deaths (including pending conclusions) 34 occurred while the patient was being managed by a CMHT and towards the end of the three month period. Eight deaths occurred in CRHTs. Deaths under CRHT care accounted for a larger proportion of deaths occurring during the first week, but this was still less than the number of deaths occurring in CMHTs.



Graph 11: Unnatural death following discharge from hospital by service. Source: NTW SafeGuard, accessed April 4th 2016

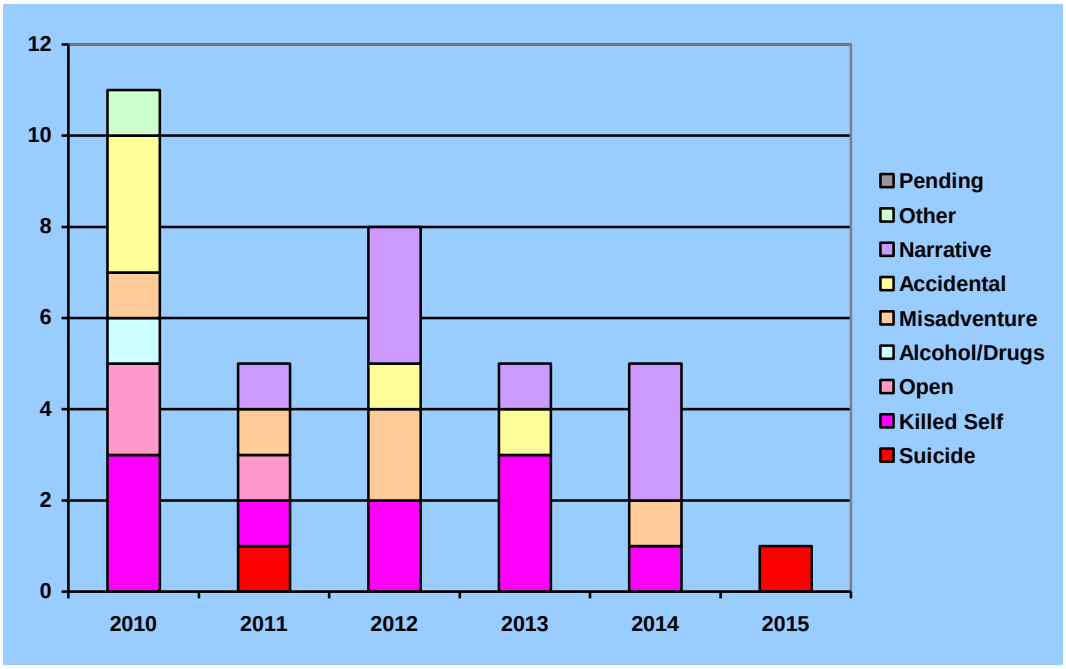
6) UNNATURAL DEATHS OCCURING WHILST AN IN PATIENT

This analysis includes deaths of service users while an in-patient. It includes deaths which occurred on the ward but also deaths which occurred while an in-patient was on leave or absent without leave (AWOL).

Fortunately, deaths while an in-patient are rare events. Over the five year period there were a total of 35 deaths. Just over a half of these occurred on the ward (19 cases, 54%), with the remainder while the patient was on leave (11 on leave and 5 while AWOL).

The trend has been downwards, although the annual numbers involved are small. In 2010 there were 11 in-patient deaths, falling to 5 in 2011, 8 in 2012 and 5 again in 2013 and 2014. In 2015 there was only one death relating to in-patient care, which occurred whilst the patient was on leave.

Fifteen deaths were attributed to death by own hand, ten deaths to misadventure or accident and a narrative conclusion was given in eight cases. There are no outstanding conclusions.

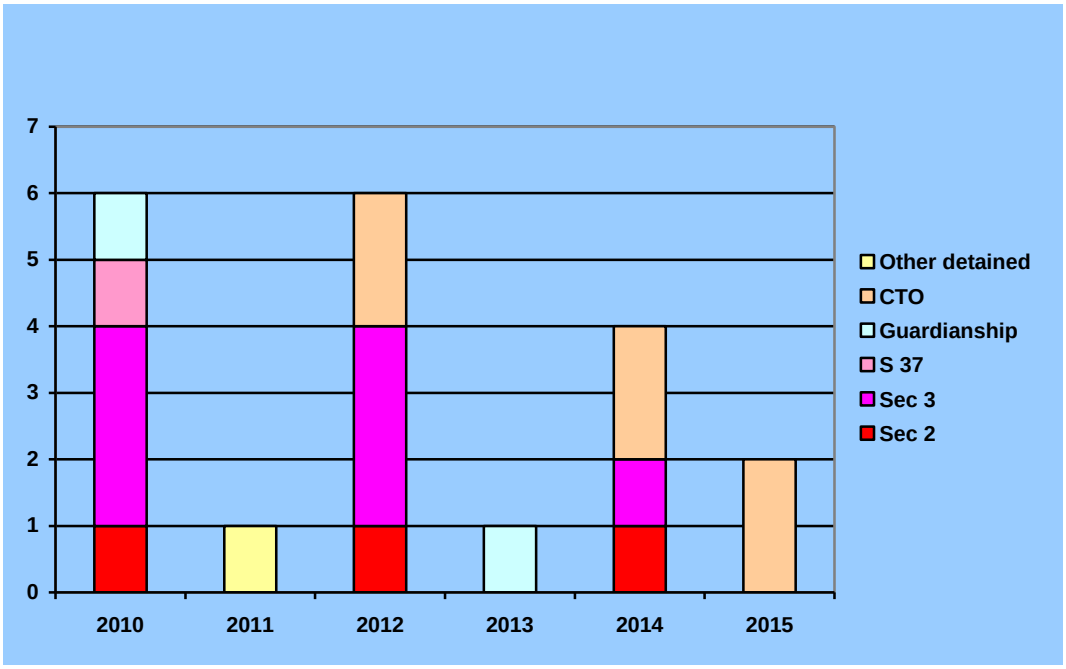


Graph 12: Unnatural deaths amongst in-patients.
Source: NTW SafeGuard, accessed April 4th 2016.

Deaths occurring while an in-patient was on leave have become less common. In 2010 four in-patients died on leave and another one died while absent without leave. Two in-patients died on leave in 2011, two in 2012 (while AWOL), three in 2013 (all on agreed leave) and three in 2014 (one on leave, two AWOL). In 2015 the only in-patient who died was on agreed leave.

7) DEATHS WHILE DETAINED UNDER THE MENTAL HEALTH ACT.

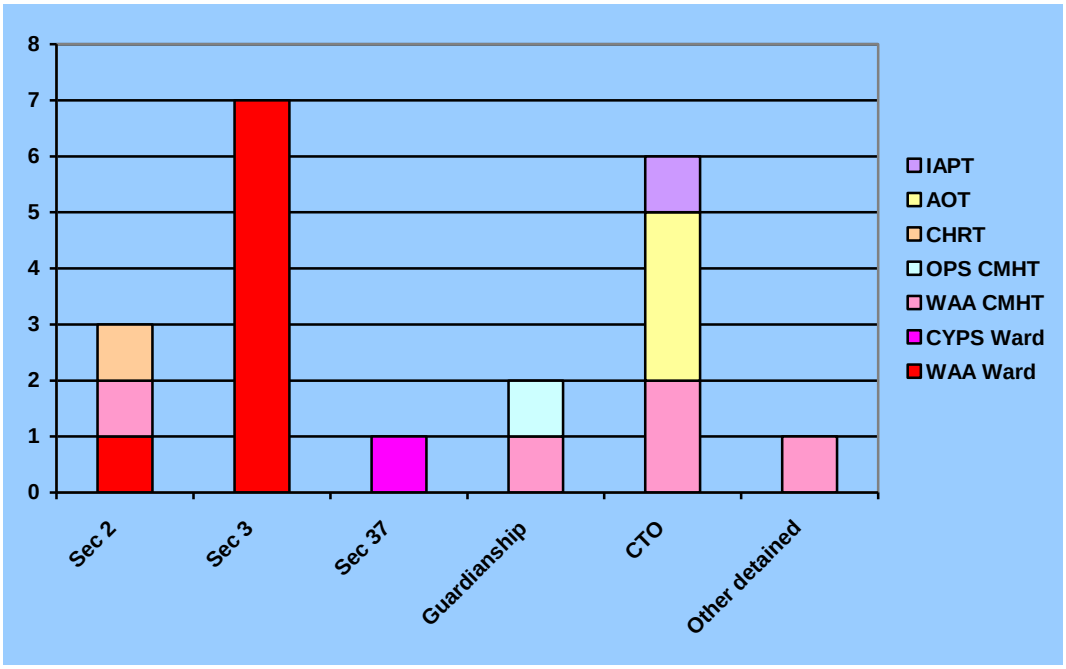
Each year a small number of people die unexpectedly while detained under the Mental Health Act. Over the six year period there were 20 deaths ranging from only 1 death in 2011 and 2013 to six deaths in each of 2010 and 2012. There were four such deaths in 2014 and two deaths in 2015.



Graph 13: Unnatural deaths by MHAct status at time of death. Source: NTW SafeGuard, accessed April 4th 2016.

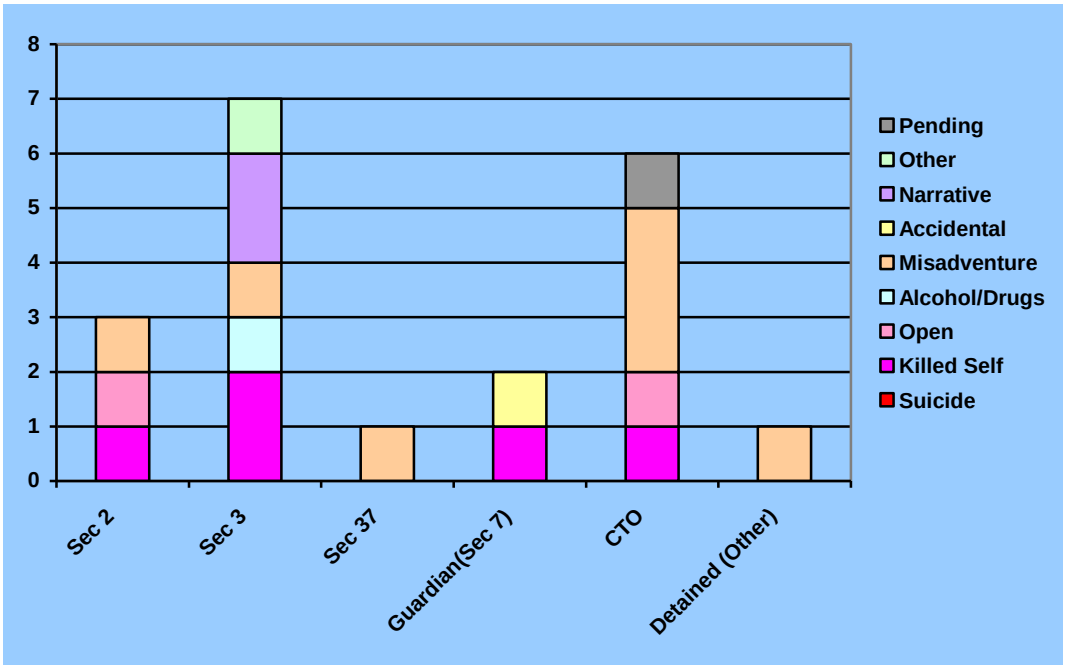
Seven deaths occurred while the service user was detained under Section 3, five deaths under a Community Treatment Order (CTO) and four under Section 2.

All deaths under Section 3 occurred on adult wards as did one of the deaths under Section 2. The remaining deaths under Section 2 occurred in adult CMHT or crisis home resolution teams. Six deaths of detained patients occurred while on Community Treatment Orders; half of these patients were in Assertive Outreach Teams, two in an adult CMHT and one while receiving IAPT care.



Graph 14: Unnatural deaths by MHAct status and service type.
Source: NTW SafeGuard, accessed April 4th 2016.

Misadventure was the most common conclusion (7 cases) followed by killed self (5 cases). A narrative or open conclusion was given in 2 cases each.



Graph 15: Unnatural deaths by MHAct status and conclusion.
Source: NTW SafeGuard, accessed April 4th 2016.

Appendix

METHODOLOGY AND CAUTIONS

This analysis was undertaken on data extracted from NTW SafeGuard on 4th April 2016. As this is a live database, which is continually updated with results from coroner conclusions[1], the data, and consequently the analysis, will change on a daily basis.

The analysis covers unexpected deaths reported through the Trust web based reporting system over the six year period from January 1st 2010 to December 31st 2015. Cases are allocated to a calendar year based on the date of death, where known, or notification of death from the coroner. The calendar year is used as the time period to enable comparison with national data from the National Confidential Inquiry into Suicides and Homicides which also uses calendar, rather than financial, years. This comparison is undertaken later in the year following the publication of the NCISH report in July.

Cases are allocated to a service line based on the entry in SafeGuard, which is derived from information provided through the web report. With the rollout of Transforming Community Services the names of many community services have changed from those used in previous years. In this analysis services have been clustered into service types representing similar services such as CMHTs.

In undertaking the analysis on this occasion a data cleansing and validation exercise was undertaken on the records held in SafeGuard. Several records have been reclassified and therefore data presented in this report are not directly comparable with data presented in previous years.

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 conclusion 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 conclusion is necessary.

1) Where a coroner has used a standard form of conclusion this is the term used. This includes ***Suicide, Open, Misadventure***, and ***Accident***.

2) Where the coroner has used a short narrative conclusion the following reclassification has been used.

[1] Previous reports have used the term *verdict*; this has been replaced with the current term *conclusion*

- Where the words drug(s) and/or alcohol appear the conclusion is reclassified as ***Drug/Alcohol***.

- Where there is an indication that the person has killed themselves, but no indication of intent is apparent, the conclusion is reclassified as ***Killed Self***.

3) Where the coroner has given a long narrative conclusion this is reclassified as ***Narrative***.

4) There are a small number of cases where it is not possible to determine the coroner conclusion. These cases are classified as ***Other***.

5) Where the coroner has not yet given a conclusion 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* conclusions, all deaths re-classified as *Killed Self* and all *Open* conclusions (conventionally included in analyses of suicide cases).

This is an interim analysis as there are a significant number of conclusions still pending, particularly for deaths occurring in 2015. 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.