

This PDF includes 2 documents:

Document #1:

Statistical evaluation of data on the change in Emergency Surgery provision in Western Health and Social Care Trust

Statistical Report

Compiled by:
Paul Bassett

19th November 2025

Document #2: *(included as an addendum)*

Understanding the Independent Statistical Review on RAMI: Challenging Claims of Improved Patient Mortality Outcomes

Commentary

Provided by:
SOAS

19th January 2026

Document #1 follows:

**Statistical evaluation of data on the change in Emergency
Surgery provision in Western Health and Social Care Trust**

Statistical Report

Compiled by:
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The logo for Statsconsultancy Ltd is a rectangular box with a dark grey background. It features a subtle, concentric circular pattern that resembles a ripple or a stylized 'S'. The text 'Statsconsultancy Ltd' is written in a white, sans-serif font, centered within the box.

Statsconsultancy Ltd

Freelance Statistical Consultancy

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Statistical Report

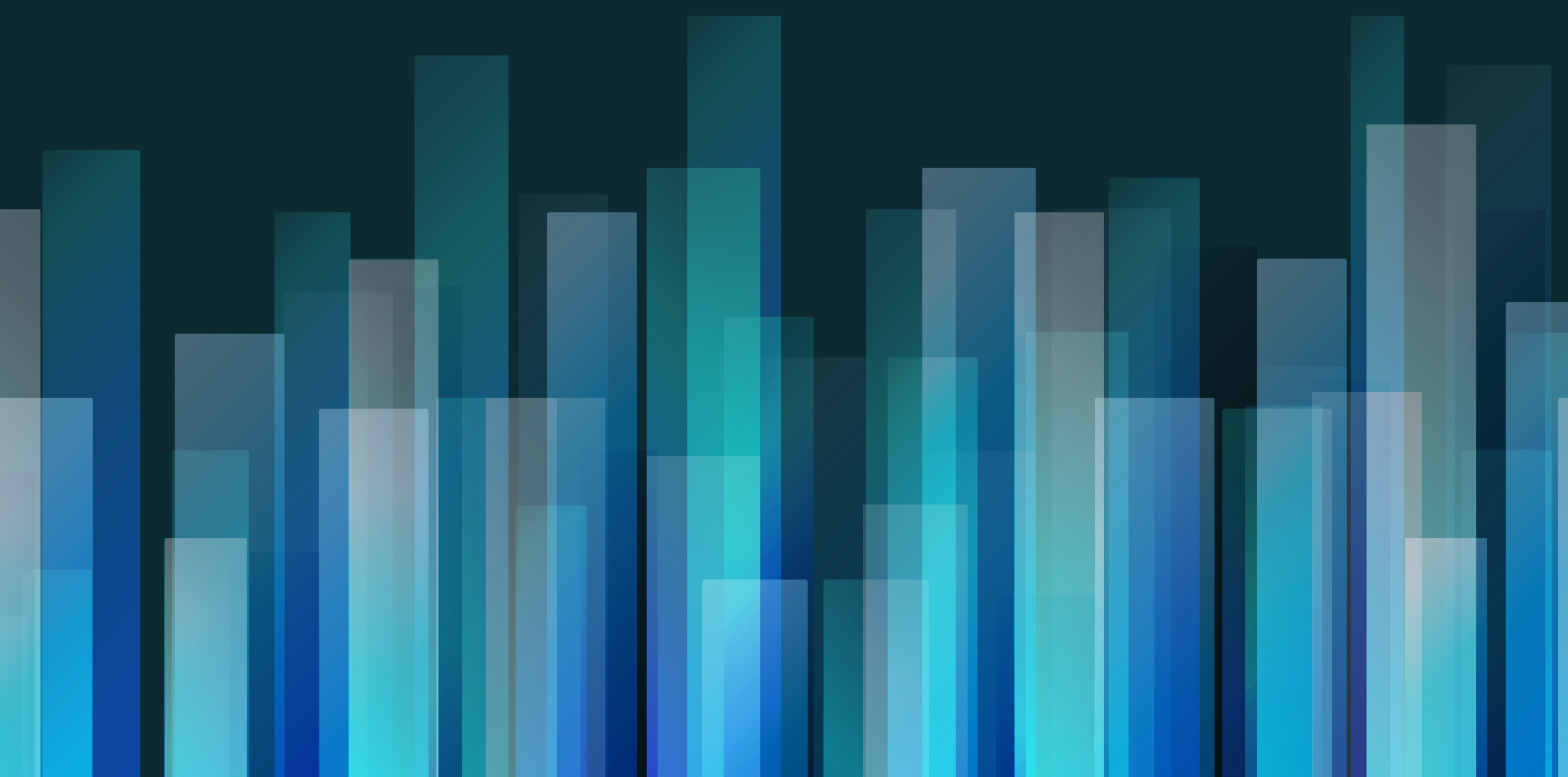
Author: Paul Bassett

Client: Save Our Acute Services (SOAS)

Date: 19th November 2025

Report Number: 3

Description: Statistical evaluation of data on
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Statsconsultancy Ltd

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Author:	Paul Bassett
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Description:	Statistical evaluation of data on the change in Emergency Surgery provision in Western Health and Social Care Trust

Introduction

Historically, emergency general surgery (EGS) for patients in the catchment area of the Western Health and Social Care Trust has taken place in two sites. These were the Altnagelvin Area Hospital, and the South West Acute Hospital (SWAH). After November 2022, EGS was stopped at SWAH, with all emergency surgery subsequently performed at the Altnagelvin hospital.

This report independently considers claims of improved patient outcomes in the data available to support the decision to perform EGS in one hospital rather than continuing with two hospitals.

Evaluation of Data

The data presented to back-up the case for a change in the provision of EGS was evaluated from a statistical perspective.

There were two main areas of concern. These were:

1. Appropriateness of comparison
2. Uncertainty in reported figures for General surgery

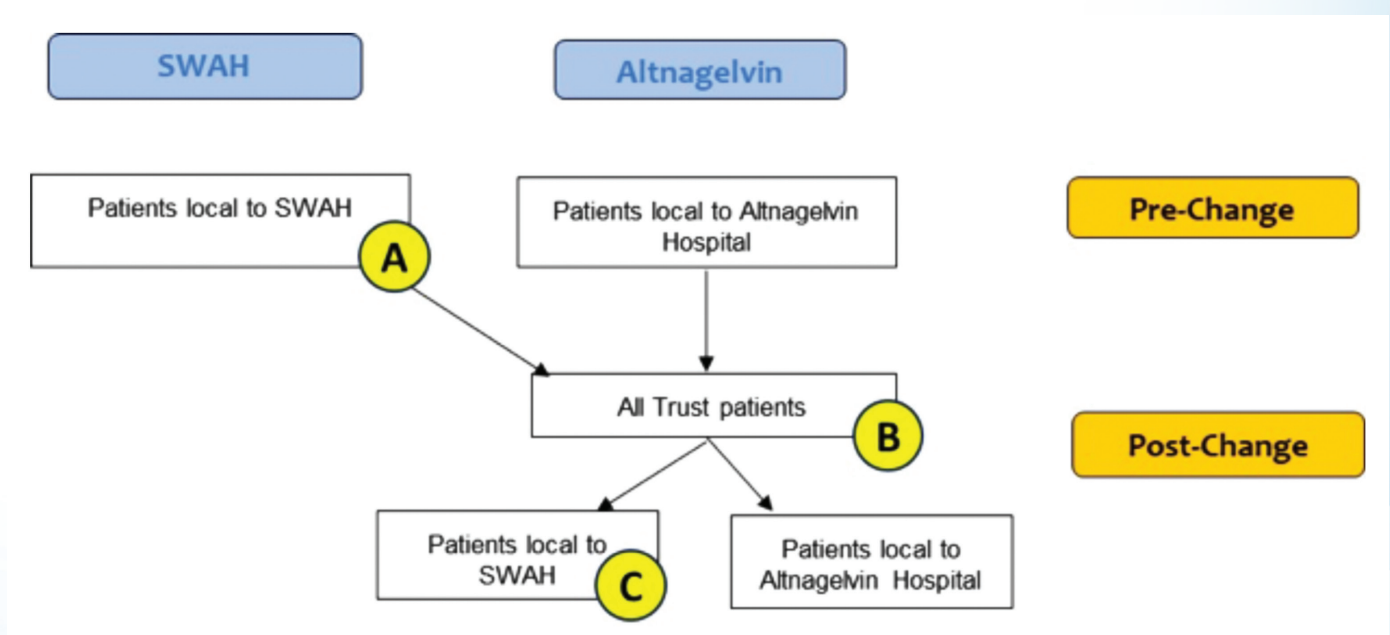
The two areas are considered in more detail in the subsequent sections.

a) Appropriateness of comparison

Data used to make a judgement about the change in outcomes following the policy change is based on data from SWAH pre-change and Altnagelvin both pre and post-change. It needs to be considered whether these figures are providing an appropriate and 'fair' comparison of the impact of the change.

Figure A illustrates how Trust patients would be treated historically, pre-change, and then following the change.

Figure A: Graphic of treatment of patients pre and post-change



Patients local to SWAH have been mostly directly impacted by changes in service provision, as these would now be treated at a different hospital to previously. Patients historically treated at Altnagelvin have not undergone any major change to their care pathway, being treated at the same hospital as previously.

In order to make a judgement about the effectiveness of the change on patient outcomes the appropriate comparison should be between the outcomes of the following groups of patients:

1. Patients treated as SWAH before the change (group A in Figure 1)
2. Patients from Altnagelvin post-change who would have been treated at SWAH pre-change (group C in Figure 1)

The only data post-change is from all patients treated at Altnagelvin (group B in Figure 1), with no data available on the specific group required (group C).

Thus, in conclusion, it can be argued that no appropriate data is available in order for a fair comparison to be made on the impact of the changes upon patient outcomes

b) Uncertainty in reported figures and RAMI comparisons – General Surgery RAMI

The next analyses considered the Risk Adjusted Mortality Index (RAMI) values from patients undergoing general surgery. The basis for this index is in Appendix 1.

Figures for the RAMI metric have been quoted, and used to make inferences on the differences in performance between hospitals, and between different timepoints from the same hospital.

It is important to consider that all quoted figures are an 'estimate' of the performance of a hospital at any time. The occurrence of mortality, and the mortality index RAMI, can be calculated for the specific patients attending a hospital over a given period. However if, hypothetically, a different set of patients had been admitted to the same hospital at the same time, it would be expected that, due to chance, a slightly different mortality rate and RAMI would have been obtained. Thus, with any sample of patients there is some uncertainty in the calculated figures.

The uncertainty in any estimates is due partly to the rate of mortality, but more strongly related to the number of patients on which the figures are based. Figures based on more patients are likely to be more reliable, and thus would have a lower level of uncertainty attached to them than figures based on fewer patients.

Calculations have been performed to estimate the uncertainty around the general surgery mortality and RAMI figures. It is noted that these calculations are only estimates. However, they are designed to give an idea of the likely uncertainty in the figures. The statistical methodology used for the calculations is given in Appendices 2 and 3 (see end of report).

For each of the two hospitals, the data on which the calculations were made is as follows:

- Monthly RAMI figures for general surgery from Jan 2019 to Dec 2023¹
- Number of general surgery inpatients from Apr 2014 to Mar 2024²
- Number of general surgery deaths per year from 2020 to 2024³

Data on all of the above metrics was available from 2020 to 2023, and thus just data during this period was used for all analyses.

A number of assumptions and initial calculations from the figures were made. These were:

- The number of patients on which the RAMI was calculated assumed to be the total number of patients undergoing a general surgery procedure per time period
- Yearly RAMI figure assumed to be the mean of individual monthly figures (data from Altnagelvin during Dec 2022 omitted as this was at the time of the switch)
- Number of procedures based on number of general surgery inpatients and percentage of inpatients undergoing a procedure. Figure assumed to be 64% patients (63% in 2020).⁴

Based on the available data and assumptions made, the data forming the basis of the calculations is summarised in Table 2.

Table 2: Summary of figures used in General Surgery statistical calculations

Year	Number of procedures (+)		Number of deaths		RAMI	
	SWAH	Altnagelvin	SWAH	Altnagelvin	SWAH	Altnagelvin
2020	1191	1913	55	59	102	116
2021	1078	1953	48	56	89	87
2022 (*)	854	1791	36	65	114	99
2023	0	2639	-	74	-	85

(+) Calculated from number of general surgery inpatients

(*) Figures based on period for January to November only due to switch in December

The data in Table 2 was used to calculate the proportion of patients dying in each hospital per year, and then the uncertainty in this estimate. This in turn was used to calculate uncertainty in the RAMI figures, and also a confidence interval for the RAMI. The confidence interval reflects an interval into which the 'true' RAMI figure would be likely to lie if all possible patients had attended the hospital.

1 Freedom of Information Request – RAMI Mortality figures – referenced by Medical Director
<https://heyzine.com/flip-book/5dec7be440.html>

2 Dept of Health Hospital statistics: inpatient and day case activity 2023/24
<https://www.health-ni.gov.uk/publications/hospital-statistics-inpatient-and-day-case-activity-202324>

3 Freedom of Information Request – Hospital Deaths in WHSCT – by speciality
<https://heyzine.com/flip-book/8105e970d4.html>

4 Dept of Health – Review of General Surgery Workstream Reports – Demand Capacity Report
<https://www.health-ni.gov.uk/publications/review-general-surgery-workstream-reports>

The methodology used is as described in Appendix 2. A summary of the calculations and results is shown in Table 3.

Table 3: General surgery RAMI figures, along with uncertainty in figures

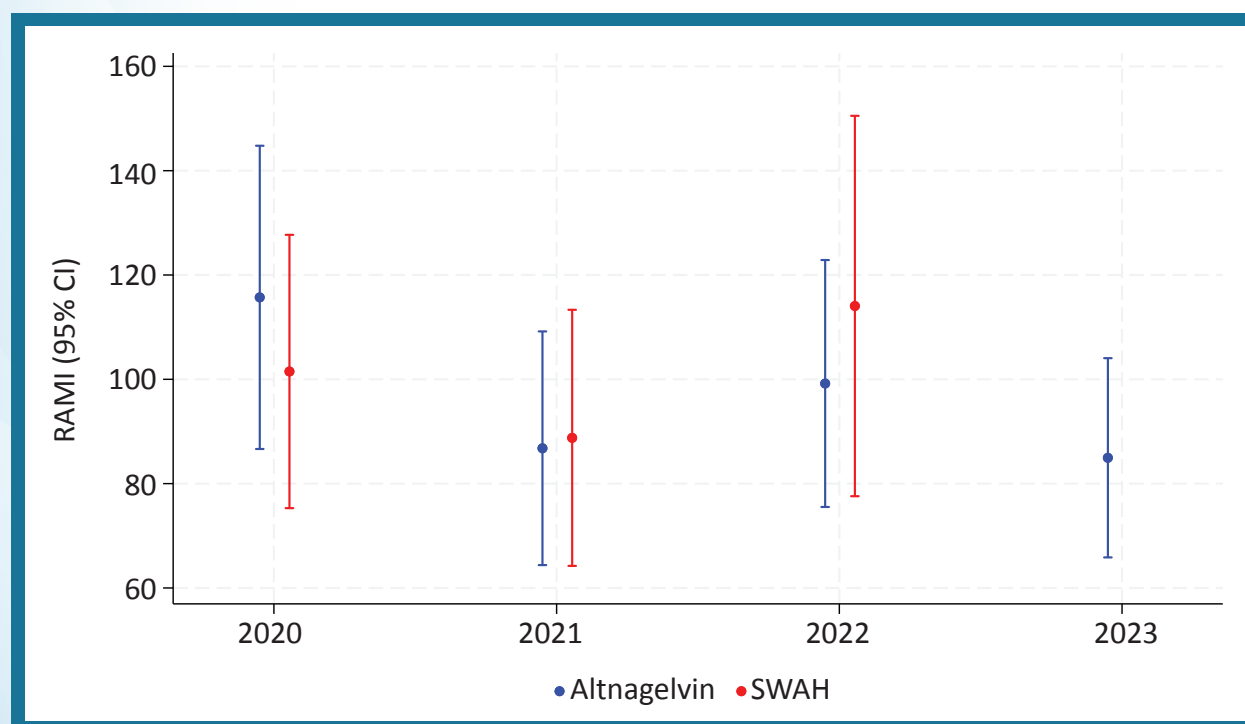
Year	SWAH			Altnagelvin		
	RAMI	Uncertainty	95% CI	RAMI	Uncertainty	95% CI
2020	102	± 26	76 to 128	116	± 29	87 to 145
2021	89	± 25	64 to 114	87	± 22	65 to 109
2022 (*)	114	± 36	78 to 150	99	± 24	75 to 123
2023	-	-	-	85	± 19	66 to 104

(*) Figures based on period for January to November only due to switch in December

As an example of the data, consider the figures from Altnagelvin in 2022. Here the calculated RAMI figure is 99. It is calculated that the uncertainty in the RAMI figures is ± 24 . In other words, the ‘true’ value (if all possible patients attended the hospital) is 95% likely to be anywhere from 75 to 123.

A graphical illustration of the RAMI figures per year in each hospital, with corresponding confidence intervals is shown in Figure B.

Figure B: General Surgery RAMI – with uncertainty around calculated values



The figures in Table 2 and illustrated in Figure B suggested that the uncertainty around the RAMI figures is greater than the differences between hospitals and between year

Differences in outcome pre and post-switch were further examined. The following specific comparisons were made:

- SWAH 2022 (pre-switch) vs. Altnagelvin 2023 (post-switch)
- Altnagelvin 2022 (pre-switch) vs. Altnagelvin 2023 (post-switch)

A summary of the results is shown in Table 4. The RAMI value for each group shown, along with the calculated difference in RAMI, and corresponding confidence interval. The last row shows the p-values from the comparisons, indicating the significance of the differences between timepoints

Table 4: Comparison of General Surgery RAMI figures pre and post-switch

Statistic	SWAH 2022 vs. Altnagelvin 2023	Altnagelvin 2022 vs. Altnagelvin 2023
RAMI 2022 (*)	114	99
RAMI Altnagelvin 2023	85	85
RAMI difference (95% CI) (#)	-29 (-70, 12)	-14 (-45, 16)
P-value	0.17	0.36

(*) Figures based on period for January to November only due to switch in December

(#) Calculated as RAMI in 2023 minus RAMI in 2022

The results suggest no statistical difference that the RAMI in 2023 (post-switch) varied significantly from the RAMI in 2022 (pre-switch) in either SWAH or Altnagelvin. Thus, whilst the calculated RAMI was slightly lower, this can be assumed to be due to chance variation rather than a 'true' improvement.

Conclusions

In conclusion, there are two statistical concerns about the data used to justify changes in EGS provision. These are:

1. The data available does not enable a fair comparison of the outcomes from patients treated at SWAH pre-change, and an equivalent group post-change
2. There is no statistical evidence of any improvement in RAMI figures after the switch

On the basis of the two reasons above, there are grave statistical doubts as to the validity of the data presented to justify the change in services.

APPENDIX 1: Outcome Metric

The data available is in the form of the Risk Adjusted Mortality Index (RAMI). This metric is a mortality rate that is adjusted for predicted risk of death.

It is calculated as follows:

$$\text{RAMI} = \frac{\text{Observed deaths}}{\text{Expected deaths}} \times 100$$

APPENDIX 2: Statistical Measures – Uncertainty for individual measurements

The mortality and RAMI figures are based on a 'sample' of patients in a specific time period. Statistically, there is uncertainty around the results from any sample.

To calculate the uncertainty in estimates of RAMI, it is first necessary to calculate the uncertainty in the proportion of patients dying, and then convert this to the uncertainty in RAMI.

In this instance, the term 'uncertainty' refers to the width of a confidence interval around the calculated value. In other words, the distance from the calculated value to either the lower or upper bound of the confidence interval.

The uncertainty in the proportion of deaths can be calculated as follows:

$$\begin{aligned} U_p &= Z \cdot \text{SE}(p) \\ &= Z \cdot \sqrt{p(1-p) / n} \end{aligned}$$

Where:

- p = proportion / probability of patients dying
- U_p = uncertainty in estimate of proportion dying
- SE(p) = standard error of p
- 1-p = proportion of patients alive
- n = sample size (number of patients)
- Z = constant value based on the level of confidence required.
(takes value 1.96 for 95% confidence)

This figure can then be used to calculate the uncertainty in the RAMI figures as follows:

$$U_{\text{RAMI}} = U_p / \text{Expected proportion of deaths} \times 100$$

A confidence interval for RAMI can be calculated as follows:

$$\text{CI for RAMI} = \text{Calculated RAMI} \pm U_{\text{RAMI}}$$

APPENDIX 3: Statistical Measures – Uncertainty for differences between hospitals/years & statistical differences

Separate calculations are required to calculate the uncertainty for differences between two sets of measurements, such as between hospitals or between years.

The uncertainty for the difference in RAMI between two measurements is calculated by:

$$\begin{aligned} SE_{\text{RAMI difference}} &= \sqrt{SE_A^2 + SE_B^2} \\ U_{\text{RAMI difference}} &= Z \cdot \sqrt{SE_A^2 + SE_B^2} \end{aligned}$$

Where:

$SE_{\text{RAMI difference}}$ = Standard error of the difference in RAMI between measurement

$U_{\text{RAMI difference}}$ = Uncertainty in the difference in RAMI between measurements

SE_A = Standard error of RAMI for measurement A (see Appendix 2)

SE_B = Standard error of RAMI for measurement B

Z = constant value based on the level of confidence required.
(takes value 1.96 for 95% confidence)

A confidence interval for the difference in RAMI between measurements can be calculated as follows:

$$\text{CI for difference in RAMI} = \text{RAMI difference} \pm U_{\text{RAMI difference}}$$

Furthermore, a Z-test to compare the statistical significance of the difference between measurements can be performed. This has the following test statistic:

$$Z = \text{RAMI difference} / SE_{\text{RAMI difference}}$$

The Z statistic is then compared to a standard Normal distribution to calculate a two-sided p-value. P-values of less than 0.05 are typically regarded as evidence of a statistically significant difference, whilst p-values of 0.05 or higher are typically regarded as no evidence of a statistically significant difference

APPENDIX 4: Links

1. Freedom of Information Request – RAMI Mortality figures – referenced by Medical Director
<https://heyzine.com/flip-book/5dec7be440.html>
2. Dept of Health Hospital statistics: inpatient and day case activity 2023/24
<https://www.health-ni.gov.uk/publications/hospital-statistics-inpatient-and-day-case-activity-202324>
3. Freedom of Information Request – Hospital Deaths in WHSCT – by speciality
<https://heyzine.com/flip-book/8105e970d4.html>
4. Dept of Health – Review of General Surgery Workstream Reports – Demand Capacity Report
<https://www.health-ni.gov.uk/publications/review-general-surgery-workstream-reports>

PAUL BASSETT - bio

Paul has over 25 years experience of providing statistical consultancy to a wide range of clients, from individuals to large commercial companies, from universities to the NHS.

Publications:

Author of over 500 peer-reviewed publications. A full list is given at this ResearchGate link.
https://www.researchgate.net/profile/Paul_Bassett/publications

Professional Membership:

Fellow of the Royal Statistical Society

Qualifications:

M.Sc. Biometry, University of Reading
B.Sc. Mathematics and Statistics, University of Bath

Previous Employment History:

Statistician, UCL

Provided statistical support to researchers, focussing on clinical trials and epidemiological research

Statistician, Institute of Education

Responsible for the statistical design and analysis of two large scale, government funded research studies.

Statistical Consultant, Imperial College School of Medicine

Provided statistical advice and analysis for medical researchers and commercial companies.

A report completed in November 2025

Addendum:

Document #2 follows:

Understanding the Independent Statistical Review on RAMI: Challenging Claims of Improved Patient Mortality Outcomes

Commentary

Provided by:
SOAS

19th January 2026



Understanding the Independent Statistical report on RAMI

Challenging Claims of Improved Patient Mortality Outcomes

[1] INTRODUCTION

You will find attached an independent statistical evaluation of patient outcomes following the suspension of Emergency General Surgery (EGS) at South West Acute Hospital in December 2022. This letter explains what the statistical report contains and why its findings matter.

The attached technical report has been prepared by Paul Bassett, an experienced independent statistician who has been commissioned by Save Our Acute Services (SOAS) to scrutinise the mortality data presented by the Western Health and Social Care Trust to justify the suspension of emergency surgery at SWAH.

About This Document

This guide is designed for stakeholders—healthcare professionals, politicians, community representatives, and others—who want to understand the statistical challenges to the Trust's claims of improved patient outcomes.

The key message is straightforward: the data currently being used to justify the suspension of EGS does not provide reliable evidence of improved patient outcomes. In fact, the statistical limitations are so significant that no confident claims about improvement should be made on the basis of this data.

A key concern for SOAS is the disproportionate weighting given to clinical voices in decisions about service reconfiguration in Northern Ireland. Cases like the Western Trust's claimed outcome improvements show why evidence and perspectives from the public, campaign groups, and independent experts must be taken far more seriously before any major hospital changes are agreed.

[2] WHAT IS 'RAMI' AND WHY DOES IT MATTER?

The Western Trust relies heavily on a measure called RAMI to support its claim that patient outcomes have improved since EGS was suspended.

Understanding RAMI

RAMI stands for Risk Adjusted Mortality Index. It is a measure of patient mortality—that is, how many patients die—but adjusted to account for how sick patients were when they arrived at hospital.

How it works:

It compares the actual number of deaths against the expected number of deaths.

It expresses this as a percentage

A score of 100 means mortality is exactly as expected

Scores above 100 suggest more deaths than expected

Scores below 100 suggest fewer deaths than expected

Why the Western Trust Emphasizes RAMI

The Western Trust has repeatedly stated that RAMI is the most important measure of patient outcomes. In fact, at the Fermanagh & Omagh District Council meeting on 31st March 2025, the medical director stated explicitly: "our primary outcome that we have is mortality... the most important patient outcome measure that you can have."

This emphasis on RAMI, and mainly RAMI, is significant. It means the Trust is asking decision-makers to accept their claims based primarily on this measure of mortality data.

Highly Questionable "Lives Saved" Claims

An additional claim made by the Western Trust is that "every 40 days an additional patient has survived as a result of this change," presented in bold, red, large-font text in its own materials.

This is an extraordinary assertion to make on the basis of such small, statistically fragile numbers, particularly when the Trust has acknowledged that robust statistical confidence would take decades of data.

Yet this headline-friendly statement has clearly influenced stakeholders and decision-makers, some of whom have told SOAS they were initially reassured by what appeared to be a simple, compelling "lives saved" message.

This is precisely why these mortality statistics, and the claims built around them, must be placed under a microscope before they are used to justify permanent changes to acute services.

'Blatantly flippant'

A retired former head of surgery at SWAH, Mr Essam Ghareeb, who worked as a consultant surgeon in the Erne and SWAH for nearly 30 years, has provided detailed commentary on the Trust's claims of improved outcomes. These remarks are all the more striking given his extensive frontline experience, during which he has never before heard a senior doctor treat such serious statistical limitations so lightly.

When a former head of surgery describes the Trust's comment about needing 20 to 30 years of deaths for statistical confidence as "the most blatantly flippant statement" he has heard from a doctor in that position, it underlines just how far outside normal professional standards this approach appears to be.

[3] THE CORE STATISTICAL PROBLEM: SMALL NUMBERS OF DEATHS

The independent statistical analysis identifies a fundamental problem with using RAMI data to justify the suspension of EGS: there are simply not enough deaths to draw reliable conclusions.

Why Small Numbers Matter in Statistics

When a statistical measure is based on only a small number of events, there is enormous uncertainty around the result. A single unusual case can dramatically change the figures from month to month.

Think of it this way:

If you toss a coin 10 times, you might get 6 heads and 4 tails (60% heads). But if you toss it 100 times, you're much more likely to get close to 50% heads. The larger sample size gives you a more reliable answer. The same principle applies to death statistics.

The Numbers at SWAH and Altnagelvin

General surgery deaths per year across the Western Trust:

Year	Number of deaths	
	SWAH	Altnagelvin
2020	55	59
2021	48	56
2022	36	65
2023	-	74
2024	-	100

These figures—roughly 100 deaths in total per year—are the foundation for all the Trust's claims about improved outcomes.

What the RAMI Data Provider Says

The company that produces RAMI data (CHKS) has made a clear statement: you need approximately 1,000 deaths in your dataset to have confidence in RAMI comparisons.

The Western Trust has only around 100 deaths per year from general surgery. This means the Trust's figures fall dramatically short of what statistical best practice requires.

To put this in perspective: even comparing outcomes across an entire year at each hospital, the Trust is using roughly 1/10th of the data that professional guidelines recommend.

[4] WIDE CONFIDENCE INTERVALS: A KEY FINDING

The independent statistical analysis calculates what are called confidence intervals around the RAMI figures. These intervals show the range within which the true RAMI figure is likely to fall.

What the Figures Show

For example, at Altnagelvin in 2022:

Calculated RAMI:	99
Uncertainty:	± 24
Confidence interval:	75 to 123

This means the true RAMI could realistically be anywhere from 75 to 123. That's a range of 48 points—enormous uncertainty around a single figure.

Compare this to the Trust's claims: they have been stating that RAMI improved from around 114 in 2022 to around 85 in 2023—a difference of only 29 points. But given the uncertainty ranges, this apparent difference easily falls within the normal range of chance variation and cannot be reliably attributed to the service change.

The Critical Point

The differences between hospitals and between time periods are smaller than the uncertainty around the figures themselves.

This is the statistical equivalent of saying: The difference you're pointing to is so small compared to how uncertain these measurements are that we cannot be confident it represents a real change rather than just random variation.

[5] NO STATISTICALLY SIGNIFICANT IMPROVEMENT

The independent statistical analysis performed a formal statistical comparison between:
SWAH in 2022 (pre-suspension) versus Altnagelvin in 2023 (post-suspension)
Altnagelvin in 2022 (pre-suspension) versus Altnagelvin in 2023 (post-suspension)

The Results

Neither comparison showed a statistically significant difference. Both comparisons had p-values well above 0.05—the standard threshold for statistical significance.

This technical language means: on the basis of the data available, we cannot confidently say that patient outcomes improved.

In the language of statistics, any apparent improvements could easily be due to chance variation rather than representing a true improvement in outcome.

What the Public Health Agency (PHA) Said

Even before the independent analysis commissioned by SOAS, the Public Health Agency (PHA) expressed concerns about the Trust's approach. In a confidential email dated 3rd October 2024 from Joanne McClean, Director of Public Health, to the Medical Director at the Western Trust:

"While you could say... there is no evidence of an increase in in-hospital mortality following the service change... I don't think you could go beyond that without some more work."

Ms McClean went on to state:

"The biggest issue is that the absolute number of deaths per month is very small and subject to significant month to month variation... This means that the RAMI figures calculated are likely to have wide confidence intervals."

This is the professional judgment of Northern Ireland's public health authority—expressed cautiously and privately to the Trust, but expressing fundamental concern regarding the Trust's conclusions. This email is included at the end of this document.

[6] THE PROBLEM WITH HOW THE COMPARISON WAS MADE

Beyond the issue of small numbers, there is a second major statistical problem: the Trust has not made the correct comparison.

The Right Way to Compare Outcomes

To fairly assess whether the change in service has improved outcomes for the population of Fermanagh and West Tyrone, you need to compare:

Before the change: Patients from Fermanagh and West Tyrone who received surgery at SWAH

After the change: Patients from Fermanagh and West Tyrone who now receive surgery at Altnagelvin (after being transferred)

This ensures you are comparing the same population receiving the same service in two different configurations.

What the Trust Actually Did

Instead, the Trust compared:

All SWAH patients pre-suspension (including patients from across the Trust catchment area)

All Altnagelvin patients post-suspension (again, including patients from across the wider catchment)

This is not a fair comparison because:

- It mixes different populations
- It doesn't isolate the impact on the specific population (Fermanagh and West Tyrone) that was most affected by the change
- Patients from other parts of the Trust catchment may be experiencing different outcomes

The Data Gap

Critically, the data that should be used for the correct comparison does not appear to be readily available. The Trust would need to track outcomes specifically for Fermanagh and West Tyrone patients treated at Altnagelvin post-suspension—something that would require detailed audit work.

This has not been done.

[7] WHAT ABOUT OTHER MEASURES OF PATIENT OUTCOME?

The Trust has provided some additional outcome measures beyond mortality. However, these measures require careful interpretation and do not present a clear or conclusive picture of improvement. The Trust has also provided information on measures related to complications, re-admission to hospital and length of stay in hospital.

We have focused on the mortality statistics in this document, as the Trust has stated that it is the statistic that is the most important by far of all the outcomes measures.

A Notable Inconsistency

The increase in length of stay is particularly noteworthy. The Trust initially suggested that length of stay had not changed. This statement was later amended to acknowledge that length of stay has increased by 0.4 days per patient.

This revision raises an important question: if consolidating emergency surgery at Altnagelvin and increasing the surgical consultant workforce from 5 to 14 consultants has genuinely improved outcomes, why would length of stay increase? Typically, well-coordinated services with more specialist input would be expected to reduce length of stay, not increase it.

The Trust's explanation—that this is due to the hospital "now just admitting the sicker patients"—requires further scrutiny through the kind of clinical audit and detailed case analysis that would establish whether this is truly the case.

Why This Matters

Mortality is just one measure of outcome. Patients want to know:

- How long will I stay in hospital?
- What is my risk of post-operative complications from extended ED waits?
- Am I more likely to be readmitted?
- How will the extended journey affect my long-term recovery?
- Will I recover as well as I would have recovered with timely local care?

These questions cannot be comprehensively answered by RAMI alone, nor do the limited additional measures provided by the Trust fully address them.

What Is Known About ED Delays

We do have medical evidence about another important outcome: the impact of time spent waiting in Emergency Departments.

The Royal College of Emergency Medicine has published data showing: one excess death for every 72 patients waiting 8–12 hours in ED.

Since the suspension of EGS at SWAH:

- Significant increases in ‘time to treatment’ occur as a result of both waiting for ambulances to arrive at SWAH and the time it takes to transfer from SWAH to Altnagelvin
- Patients now often still wait twice in ED (once at SWAH, once at Altnagelvin) – ‘DoubleED’
- Some patients are reported to wait over 50 hours on the floor in Altnagelvin ED
- In September 2025, 1,137 patients waited over 12 hours in Altnagelvin ED compared to 524 at SWAH

This increased ED waiting time is likely having a negative impact on patient outcomes—an impact not captured by RAMI figures.

[8] RAMI CAN MISS MORTALITY OUTCOMES: MARK MCGUIGAN

The limitations of mortality analysis are starkly illustrated by the case of Mark McGuigan, a 61-year-old man from Roslea, Fermanagh. On 1st March 2025, Mark developed gallstone problems at home. Because of his age, the surgical pathway put in place by the Western Trust bypassed SWAH and sent him directly by ambulance to Altnagelvin Hospital.

At Altnagelvin, Mark was forced to wait on a chair in the Emergency Department for three days before being admitted to a ward. During that extended wait, his condition deteriorated significantly. He developed sepsis, then pancreatitis, and eventually necrotising fasciitis. Despite aggressive treatment, his condition continued to worsen. He was transferred to Belfast City

Hospital for specialist care, but his condition had deteriorated beyond recovery. Mark died on 17th November 2025—the third anniversary of the date the Western Trust suspended emergency surgery at SWAH.

At the time of his death, Mark still had his gallstones. He never made it to surgery.

Mark's story will not appear in the Trust's RAMI statistics. Mortality statistics only count patients who die as inpatients following surgery. Mark died as an inpatient in intensive care in Belfast. Yet his death is directly related to the pathway changes: had he been able to receive assessment and treatment at SWAH, we believe he would not have faced the three-day ED wait that allowed his gallstone-related illness to progress to sepsis, pancreatitis, and ultimately necrotising fasciitis.

This is precisely why patient stories are essential to understanding real-world outcomes. Clinical data cannot capture the full impact of service changes on people's lives. Mark McGuigan was much more than a statistic. He was a husband, a father, and a friend of the campaign. His death represents a failure to provide timely emergency care that was previously available at SWAH.

The issue is not whether the Trust has "worsened" mortality in aggregate (though this remains unproven). The issue is whether the pathways currently in place are genuinely safer and better for patients. Mark's case suggests they are not.

[9] THE CREDENTIALS OF THE INDEPENDENT STATISTICIAN

The statistical analysis has been conducted by Paul Bassett, an experienced independent statistical consultant. His credentials include:

- Over 25 years of statistical consultancy experience across diverse sectors including healthcare, universities, and commercial organizations
- Specialist background in clinical trials and epidemiological research (former Statistician at UCL)
- Experience in medical research support (former Statistical Consultant at Imperial College School of Medicine, London)
- Over 500 peer-reviewed publications across research applications (full publication list available on ResearchGate)
- Fellow of the Royal Statistical Society—the UK's professional body for statisticians
- Formal qualifications: M.Sc. in Biometry (University of Reading) and B.Sc. in Mathematics and Statistics (University of Bath)

Mr Bassett's analysis is grounded in standard statistical practice and the published guidance from the data provider itself (CHKS).

[10] THE GOVERNANCE AND ACCOUNTABILITY QUESTION

There is a serious question of governance and accountability that arises from this situation. The senior management of an organization responsible for delivering over £1 billion in annual healthcare spending has presented inadequate statistical data to justify major service changes. It is acknowledged that this data would require 30 years to become statistically reliable. Yet a board decision was made to commission a public consultation on the permanent closure of emergency surgery based substantially on these unsubstantiated claims of improved outcomes.

This raises fundamental questions about the governance arrangements within the Trust.

Decision-makers need assurance that major health service changes are based on robust evidence. The current situation—where unsubstantiated statistical claims were used to drive a permanent service closure consultation, and where senior management subsequently acknowledged the inadequacy of the data when challenged—represents a failure of governance that should concern anyone involved in health service accountability.

It is interesting to note that the Western Trust still continue to make these claims of improved outcomes related to mortality - despite being aware of both the concerns of the Public Health Agency (PHA) and the findings of this independent statistical report.

[11] A STATEMENT FROM SOAS

It is difficult to adequately express the shock, anger, and hurt that SOAS and the people of Fermanagh and West Tyrone feel when confronted with claims that patient outcomes have improved following the suspension of emergency surgery at SWAH.

The claim appears disingenuous. It goes against common sense. It contradicts the evidence presented by other professional bodies and organizations:

- NICE guidelines consistently emphasize the importance of timely access to emergency care.
- The Royal College of Emergency Medicine has published clear evidence that extended Emergency Department waits result in excess deaths.
- The Northern Ireland Ambulance Service (NIAS) has confirmed that delays are leading to increased deaths.
- The regulator, RQIA, raised urgent concerns about the current pathways in their review.
- For years, every healthcare organization has worked on the principle that "time is of the essence" in emergency care.

Yet now, specifically for the population of Fermanagh and West Tyrone, the Western Trust claims that time no longer matters. That distance no longer matters. That having to wait twice in Emergency Departments no longer matters. In fact, they go further than this. They actually claim that overall emergency surgical outcomes have improved for the population of Fermanagh and West Tyrone.

This is not credible. It is not supported by evidence. And it causes real harm to real people.

[12] CORE FINDINGS AND CONCLUSION

The Core Findings: Summary and Conclusion

The available data does not provide reliable evidence that patient outcomes have improved following the suspension of EGS at SWAH. This is not a matter of opinion or perspective. It is a matter of statistical fact.

1. Small sample size: The Trust is using roughly 1/10th of the data that professional guidelines recommend for RAMI comparisons.
2. Wide uncertainty: The confidence intervals around RAMI figures are so large that apparent differences between time periods and hospitals easily fall within the range of normal random variation.
3. No statistical significance: Formal statistical testing shows no significant difference in RAMI between pre- and post-suspension periods.
4. Inappropriate comparison: Even setting aside the small numbers issue, the Trust has not made the correct population-level comparison needed to assess the true impact on Fermanagh and West Tyrone patients.
5. Inadequate outcome analysis: Mortality is just one measure of outcome, and the additional measures provided by the Trust do not present a clear picture of improvement. Many important outcome measures have not been comprehensively examined.
6. Ignored evidence about time in emergency care: The Trust's analysis fails to adequately account for the well-established principle that time matters in emergency medicine. Extended transfer times, ED waits, and delayed assessment impact patient outcomes.
7. Real-world evidence: Patient stories, such as that of Mark McGuigan, reveal real harms not captured by aggregate mortality statistics.

The Western Trust has emphasized mortality (RAMI) as the key outcome measure. But the sample sizes are too small, the uncertainty ranges too wide, the comparisons not appropriate, and the timeframe to adequate statistical robustness is 20 to 30 years away.

The Public Health Agency (PHA) has cautioned about the small numbers and wide uncertainty ranges.

An independent statistical review has confirmed that there is no statistically significant evidence of improvement.

Professional bodies across healthcare have consistently affirmed that time matters in emergency care. This principle should not suddenly change because a patient lives in a rural area.

To properly assess the impact of the service change on patient outcomes, decision-makers should commission a comprehensive independent analysis that uses the correct population comparison and examines all relevant outcome measures, not just mortality.

The claims of improved patient outcomes should not form the basis for policy decisions about the future of acute emergency surgical services at SWAH.

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Included:

Email from Director of Public Health (PHA), to Medical Director, Western Trust on 3rd October 2024.

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From: Joanne McClean
Sent: 03 October 2024 11:16
To: Lavery Brendan
Subject: RE: Confidential.

Hi Brendan,

A few of us have taken a very quick look at this for you. We did it separately but have all reached same conclusion.

In a nutshell, while you could say that - looking both at crude death rate and the RAMI - there is no evidence of an increase in in-hospital mortality following the service change. I don't think you could go beyond that without some more work. I also think the strength of the conclusions in the power-point would need more exploration/testing before they were used in public.

The biggest issue is that the absolute number of deaths per month is very small and subject to significant month to month variation (as you would expect). There are also fluctuations in the denominator. This means that the RAMIs and any other rates calculated are likely to have wide confidence intervals. It would be helpful to see the confidence intervals etc. We also have some questions about how the pathway changes may need consideration when considering the findings.

Some specific comments below, but it may be more helpful to talk through these and maybe consider how we could use data objectively to consider what the impacts of the change have been. I have included them just for completeness.

The attachments include raw mortality rates for general surgery and then RAMI rates for the same period. The former show that in SWAH from Jan 2019 to the cessation of EGS in Dec 2022 there were 170 deaths from 10,080 admissions – a rate of 1.69 compared with 0.87 for the NI peer group. Deaths per month ranged from 1 – 9. These are very small numbers from which to draw robust conclusions.

The raw mortality graph (file titled SWAH mortality data 300824) appears to show a downwards trend, but is this because it was extended out to the period after EGS had stopped? In contrast, one RAMI graph for the same period shows a slight upwards trend. The trend line may have been influenced by several unusual months (e.g. March and April 2022, when there were [REDACTED] deaths respectively – against what seem to be much lower total admission numbers of 118 and 116). Without some statistical testing it is impossible to say whether either the slight downwards trend for Altn or upwards trend for SWAH was statistically significant. I would not be confident to draw conclusions on the basis of these graphs, other than to say there was no signal of an increase in mortality following the EGS change.

One graph that I did think interesting and was the one titled 'Mortality rate SWAH & Altn for Gen Surgery based on activity for GP practices in Southern sector'. I assume this was trying to show for the previous catchment of SWAH Gen Surgery whether there were changes in (in-hospital) mortality over time from 2019. Although again the small numbers result in substantial variation from month to month, the mortality since Dec 2022 is not greater – and eyeballing it seems lower – than in 2022, or indeed the pre-pandemic period. Again I would be inclined only to say there is no evidence of an increase in mortality following the change, and potentially – though too early to be definitive – a reduction in (in-hospital) mortality.

The fact that these are in hospital deaths only may also lead to questions – what about people who died outside hospital or people who went to CAH rather than Alt post the change?

RAMI excludes zero LoS emergency admissions. Could this mean some patients who die relatively soon after presentation are being excluded who would previously have been included because time to admission to SWAH ward was faster than the time to go to Alt and go through ED – meaning patients more likely to have passed midnight as inpatient prior to their death before the change?

Query about use of GP rather than patient postcode as proxy for SWAH catchment.

Hopefully this is of some use and I am happy to consider if we can assist in using data to consider impact of the change. Of note, I don't think we have routine access to the RAMI/SHMI/HSMRs so we are not experts in the methods.

Joanne