Northern Ireland Ambulance Service
Health and Social Care Trust

Northern Ireland Ambulance Service Health and Social Care Trust

Annual Quality Report

For the year ended March 2018

"encourage excellence…"

Contents

Foreword

Looking back, it is easy to forget that the distinct Health Service Trust that is the Northern Ireland Ambulance Service only came into existence in 1995, formed from four previously separate ambulance authorities. Over the years our organisation has gone through unprecedented change from a very traditional model of transporting patients to being a key partner in the delivery of care as part of an integrated health service.

Key to this change are our staff who have always embraced the challenges and pressures of striving to meet ever higher expectations, and since taking up the position of Chief Executive this year, I have constantly been impressed by their dedication to delivering a high quality service where their skills contribute to the wellbeing of patients in a very real sense.

Meeting this challenge has proven especially difficult at a time when pressure on the Health Service continues to increase year on year due to an ageing population where more people are living with complex long-term conditions. This has seen the demand for our services – in both the Accident & Emergency and the Patient Care Service settings - rise to a new high at the same time as we are striving to deliver more meaningful care, aiming to direct patients to the most appropriate services through making key decisions in the pre-hospital setting, while still responding as quickly as possible to those with immediately life-threatening conditions.

Maintaining quality sometimes makes for difficult choices, and throughout recent years those leading the service have been unwavering in aiming to deliver high quality, compassionate care. I am proud to lead a service where this culture exists at every level, and look forward to continuing the journey.

Michael Bloomfield
Chief Executive

Transforming the culture

*"An ambulance **service** is called that for a reason – we exist to **serve** the public, and as such we aim to take on board their views as to how we can best deliver high quality care through personal and public involvement"*

10,000 More Voices

10,000 More Voices was commissioned and funded by the Health and Social Care Board (HSCB) and the Public Health Agency (PHA) to introduce a more person-centred approach to shaping the way services are delivered and commissioned. It is based on the principles of experience-led co-design, which were adapted into a robust and systematic model through which patients, clients, family members, carers and staff could describe their experience of receiving and delivering health and social care services. *10,000 More Voices* gives patients, carers, relatives and friends the opportunity to describe their experience of using health and social care services so that improvements can be made to the way care is provided.

Work to promote the *10,000 More Voices* patient experience survey and to pilot a survey for Appropriate Care Pathways (ACPs) continued throughout the year through

- A focus on the regional priorities on staff introductions and patient-centred communication skills
- The re-launch and promotion of the *"#hellomynameis…"* campaign
- The NIAS *10,000 More Voices* awareness and promotional campaign
- A promotion of the pilot of the ACP survey and re-launch of the staff survey
- Learning from results – ensuring that learning is shared with senior management and lessons learnt are used in training and service delivery.

Patient stories are provided to public sessions of the Trust Board and shared with managers and staff. So far, over 300 stories about patients' experiences of the Ambulance Service have been collected. The vast majority (90%) of the stories received so far have been positive. This result was consistent with the Department of Health's Inpatient Experience Survey 2017 which found that 87% of respondents who had arrived at hospital by ambulance rated the care they received from NIAS as excellent.

The regional launch of *10,000 More Voices* in June 2017 was supported with a video message from former Chief Executive Shane Devlin on Facebook and Twitter alongside a Trust press release. The results of this project reflect a high degree of satisfaction in terms of compliance with the five patient experience standards set by the Department of Health:

Respect

Attitude

Behaviour

Communication

Privacy and dignity

The importance of a caring and compassionate approach, proper introductions and the need to keep patients informed were highlighted as key by NIAS service users. The Trust was represented at the monthly regional 10,000 Voices Facilitators Working Group which took place throughout the reporting period.

The Trust produced a video on Personal and Public Involvement (PPI) which has been shared on social media. The aim of the video is to promote the PPI agenda to NIAS staff and service users. It has been used to highlight the Trust's commitment to PPI at public engagement events and in training with staff.

NIAS contributed to regional work on the development of, consultation on and publication of the revised Equality Scheme and Action Plan and Disability Action Plan 2018-23. The Trust worked collaboratively with the other five HSC Trusts to review and update the previous Equality Scheme and Action Plan and Disability Action Plan and engaged with the Equality Commission for Northern Ireland in relation to delivery of statutory duties within Health and Social Care.

Public Engagement

Public engagement events in support of the Trust's equality, PPI and patient experience objectives during 2017/18 included:

- A workshop with service users, staff and the PHA at Ballymena Ambulance Station to share and analyse the themes emerging from patient stories collected so far as part of the 10,000 More Voices patient experience survey and consider learning outcomes and improvements
- Paramedic-led engagement with, and 10,000 Voices surveys distributed to, services users at a Dementia NI patient and carer event in Coleraine
- Attendance at the NICON Conference in May, where 10,000 Voices surveys were distributed to service users
- Visits to the "BCH Direct" Medical Admissions Unit on the Belfast City Hospital Site in September and October to promote the ACP pilot survey among patients referred via the direct admissions care pathway
- Community Education staff and vehicles attending Belfast and Foyle Pride events to engage with members of the LGBT+ community and their families and friends in August
- Meeting with the South Eastern Trust Falls Co-ordinator in September to plan work to identify and contact patients on the NIAS Falls pathway who had been referred to the Trust's Falls Assessors
- A 10,000 More Voices stand at the NIAS Leadership Conference in September, promoting generic, ACP and staff surveys
- Visits to the South Eastern Trust Emergency Department and Outpatients Unit in September and October respectively to promote NIAS surveys
- Presenting at the "Always Events" Regional Workshop, Lough Neagh Discovery Centre in November
- Engagement with the British Deaf Association and service users with hearing impairments in collaboration with the Northern Trust, Antrim Hospital in November
- Public engagement events with NIAS Community Resuscitation Team at Bloomfield, Abbey, Bow Street Mall, Kennedy Centre and Richmond shopping centres
- Staff and service users celebrating the milestone of collecting the first 10,000 patient stories at an event at the Dunadry Hotel in March

- Engagement meeting with the Macular Society, Carrickfergus Library in March
- Participation in public consultation meetings across Northern Ireland to address issues such as the future of stroke care services and the introduction of a Helicopter Emergency Medical Service (HEMS)

NIAS staff demonstrating solidarity with the LGBT+ community at Belfast Pride

Driving Equality

The Trust's Equality and Good Relations Duties Annual Progress Report for 2016/17 was submitted to the Equality Commission for Northern Ireland on 31 August 2017. NIAS contributed to the HSC regional equality and human rights agenda through participation in the DHSSPS Equality and Human Rights Steering Group. Implementation and delivery of the Trust's section 75 duties was monitored by the Trust's Equality and PPI Steering Group of senior managers.

Strengthening the workforce

Peer Support

"Our workforce often encounter difficult and distressing situations ranging from serious trauma to patients facing the most upsetting of social circumstances. Our focus is always on our patients, but we cannot neglect the potential impact this can have on those responding on the frontline, answering calls in our control centre, and working behind the scenes."

A programme has been developed to focus on staff health ***and*** wellbeing, with a specific project on developing a peer support pilot project which can assist those staff under stress or dealing with trauma. To date this has seen:

- Significant internal staff engagement
- Development of external partnerships / learning
- Approval of a Peer Support Pilot plan and a request for expressions of interest from staff to take part in the pilot
- Completion of a Partnership Survey
- Greater visibility of Health & Wellbeing issues
- Establishment of a Peer Support Pilot Working Group
- Agreement to appoint a Health & Wellbeing Project Manager

A number of staff engagement workshops have already took place where there was wide-ranging discussion reaching towards staff consensus on the merits of instigating a pilot project on peer support. Detailed discussions took place on a protocol to trigger peer support.

The pilot is being led by the Assistant Director for Human Resources with support from our Transformation Programme Manager. Three sections of NIAS have been selected for the pilot project – our Emergency Ambulance Control Centre, the Helicopter Emergency Medical Service and the Southern Operational Division.

FdSc Paramedic Practice

Increasing expectations of our workforce are driving the need for ever higher standards of education, and across the United Kingdom there is a move towards degree-based qualifications for Paramedic Staff. In order to meet this requirement, we are continuing to develop a Foundation Degree in Paramedic Practice in partnership with an external education body.

Our own Regional Training Team are leading on this work, and a number of service user groups are assisting with the curriculum design and content of the foundation degree, including Mencap, Inspire Mental Health, Autism NI and Diabetes UK.

At the same time we are intending to develop our training team's own skills through offering development in education practice to meet the needs of a more formal academic process

We aim to be in a position to commence our first cohort of trainee paramedics in late 2018 / early 2019.

Service-wide education

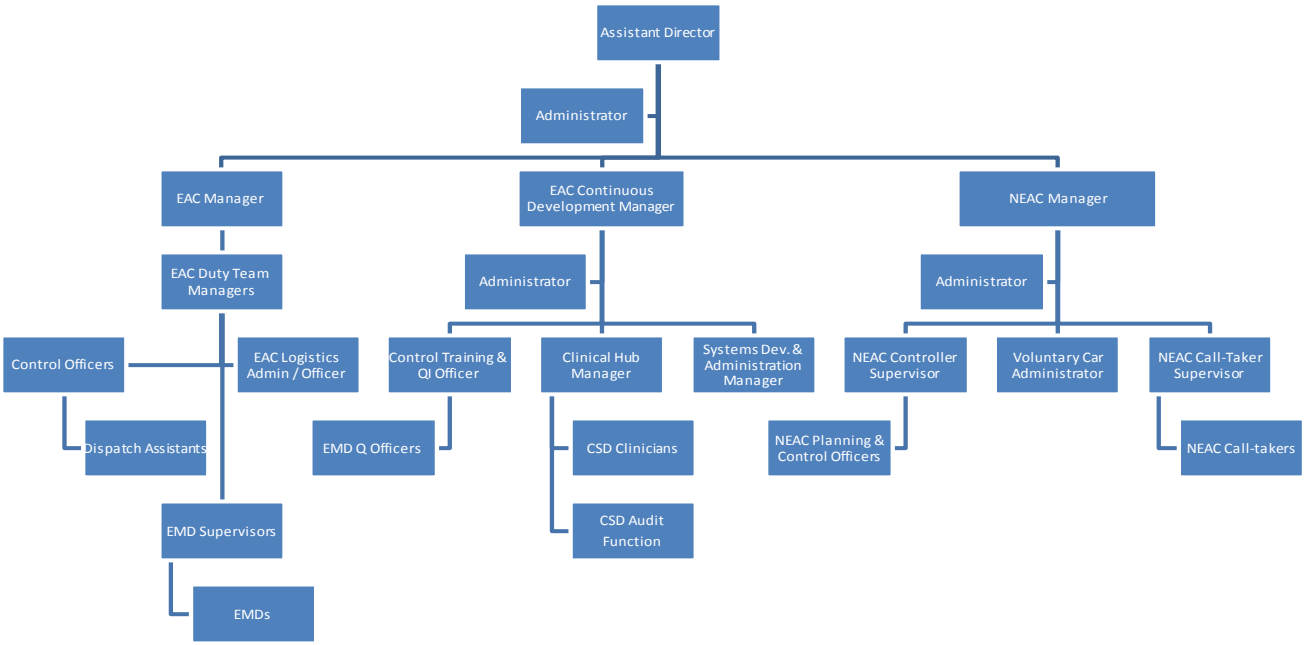
The frontline nature of ambulance service work means that delivering training to the entire work force poses a particular challenge. We address this through a combination of formal "post-proficiency" training days for operational staff to work through key topics, a tier of Clinical Support Officers who can cascade new topics as they arise and even more importantly can observe practice and offer feedback in real time, and more recently through delivery of online learning. We have recently completed a matrix of statutory and mandatory training relevant to both operational and support staff across the Trust.

Launch of the e-Health training in December 2017

Meeting the Demand – a plan for the future

As demand for our services continues to grow it is clear that we will have to change how we deliver services in order to keep pace. During 2017/18 NIAS engaged the assistance of The Association of Ambulance Chief Executives (AACE) and Operational Research in Health (ORH) to bring forward recommendations based on a demand / capacity review of the Northern Ireland Ambulance Service (NIAS). The review and recommendations have been taking into account the activity data from previous years and are analysing this as well as qualitative feedback from interviews with Control personnel and managers. The purpose of the first element of this review was to support changes to the workforce of the Control & Communications department in order to prepare for the levels of demand we expect in the next five years.

The proposed organisational structure recommended by AACE in collaboration with NIAS is shown on the next page:



In 2017 / 18 we identified the funding required and commenced the planning and implementation of the proposed control workforce and structure. We made steady progress and secured the £1.1 M required for the developments, engaged with staff and staff-side colleagues and have already began to recruit and develop the new teams required. Further work will help us to identify what resources we will need to address demand going forwards

Recruitment of EAC Senior Management Roles

Among the recommendations of the review into Emergency Ambulance Control, AACE/ORH, two senior management posts within EAC were to be created to provide day to day support for management of EAC and to co-ordinate the implementation of new EAC systems and processes in a structured way. This recruitment process commenced in March 2018 and has already seen the appointment of the EAC Continuous Development Manager. Their role includes oversight of the Control Training and Quality Improvement Unit as well as the Clinical Support Desk and our technical systems.

Opening of Ballymena Ambulance Station

In September 2017 we were delighted to welcome His Royal Highness The Duke of Sussex who unveiled a plaque to mark the official opening of Ballymena Ambulance station, which also serves as the headquarters for our Northern Operational Division.

The new station offers state of the art accommodation for operation staff and training teams as well as a fully enclosed garage area for a range of vehicles.

Measuring improvement

Call Management

NIAS operates two Control Centres – Emergency Ambulance Control (EAC) based at our Headquarters in Belfast and Non-Emergency Ambulance Control (NEAC) in Altnagelvin. We currently have a workforce of 132 (102 at EAC and 30 at NEAC).

The basic functions of the Ambulance Command & Control systems are to:

- Receive 999 Emergency calls, Healthcare Professional (HCP) calls and other routine health-related transport bookings.
- Provide on-line advice to callers as appropriate. Record information, prioritise work-load and plan Ambulance dispatch
- Deploy Ambulance resources

Telephone calls are received and passed to our dispatchers via Automatic Call Distribution (ACD) which is a call handling system that delivers calls automatically to the first available and suitable call-taker. Normally this whole process occurs within 2 seconds.

During 2017-18 the EAC team handled more telephone calls than ever before, with demand in "999" call activity increased from the previous year by almost 8%.

Type of phone call	Calls
999 Calls	226,670
Routine	147,435
Healthcare Professional Calls (HCP)	36,395
Outgoing calls made	289,192
Total	699,692

On average, we received a 999 call every two-and-a-half minutes.

999 Call Answer Times

We always aim to answer emergency calls as quickly as possible and the system delay between the call arriving at our telephone switch and being distributed to an available call-taker with the appropriate skill set is 2 seconds. Call delays can occur when there is no call-taker free when the call arrives. The target for 999 call answering is 95% within 2 seconds.

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Emergency	89.88	88.99	91.71	91.44	89.20	90.63	89.01	88.64	75.88	86.79	87.33	85.16
Routine	96.23	94.47	95.58	94.51	91.25	93.46	92.40	91.63	80.36	89.25	89.32	88.40
HCP / Urgent	70.93	76.71	74.69	71.28	67.17	69.67	72.52	61.88	54.01	67.03	64.48	65.08

The graph shows routine calls being answered the quickest and this is because all of our call-takers are available for this type of call whereas those who answer HCP calls require additional training, and even more advanced training is undertaken before call takers can respond to 999 emergency calls.

Changes are being made in the staff profiles for call answering with the aim of significantly improving the compliance in answering HCP calls, and there will be further focus on improving 999 call answering through restricting within our control centre and additional recruitment of staff.

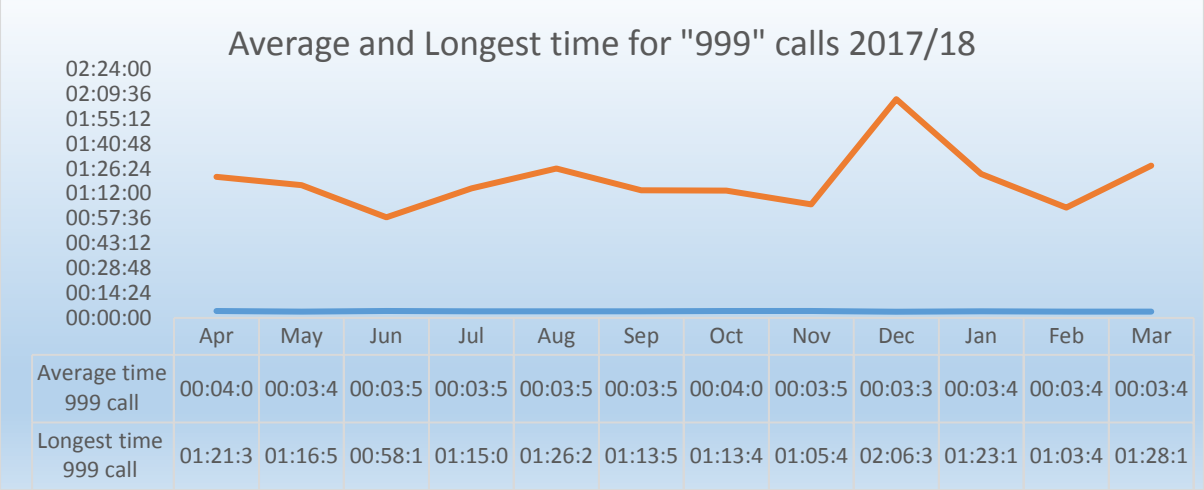
Time spent on Emergency calls

Emergency Medical Dispatchers (EMDs) who take the Emergency calls are required to remain on the line for certain health critical situations. The purpose of them remaining on the line is to provide support and advice to callers until one of our operational Ambulance resources is in attendance at the scene. Our EMDs have available to them a selection of advice on subjects

ranging from detecting ineffective breathing to delivering Cardio Pulmonary Resuscitation (CPR), managing a choking patient to supporting callers in the process of childbirth.

While the average telephone call time is around four minutes, the longest has been over two hours through a combination of increased demand and bad weather. During extended calls, our EMDs stay on the line to provide clinical advice and emotional support until an ambulance arrives – whether talking a caller through how to deliver a baby, or acting as a listening friend for those suffering a mental health crisis and at risk of self-harm.

The graph below gives an indication of some our longest telephone interactions with patients throughout the year



	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Average time 999 call	00:04:0	00:03:4	00:03:5	00:03:5	00:03:5	00:03:5	00:04:0	00:03:5	00:03:3	00:03:4	00:03:4	00:03:4
Longest time 999 call	01:21:3	01:16:5	00:58:1	01:15:0	01:26:2	01:13:5	01:13:4	01:05:4	02:06:3	01:23:1	01:03:4	01:28:1

Emergency Medical Dispatcher Award Scheme

NIAS implemented an EMD award scheme in September 2015 which recognises staff who maintain persistently high standards and those who rise to the challenge of particularly challenging calls.

Awards are made on a regular basis for overall High Compliance with training protocols and for demonstrating exemplary customer service. Other awards are for Baby Born, Cardiac Life Saver & Non-Cardiac Life Saver. Below are the level and number of awards attained by EMDs for the year 2017-18 and the totals since implementation:

Award type	Type	2017-18	Total to March 2018
High Compliance	Certificate	8	56
	25 (call bronze)	14	44
	50 call (silver)	11	34
	100 call (gold)	17	20
Exemplary Customer Service	certificate	2	63
	25 call bronze	3	57
	50 call silver	8	55
	100 call gold	13	46
Baby Born - talking a caller through delivering a baby	boy	2	11
	girl	6	10
	twins	0	0
Life Saver - successfully coaching a caller to provide CPR	Cardiac	5	10
	Non-Cardiac	1	4

Care at the Coalface

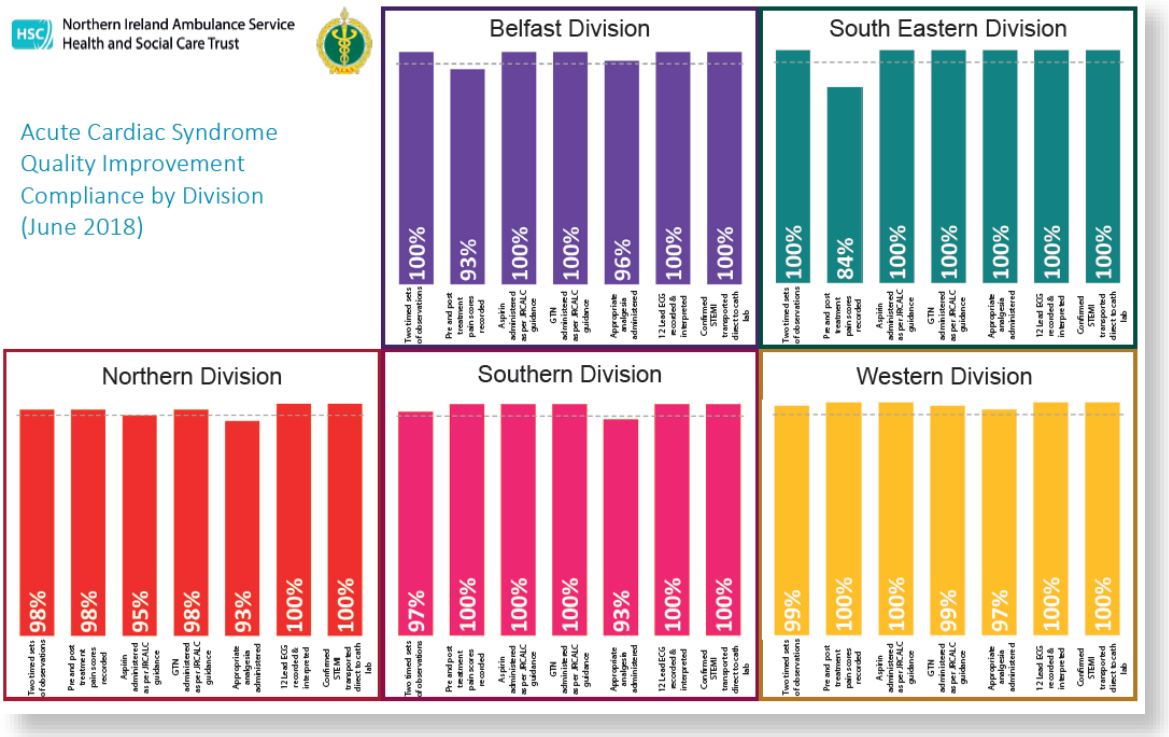
Traditionally Ambulance service performance has been assessed using a very simple measure of how quickly an ambulance arrives at a perceived life-threatening emergency. Historically this has become known as the “8-minute target”, a figure based on work undertaken in the 1970’s relating specifically to the response to patients suffering a heart attack. This predates the existence of paramedics and an ambulance service which is actively involved in treating a wide range of emergencies.

In common with the rest of the United Kingdom, we are moving towards more meaningful measurement of the quality of the care we provide, by comparing our treatment of a number of conditions against what is perceived as best practice.

Clinical Performance Indicator Compliance

NIAS continues to monitor compliance against a range of Clinical Performance Indicators (CPIs). These CPIs are benchmarked with other UK ambulance services and help provide assurance that NIAS continues to deliver safe and appropriate patient care. CPIs are currently in place to monitor our response to conditions such as acute stroke, myocardial infarction, diabetic emergencies, falls and cardiac arrest, with a CPI to measure sepsis care scheduled for implementation later in 2018.

CPIs are regularly reviewed and any areas of lower performance are brought to the attention of our training team and Clinical Support Officers in order to raise awareness of areas for improvement amongst frontline staff.

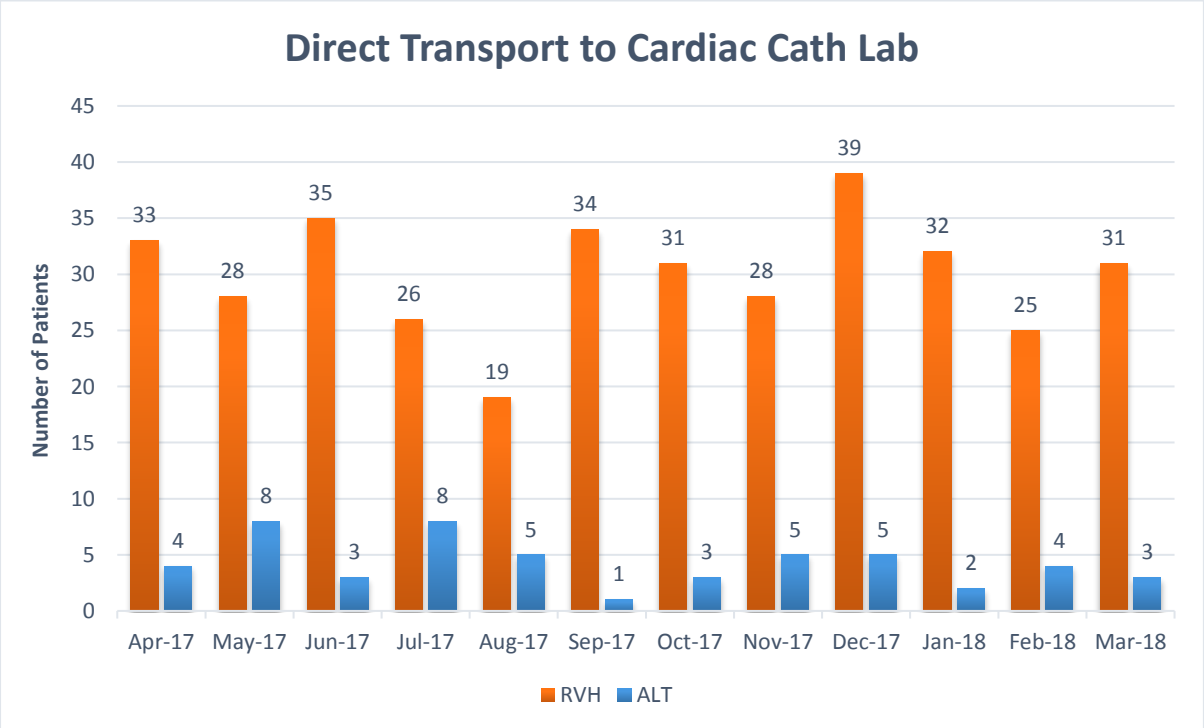


Appropriate Care Pathways

We are continuing to embed our work on improving the patient journey through delivering patients to the most appropriate care with the right care.

April 2017 – March 2018 (Cumulative)	
Diabetes Treat and Leave / Refer	677
Falls Referral	2048
Southern Trust Acute Care at Home Team	49
South Eastern Trust Enhanced Care at Home Team	22
Belfast Trust Acute Care at Home Team	92
Palliative Care	41
Epilepsy	224
Respiratory	65
Community Nursing	124
GP Referral	2456
Total	**5,798**

We are also building on the success of the Primary PCI service which sees patients who are suffering heart attacks delivered directly to one of the two specialist treatment centres at the Royal Victoria Hospital in Belfast (361 patients) or Altnagelvin Hospital in Derry (51 patients).



Improving Turnaround at Hospitals

Recent media attention has highlighted the issue of ambulances at hospital Emergency Departments waiting to hand over the care of patients to the hospital staff. While we are clear that the clinical responsibility for these patients rests with the hospital after we arrive, NIAS works as part of the Health & Social Care family and we understand the sometimes complex system-wide pressures that lead to delays in our crews being able to leave their patient and respond to the next emergency call. However, we recognise the very real risk that this poses to patients in the community who are in need of an emergency response, as well as those in hospital units who may likewise require an emergency transfer for specialist care.

One of our Area Service Managers has been working to address this issue through:

- Engaging with our colleagues at acute hospital sites
- Engaging with staff through workshops with our Hospital Liaison Officers (HALOs) and Emergency Control Centre Staff
- Standardising an escalation process for HALOs when delays become significant
- Improving IT support for HALOs to improve awareness of the wider system pressures between different hospital sites
- Standardising a “Front Door” policy which allows for patients with less serious conditions to be left in Emergency Department waiting rooms so that crews can make themselves available for the next emergency call.

In addition we have gained the support of the Health & Social Care Board to form a regional working group to address this issue.

Raising the standards

Infection Prevention and Control

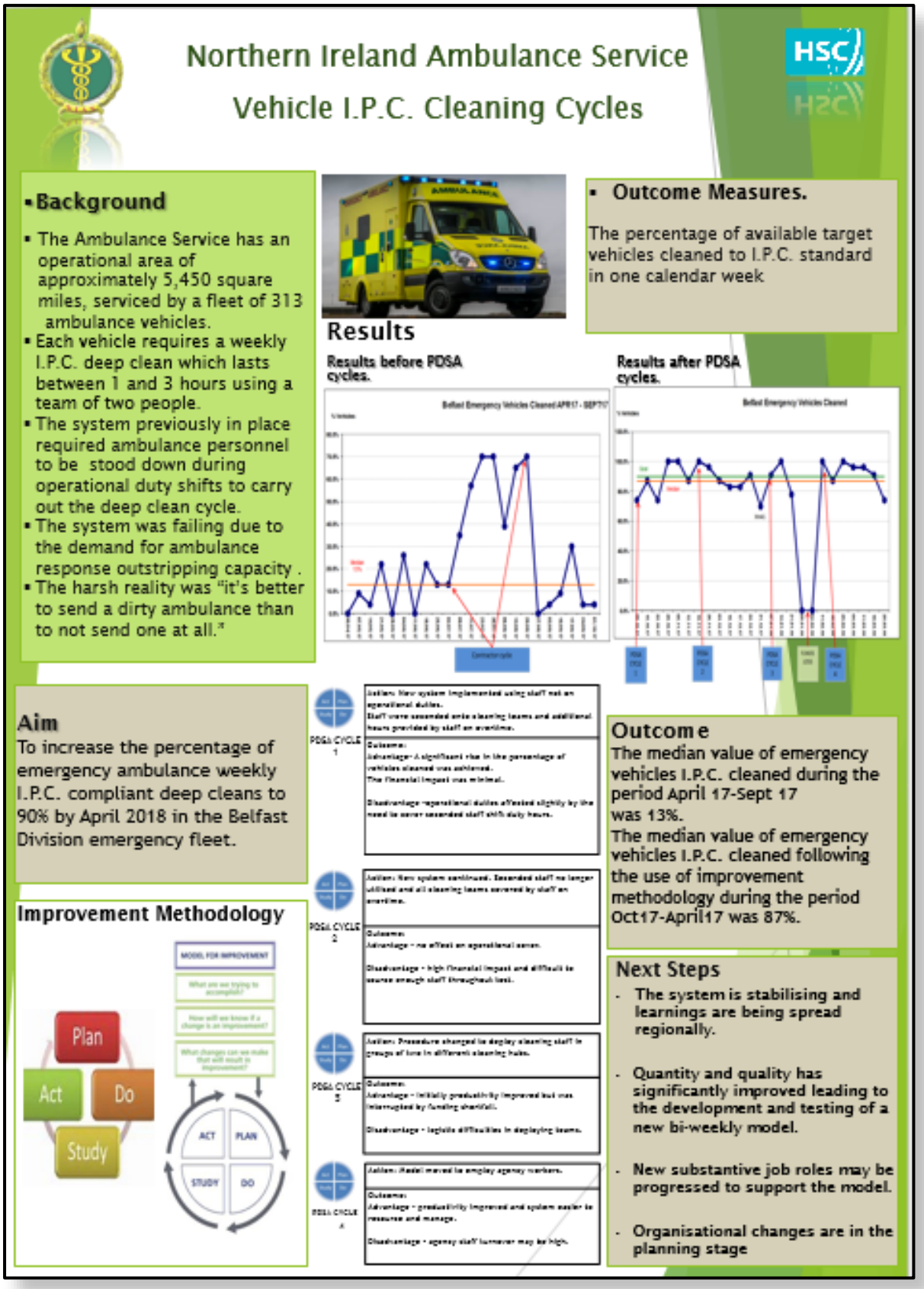
At the invitation of NIAS, the RQIA undertook a review of infection prevention and control practice across NIAS. This revealed some significant concerns in relation to our ability to keep vehicles clean, the condition of some of our stations and the embedding of IPC knowledge.

This was clearly disappointing news for the Trust, but we have focussed firmly on addressing these concerns by steadily improving standards across the whole of Northern Ireland.

NIAS has provided refresher training to all of our frontline staff as well as additional support to staff who manage stations and undertake the audit checks necessary to ensure good practice.

With support from both the Department of Health and the Health and Social Care Board, we have introduced a team of dedicated vehicle cleaning staff who can focus on maintaining the standard of vehicles through regular deep cleaning, while freeing up frontline staff to continue responding to emergencies. We have also conducted surveys right across our estate to determine priorities for renovation or replacement of facilities and are seeking the financial support for both this and staff to focus on this important safety issue going forwards. Finally we are introducing a completely new system of auditing IPC standards across the organisation in a way that will provide life assurance on our practice.

Experience in other UK ambulance services and in our five partner Health & Social Care Trusts in Northern Ireland shows that it will take a long time to ensure we have in place a sustainable system to ensure excellent practice, but we remain absolutely committed to addressing this important safety issue.



Safety Quality Experience programme poster relating to improving our processes for cleaning of NIAS vehicles

Encouraging Excellence in our Control Centres

Emergency Medical Dispatchers (EMDs) are trained to answer 999 calls and rapidly identify the nature of a wide range of medical emergencies as well as offering time-critical advice to callers in order to help patients ahead of an ambulance arriving.

As part of their continuous professional development, they are required to undertake 24 hours of Continuous Dispatch Education (CDE) to maintain certification by the International Academy of Emergency Dispatch. During the 2017 / 18 year the Quality Improvement Team expanded the CDE opportunities available to EMDs and implemented a series of monthly training bulletins and workshops.

Each month the Quality Improvement team publish two training documents on the NIAS Intranet for EMDs. This can take the form of a training update document, a CDE refresher on a specific part of the protocol, a quiz for completion for CDE hours or flashcards for use at the desk while processing 999 calls.

Alongside this there are monthly workshops covering varying topics and allowing the EMDs some face-to-face time to raise any concerns or queries they may have around specific areas of the protocol. This year some of the topics covered included Urgent Disconnect, 999 Audit process and Coding Accuracy.

Staff in Emergency Ambulance Control also play a very important role in the **onward referral** to community-based intervention teams for patients who have fallen at home and are uninjured or patients who have recovered from a diabetic (hypoglycaemic induced) coma through an electronic referral system within EAC. In 2017/18, 2,048 referrals were made to Falls Teams across the region and 677 referrals made to specialist diabetic teams.

NIAS continues to be represented in the **Regional Directory of Services** (DOS) work and is identified as a key stakeholder in the use of a Regional DOS ensuring that patients are signposted to appropriate healthcare services based in the community that will address their clinical condition and preventing unnecessary trips to Emergency Departments.

Intelligent Routing was introduced into the Computer Aided Dispatch system within EAC which improves the accuracy of distance and estimated time of arrival of emergency vehicles to the location of 999 calls.

NIAS and the Scottish Ambulance Service (SAS) operate a "buddy" system with the 999 operator in times of high demand which means that calls from Scotland may be redirected to NIAS and vice versa. In December 2017 NIAS and the SAS commenced work on introducing an electronic call passing solution that would speed up the passing of emergency calls between each service. This system when fully implemented will be the first of its kind operating between ambulance services in the UK and opens the door on many potential innovations in terms of resilience, contingency and collaborative working.

As part of our improvements to working conditions in EAC a number of height adjustable desks have been introduced to allow staff to sit or stand during a shift to help prevent aches, injuries, cardiovascular disease and other unhealthy effects of prolonged sitting.

Our Non-Emergency Ambulance Control (NEAC) is based at Altnagelvin, and has recently permanently appointed a Call-Taker Supervisor and Control Room Supervisor to increase the managerial oversight of the Control room. NEAC has increased hours of opening to midnight Monday to Friday to provide a better response to after-hours transport issues. We are continuing with the NEAC Discharge Co-ordination initiative / pilot, in conjunction with Belfast Trust which has now been extended for another year. This allows better coordination of discharges and transfers with new Key Performance Indicators (KPIs) and delivers increased attention to complex and / or palliative patients who are awaiting discharge from hospital. These patient journeys in particular require increased planning and often specific resources to complete successfully.

Emergency Control Quality Assurance Process:

During 2017/18 our Quality Improvement Team managed an increase in the number of 999 calls for audit and review. We are committed to reviewing a percentage of 999 calls in line with annual call volume. For 2018/19 this equates to approximately 2.6% of 999 calls or approximately 70 calls per week. Calls are measured across seven areas including customer service and final

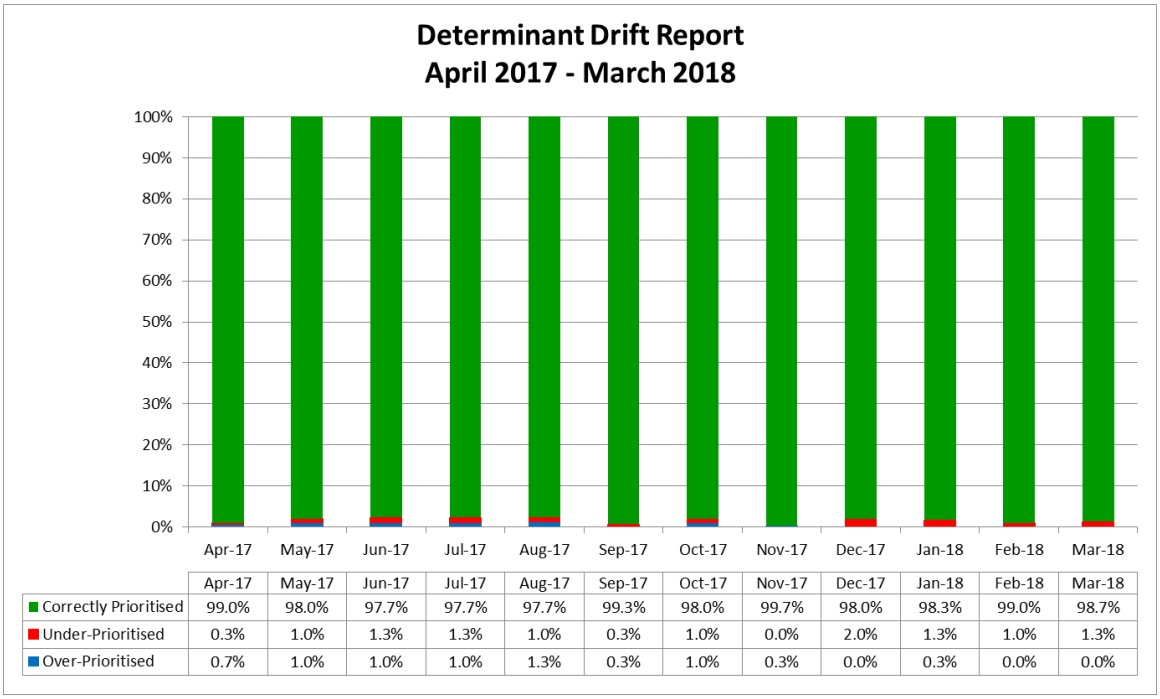
coding (similar to diagnosis) to ensure the highest standards of patient care are provided.

The performance of our Emergency Medical Dispatchers (EMD) is constantly improving as a consequence of the Quality Assurance processes. High-performing EMDs result in minimised resource waste (identifying too many high priority calls which require immediate ambulance response) or minimising risk (identifying high priority calls as low priority therefore creating the risk of not sending an ambulance immediately). The International Academies of Emergency Dispatch (IAED) require monthly figures detailing our compliance to protocol.

In August 2017, NIAS was recognised as an Accredited Centre of Excellence (ACE) by the IAED. To apply for Accreditation, an agency must submit an on-line ACE application form along with a self-study portfolio based on the twenty points of accreditation. The twenty points of Accreditation requirements are presented as a guide for EMS agencies to become officially recognised as ACE standard.

Staff from our Control Centre Team receiving official accreditation from IAED President, Jerry Overton

The ACE award was recognition of the continuing improvement in the quality of 999 call processing and this compliance to protocol was maintained throughout 2017/18 as detailed in the figures below.



	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
Correctly Prioritised	99.0%	98.0%	97.7%	97.7%	97.7%	99.3%	98.0%	99.7%	98.0%	98.3%	99.0%	98.7%
Under-Prioritised	0.3%	1.0%	1.3%	1.3%	1.0%	0.3%	1.0%	0.0%	2.0%	1.3%	1.0%	1.3%
Over-Prioritised	0.7%	1.0%	1.0%	1.0%	1.3%	0.3%	1.0%	0.3%	0.0%	0.3%	0.0%	0.0%

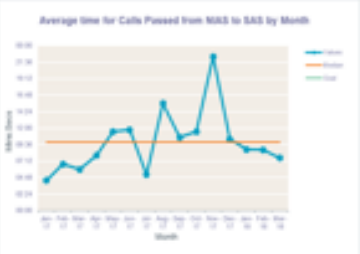
999 Call Passing

Electronic Call Passing to Scottish Ambulance Service

Frank Rafferty, Heather Lyons, Jonny McMullan, Anne Marie DiPalo (SAS)

Background

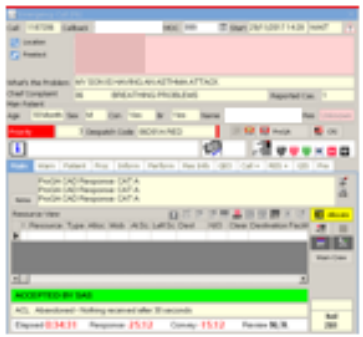
- NIAS – SAS Buddy System (business continuity arrangement)
- Current system telephone based
- Jan 17 – Feb 18 NIAS dealt with 563 calls from Scotland
- Delays in passing calls back to Scotland – **Patient Safety Risk**
- Average time to pass calls: 9mins 58secs
- Longest time: 1hr 17 mins
- Staff under pressure

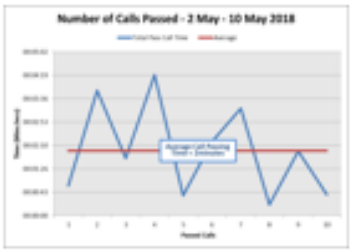


Aim

To enhance patient safety by reducing the time to pass 999 Emergency Calls between the Northern Ireland Ambulance Service and Scottish Ambulance Service to less than 1 minute by June 2018 through the implementation of electronic solution

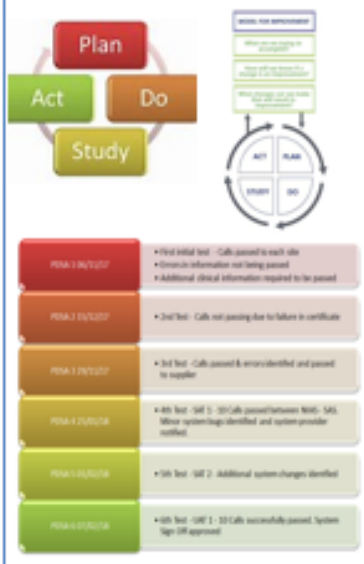
Results





Post Go Live Data 2 May – 10 May

Improvement Methodology



Outcome Measures

- IT system procured, tested and approved
- Standard Operating Procedures (SOPs) developed
- Staff trained
- Calls passed to relevant service within 60 seconds of a 999 call being prioritised by the Medical Priority Dispatch System
- System implemented by 30 June 2018

Outcome

- System procured tested and signed off February 2018
- SOP's signed off March 2018
- Staff training commenced April 2018
- System able to pass calls in within 60 secs of being prioritised
- System implemented 2 May 2018
- 71 calls successfully passed

Learning

- Allow sufficient time
- Manage expectations
- Escalate issues to progress
- Post implementation tests

Next Steps

- Track improvement
- Continue to monitor system
- Review within 1 month
- Obtain feedback from staff
- Ensure training for new starts is amended
- Spread to other Ambulance Services

Safety Quality Experience programme poster relating to
999 call passing arrangement with the Scottish Ambulance Service

Clinical Developments

The urgent need to review our Infection Prevention and Control practice impacted significantly on a number of other clinical developments we had scheduled for 2017/2018, but despite this we have made the following advances:

- A university module focussing on Clinical Decision Making has been offered to our clinical leads
- Over 1500 places on clinical education courses have been made available to operational staff
- We have undertaken a trial of measuring new blood tests in the pre-hospital field, including those used to identify serious cases of sepsis
- We are undertaking an assessment of a new form of fast-acting painkiller delivered via an inhaler device
- We have appointed a lead officer to liaise with patients who call us on a frequent basis in order to review their clinical care and work with other members of the Health and Social Care Team in order to find a satisfactory solution for the patient with the added benefit of reduced emergency calls to NIAS
- We have introduced a referral pathway whereby caller with mental health issues can be passed to trained counselling staff within the Lifeline service
- Following feedback from our staff, we are rolling out a new electronic thermometer across the service

Ambulance Q

Our Transformation and Organisational Change Programme Manager is a member of the Health Foundation funded “Q community” and has set up a special interest Ambulance Quality Improvement Group. As part of this initiative a Virtual Clinical Seminar on Pain Management was piloted between Scottish Ambulance Service and NIAS during which our Clinical Service Improvement Lead made a short presentation on pain management developments in NIAS. All staff were invited to join if

interested. Feedback has been extremely positive and future clinical seminars are being planned.

NIAS Safety Quality and Experience Programme

Of the 140 participants on the South Eastern Trust Safety Quality Experience programme it was very exciting that two NIAS Participants – Frank Rafferty, EAC Continuous Development Manager and David McCrory, Station Officer – both made it to the finals of this award scheme. Given the success of this year's programme, recruitment is underway for a further 14 NIAS participants to take part in the next programme commencing in October 2018. Examples of some of the output from this programme relating to all multiple facets of our work is shown on the following pages.

Quality Improvement in Engagement for Procurement

How do we ensure that staff are suitably engaged in requirements planning for new systems?

Marianne Johnston
Business Manager
Northern Ireland Ambulance Service

South Eastern Health and Social Care Trust

Aim

To ensure meaningful engagement with staff across all **5** divisions achieving a balanced **20%** responses representative of each divisional area in relation to the development of requirements for new electronic patient record systems

Background

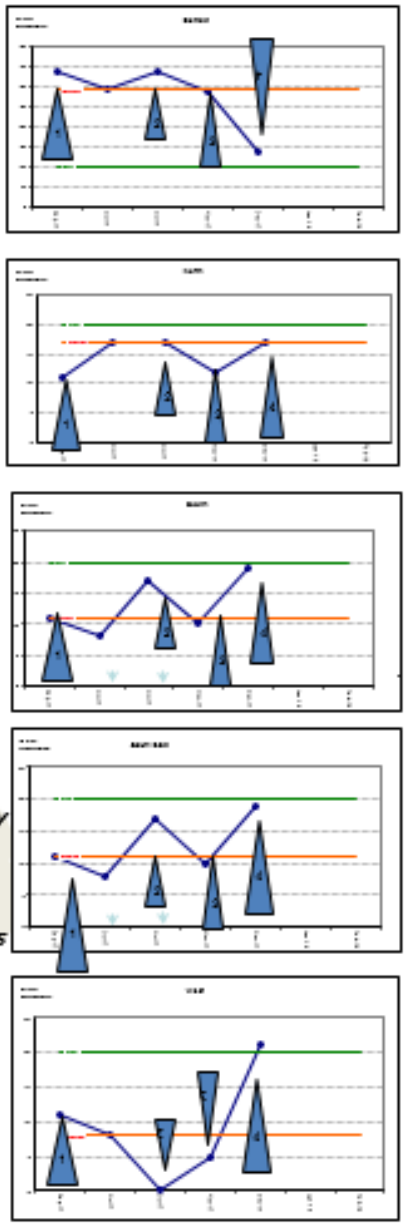
NIAS is embarking on a number of key projects to replace aged systems for mobile data and introduce new systems of electronic patient records.

Procurement is a key stage in this process engaging to get the product right.

How do we ensure that we are getting what we need and that systems are fit for purpose?

Baseline – In the past it has been difficult to engage the right staff - legacy systems there is a fear of getting it wrong

Challenge: How do we improve our engagement and ensure that the requirements are right?



That moment when Jonny realised he should have gone to that meeting, because now his tablet doesn't do what he needs it to do and it doesn't have Wi-Fi!!

Process Measures

How many staff per event?
Registration process and breakdown per division
Feedback surveys
Online survey participation

Improvement Methodology

Outcome results levels of engagement

Belfast – 28%
North – 17%
South 19%
South East – 15%
West – 21%

Improvement in Incident Reporting

Cultivating a Culture of Safety

Katrina Keating, Risk Manager

Background

- All incident reports forwarded to NIAS Headquarters by fax.
- Incident forms then scanned and emailed to the relevant manager.
- Report forms then manually inputted into DATIX.
- Staff and management frustrated by delays, missing information etc.
- Incident reporting levels affected.
- Lack of clarity around process.
- Difficult to identify themes, trends and benchmark.
- Potential difficulties with assurance.
- Potential for delays in learning.

Aim

To implement online incident reporting (DATIXWeb) in order to increase incident reporting levels by March 2018 across the entire region.

As a result the following objectives should be achieved:

- Improve staff confidence in the system.
- Enable management to address issues locally and quickly.
- Improve reporting and analysis.
- Improve learning.

Improvement Methodology

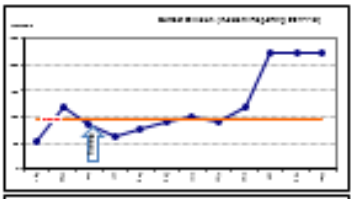
- Plan – we know that we need to improve! We predict that we can make the system better by making a few changes! Data can be collected from DATIX Rich Client.
- Do – implementation of DATIXWeb online incident reporting, delivery of training sessions across the region.
- Study – results analysed were as predicted, yes we can do this better!
- Act – now change the focus to incident management!

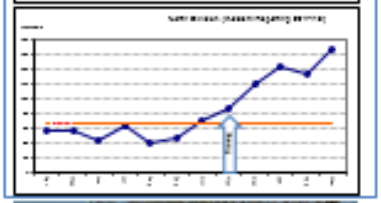
Process Measures

- 124 'incident managers' trained.
- 140 logins created.
- 960 PINS set up. Note NIAS is the only regional HSC organisation to have set the system up to automatically populate personal details.
- PC access for Ambulance Care Attendants, Emergency Medical Technicians and Paramedics equals 2.38 thin clients per location. This equates to a ratio of 1:7 (computer: staff).

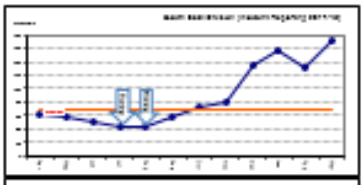
Outcome Measure

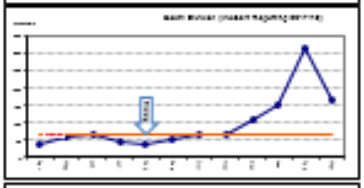
- Incident Reporting Rate

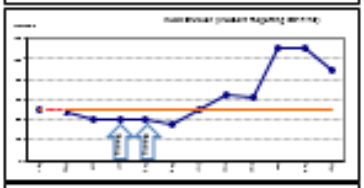


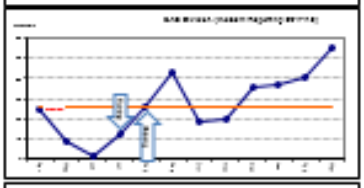


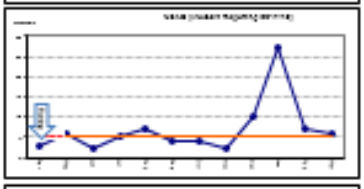
Results:

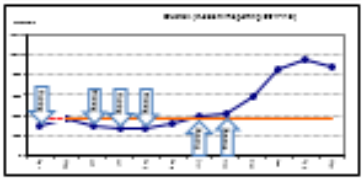


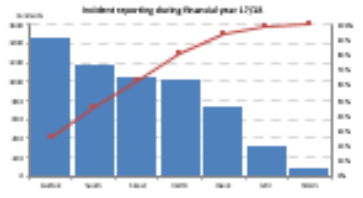












Next Steps

- Focus on incident management!

Phil Lockhart

Managing Admission and Discharge of Bariatric Service Users

Northern Ireland Ambulance Service
Health and Social Care Trust

INTRODUCTION

Obesity within the UK is increasing demand on health services. 2016/17 saw an 18% increase from 2015/16 to 617,000 hospital admission directly related to obesity (NHS Digital 2018).

UK ambulance services are responsible for the admission and discharge of bariatric service users; however, the issues associated with this include:

- Bariatric service user experience in the prehospital environment does not always reflect the values of our organisations.
- Bariatric admissions or discharges from hospital require numerous resources and production hours.
- Adverse effects on staff health and wellbeing can increase when providing care for bariatric service users.
- 72% of Ambulance Trusts do not have a policy directly relating to handling bariatric service users (HSE, 2007).

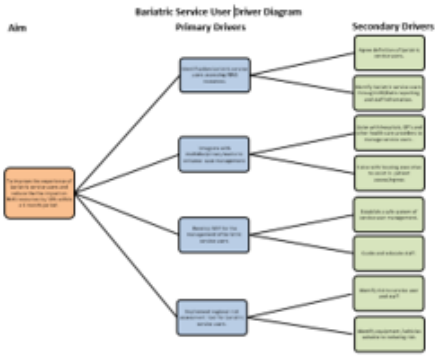
AIM

To improve the experience of bariatric service users and reduce the impact on NIAS resources by 10% within a 6 month period

OBJECTIVES

- To identify bariatric service users within the NIAS Belfast division area.
- Establish baseline data regarding the resources and production hours relating to the hospital admission and discharge of bariatric services users.
- To develop a risk assessment tool and admission/discharge plans suitable for bariatric service users.
- To explore hospital avoidance plan for individual service users together with.

DRIVERS



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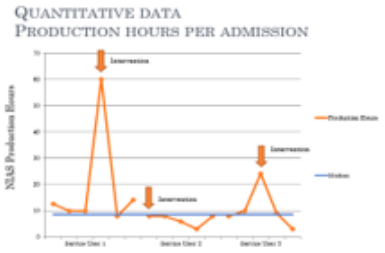


PDSA CYCLE

PROGRESS

PLANNING FOR THE FUTURE

- Procure additional resources to support both the service user and staff in hospital admission and discharge.
- Establish a robust recording mechanism for bariatric service user admissions and discharges.
- Develop policy and procedure for trial within Belfastdivision

Poster by Joanna Smylie

Management of Frequent and Vulnerable Callers to NIAS

Northern Ireland Ambulance Service
Health and Social Care Trust

INTRODUCTION

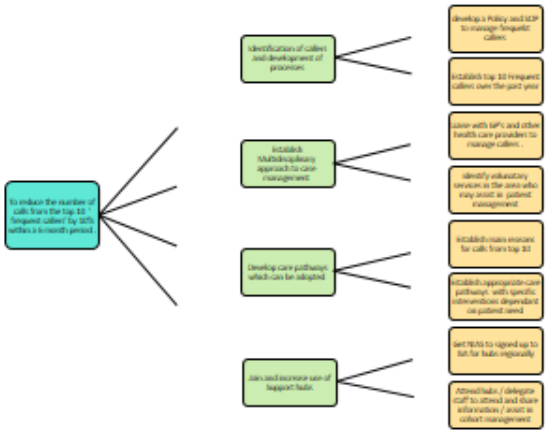
Frequent and Vulnerable callers account for around 3000 calls to Emergency Ambulance Control Room per year (that we are aware of) Mental Health issues, Addictions and Social isolation are the most common reason for these calls, when 999 is used as a safety net by these patients. Other **UK Ambulance Services** have teams , including Social Workers and Mental Health workers, to manage this cohort pf patients.

In order to safely manage these patients the NIAS need to look at implementing a process to ensure each patient has an **Appropriate Care Pathway** in place as an alternative to 999

AIM

1) Establish a Policy and SOP for the Management of frequent and Vulnerable Callers
2) Introduce appropriate care pathways for this cohort of patients
3) Record, Monitor and Reduce the number of callers to NIAS
4) Prioritise Patient Safety and reflect Trust Values

DRIVERS



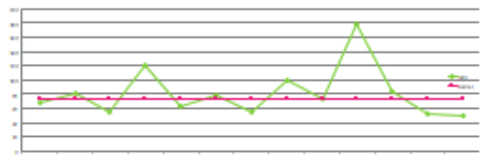
INCIDENTS FOR NIAS (2017)

Individual callers identified	Total number of calls received	Average calls per individual
70	3083	44

PDSA CYCLES

CASE STUDIES

OUTCOMES



NEXT STEPS

- Every patient must be managed individually
- The majority of patients require social support from Multidisciplinary teams and volunteers, in Hub areas these complex needs more easily managed
- Mental Health and Alcohol addiction often go hand in hand, these are the most challenging clients to manage
- A complex individual can require intensive management and monitoring lasting months or years

Ambulance Daily Occurrence Log (ADOL)

How can we improve recording and communication of Daily Occurrences

John Wright, Assistant Director - Control & Communications NIAS

Background

- Northern Ireland Ambulance Service (NIAS) operates 24 x 7 x 365 days.
- We have 5 operational AREAS and resources are controlled by 3 Control Desks – North, South and West, Belfast and South Eastern
- Daily Occurrences are a record of events impacting on service delivery
- Daily Occurrences across the service are recorded by each Desk team via excel and are emailed out to ops colleagues at the end of the shift
- The quality of the records and the effectiveness of the process are poor
- The impact on service delivery is minimal

Aim

What are we trying to accomplish? Improved ambulance service delivery through provision of information for decision-making across the organisation

We aim to increase the occasions when Managers take action *Daily* as a result of the Daily Occurrences by 20% by end of Q2 2018

Improvement Methodology

- Survey use by controllers and managers of Daily Occurrences in the Northern Area to provide baseline
- Gather Category detail on Daily Occurrences for one day per week in that Area for 13 weeks
- Review measures - what outcomes would indicate improvement?
- Create Daily Occurrences categories for the new ADOL module
- Install module, train personnel and provide Daily Occurrences using this
- Repeat survey and study category detail as per outcome measures

Results

From Initial survey:

South Eastern Health and Social Care Trust

Outcome Measures

After we establish the ADOL module for real-time reporting:

From analysis of the baseline, we have compiled a run chart of the number of Daily Occurrences and anticipate this to increase in the initial cycles – this is a process measure.

We aim to increase the frequency with which managers take action in response to the Daily Occurrences – this is a outcome measure and in theory should reflect the ability to see and action Daily Occurrences in real time rather than at the end of a shift.

The list below shows how we believe quality improvement should be reflected in follow-up surveys:

Outcome

Ultimately our aspiration is for reduced incidence of Daily Occurrences due to improved service delivery.
Achievement of our Aim should result in lower numbers of Daily Occurrences across the service

Next Steps

- Further analyse the existing Daily Occurrences to ensure capture of key category's
- Complete system testing and installation of ADOL module
- Train North Control & Operational personnel from Northern Area in use of ADOL
- Re-survey, gather and analyse results and adapt pilot in response
- Roll-out to other Areas if improvement demonstrated

Inquiry into Hyponatraemia-Related Deaths

In January 2018 Justice O'Hara published a long-awaited report of the inquiry into the deaths of children from hyponatraemia – a condition where sodium levels in the bloodstream are abnormally low. This identified many issues with the care of these children, but also with the processes for reviewing incidents where errors may have been made and learning from those mistakes. The inquiry made 96 recommendations on a wide range of topics, and while some of these are specific to the in-hospital setting, there are many themes which everyone working in the health service can address. A comprehensive response to all of the recommendations will take considerable time in order to provide a meaningful outcome, and this work is being led by the Department of Health. NIAS is represented on several workstreams of this group, and will work to implement changes which can be applied to the setting of an ambulance service.

The health service has a duty to learn from both mistakes and from areas of good practice. With this in mind, we have formed the NIAS Learning and Outcomes Review Group where staff from across the organisation can review the learning from incidents where things have not gone well with the aim of reducing the risk of recurrence and improving safety in the future. This group looks at any serious adverse incidents reported by NIAS as well as complaints and concerns raised by other organisations, and develops action plans to ensure that the lessons learned can be embedded in future practice.

Evacuation of EAC

Modern ambulance services are hugely reliant on advanced electronic communications, but as part of our schedule of Business Continuity testing, we used took the opportunity to plan for a complete failure of our Emergency Ambulance Control Centre. In October 2017 an essential test and upgrade of electrical systems within the building provided the perfect excuse to simulate a full evacuation of the Emergency Control Room.

The extensive plan for the evacuation and relocation to an alternative building housing backup systems was sanctioned by the Senior Management Team, and was carried out with the aid of NIAS staff, BT and the Scottish Ambulance Service. Our entire Control team and the IT team demonstrated true resilience

and team work in delivering this event while maintaining our crucial services to the public of Northern Ireland.

This essential maintenance work provided a real-time opportunity to seriously test our short term resilience arrangements and as such was considered a demonstration of the quality of our workforce.

Integrating the care

Helicopter Emergency Medical Service

The HEMS service for Northern Ireland commenced operations in August 2017, and continues to attend serious trauma incidents across Northern Ireland. The service is provided through joint working with our charity partners, Air Ambulance Northern Ireland, who provide the aircraft, aircrew and the base for our operations at Maze near Lisburn. From here the doctor and paramedic team can reach calls anywhere across Northern Ireland within thirty-five minutes, delivering specialist care that previously would have only been given once a patient arrived in hospital. Following this the team will make a decision on which hospital best suits the patient's specific needs, often transferring patients to the Royal Victoria Hospital when specialist care is needed.

The availability of a second aircraft ensures the service can be kept operational when the primary aircraft is undergoing maintenance. If flying is restricted by daylight or weather conditions, the team can also respond in the their rapid response vehicle bearing the callsign Delta 7 in memory of Dr John Hinds who campaigned for the introduction of a HEMS service.

The team typically attends 1-2 serious trauma calls per day; road traffic collisions account for most of these, although falls, industrial and farming accidents and cases of drowning have also been responded to in significant numbers. The team is made up of fifteen doctors and seven paramedics from across Northern Ireland, and is headed by Clinical Lead Dr Darren Monaghan and Operational Lead Glenn O'Rorke.

NIAS Operational lead Glenn O'Rorke, Clinical Lead Dr Darren Monaghan and Air Ambulance NI pilot David O'Toole at the launch of the HEMS service.

The team regularly review the care they provide through Clinical Governance days and are aiming to introduce a set of clinical performance indicators in 2018, benchmarking against care provided in similar services across the UK. They have developed a series of standard operating procedures with the aim of ensuring a consistent approach to care for some of our sickest patients.

Community Resuscitation Team

January 2018 saw the introduction of our dedicated Community Resuscitation Team which works across Northern Ireland to increase awareness of the importance of bystanders delivering CPR in the event of a cardiac arrest. The team have been working with councils to help develop health and wellbeing strategies, and also with schools to deliver life support training to young people.

The team continues to engage with a number of voluntary Community First Responder Groups, and now manages a database of over 1000 public access defibrillators to which we can direct bystanders in the event of a collapse. In the longer term we are planning to make use of smartphone technology to alert trained responders in the vicinity of any cardiac arrest calls across Northern Ireland.

Clinical Support Desk

One of the most significant quality initiatives in 2017/18 was the initiation of a Paramedic Clinical Support Desk (CSD) in Emergency Ambulance Control. This project aimed to provide secondary telephone triage to 999 emergency calls that have been previously assessed as low priority where patients may be suitable to be referred to appropriate alternative healthcare services including primary care, GP Out-of-Hours services, Minor Injuries Units, Pharmacists etc.

The main functions of the CSD are to provide:

- Telephone based ‘hear & treat’ services ensuring that patients receive the most appropriate clinical care
- Clinical advice/support to frontline clinical staff which will complement existing clinical support mechanisms

- Advice and support in relation to the use of NIAS Appropriate Care Pathways
- Real-time clinical advice to Control Room colleagues to enable the deployment of the right resource first time to patients.

Our first cohort of Clinical Support Desk Paramedics

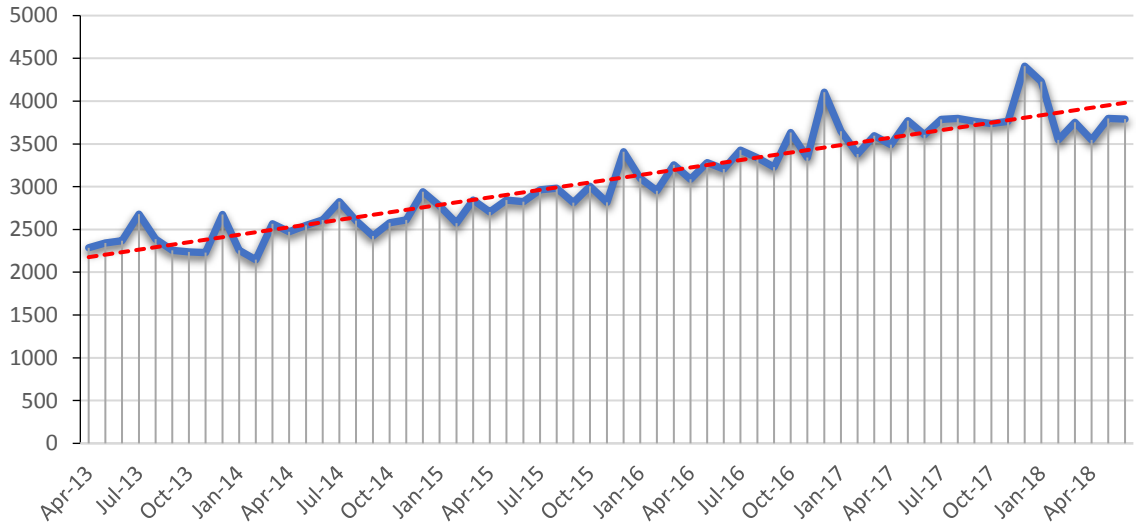
From October 2017 to March 2018 the CSD dealt with 6,442 calls to our 999 line. Half of these calls were resolved by either the provision of self-care advice (27%) with no ambulance response required – known as “hear and treat”, or assessing that patients require non-emergency ambulance transport to Emergency Departments (23%).

Progress was particularly evident during 2018 in the consolidation and enlargement of this Clinical Support Desk (CSD) team and also in the recruitment of a new Clinical Hub Manager. The Clinical Hub Manager has responsibility to oversee the CSD and its expansion with the proposed introduction of a multi-disciplinary team to include other types of Healthcare Professionals such as nurses, Community Psychiatric Nurses and Community Navigators.

Non-conveyance

In line with strategic policy and other UK ambulance services, NIAS continues to promote and advocate the use of Appropriate Care Pathways. As a result approximately 25% of patients who call NIAS are not transported to the ED.

Calls responded to resulting in non-conveyance



In order to enhance the safety of the non-convey decision, a new patient advice leaflet was designed by two of our NIAS Clinical Support Officers so that patients whom we treat and leave at home are aware of potential signs of deterioration, and how best to seek further help if this occurs.

EMERGENCY CARE

Always telephone 999 when someone is seriously ill or injured or life is at risk.

Emergency Department

Emergency departments provide the highest level of emergency care for patients, especially those with sudden and acute illness or severe trauma, such as:

SUSPECTED HEART ATTACK

SUSPECTED STROKE

SERIOUS HEAD INJURY

SERIOUS ACCIDENT

MENTAL HEALTH EMERGENCY

If you have a care plan, call your named contact using the number provided.

If you don't have a care plan, make an emergency appointment with the GP or go to an Emergency Department.

If you are unable to complete the points above and concerned about a person's safety call 999.

If you would like to speak to someone, call Lifeline, free, 24 / 7

Lifeline

0808 808 8000

Northern Ireland Ambulance Service Health and Social Care Trust

Your Self Care Advice

To be provided to all patients not transported to hospital

You have been given this leaflet because NIAS staff who attended you today have, in consultation with you and / or your carers, decided not to transport you to hospital or you have agreed to make your own way or you have declined transport.

- No further clinical intervention / assessment required
- You require medical attention at a treatment centre and have agreed to make your own way there
- Your condition warrants further assessment and / or treatment and an onwards referral has been made
- Medical assessment is advised but you have declined consent for assessment, treatment or transport

Choose well.

www.nidirect.gov.uk/choosewell

PRIMARY CARE YOUR GP

GPs provide health services including medical advice, physical examinations, prescriptions and ongoing care for longstanding or chronic conditions.

They can also provide:

diagnosis of symptoms

health education

vaccinations

simple surgical procedures

MINOR INJURY UNIT

A Minor Injuries Unit will treat injuries not critical or life threatening -

- **injuries to upper and lower limbs**
- **broken bones, sprains, bruises**
- **wounds and cuts**
- **burns and scalds**
- **foreign bodies in eyes, ears or nose**
- **abscesses and wound infections**
- **minor head injuries**
- **broken bones and nosebleeds**
- **bites - human, animal and insect**

Location Minor Injury Unit / Emergency Department

“Lead by example,

challenge complacency,

encourage excellence.”

From NIAS Staff Induction Training, 2018