Dear Mr Cullum,

**Further Information for Health and Sport Committee – NHS Ayrshire and Arran**

Thank you for your letter of 14th December seeking further information for the Committee following our attendance on the 5th December. I shall address each of the areas in turn. Dr Cheyne in his opening remarks commented on the need to adapt and innovate to meet the challenges that we face. We have approached the challenges we face by working across the Health Board and Integrated Joint Boards to look at the care models for Older People and People with Complex Needs, Unscheduled Care, Mental Health and Modernising Outpatients. We have also started to look at specific pathways and have recently concluded a review of Respiratory Care with a focus on the empowered citizen using technology to support individuals. A 3 year action plan is being developed to support change in Respiratory care.

By email to: healthandsport@parliament.scot

www.nhsaaa.net
Improvement and Learning from others

The above triangle brings together the quality ambition for NHS Ayrshire and Arran and describes our shared purpose. This is shared across NHS Ayrshire and Arran and our 3 Health and Social Care Partnerships.

Within that NHS Ayrshire and Arran has 5 corporate objectives. These objectives are shared across NHS Ayrshire and Arran teams so that they can be considered as part of the Personal Development discussions. One of these objectives refers specifically to quality;

“create compassionate partnerships between patients, their families and those delivering health and care services which respect individual needs and values; and result in the people using our services having a positive experience of care to get the outcome they expect”.

There has been a significant organisational investment in building quality improvement (QI) capacity and capability with more than 400 staff undertaking the in-house improvement science fundamentals course (which includes the completion of a quality improvement project). In addition, 35 members of staff have completed a national improvement education programme at expert level. This group of staff form the Quality Improvement Alumni and they are used as a resource to support individuals, teams and services to progress their improvement priorities. Under the banner of ‘quality improvement is everyone’s business’ the Quality Improvement Team have developed a quality approach that balances quality planning, quality control and quality improvement.
teams and services to get involved in improvement and also to ensure that ‘quality’ is celebrated and best practice shared. Some examples of activity during 2017 include:

- Six monthly QI Celebration events showcasing the outcomes of improvement activity. This is an opportunity for teams to share their improvement work and the improvement and outcomes they have delivered. Examples of this include:
  - Improvements in advanced care planning
  - Shadowing patients in Emergency Department for person centred improvement
  - Care Home access to Minor Injury Practitioner
  - Palliative and End of Life Care
- Break the rules week – encouraging individuals/teams to think about ‘rules’ that get in the way of doing the right thing for patients. This resulted in:
  - Increasing patient activity levels by ending “PJ paralysis”
  - Review nursing documentation
- Quality Improvement awareness week – giving staff the opportunity to hear about best practice and to get involved in QI activity and the resources available to them
  - The Quality Improvement Team are aligned to each Directorate and Health & Social Care Partnership
  - Libraries at Ayr, Crosshouse and Woodland View have a range of QI books and can support staff undertaking QI projects with literature searches.
  - There is a QI Twitter account @NHSAAQI to share information on QI activities and QI events that are happening locally and nationally.
  - The QI Zone is an excellent resource set up by NES to provide information and resources to support people with QI to develop their knowledge.
  - The iHUB is a new national improvement resource for NHS and Health & Social Care Partnership staff to support them in their improvement work
- QI3030 – teams and services committing to getting involved in QI activity for 30 minutes per shift for 30 days. Forming improvement teams around an improvement idea and implementing the improvement during the 30 days. Examples of this are:
  - Innovative approaches to improving staff education with short focussed posters and information located in staff rest areas
  - Distraction therapy for children undergoing blood tests
  - Music therapy in acute ward for older people
  - Improving x-ray turnaround times for Emergency Department
- Quarterly CEO quality improvement award to celebrate excellence and share best practice. This has been awarded to:
  - Intermediate Care Team Inreach to the Medical Receiving Ward (Station 7) at University Hospital Ayr (UHA). The team tested the impact and value of the Intermediate Care Team inreach to the Medical Receiving Ward (Station 7) at UHA to identify if the team had facilitated an increased number of timely discharges from the ward.
  - The Emergency Department (ED) Delirium Team at University Hospital Crosshouse. The team took forward a QI project which has transformed the management of patients presenting with delirium within the ED at University Hospital Crosshouse
  - The Enhanced Recovery Following Planned Caesarean Delivery Team at Ayrshire Maternity Unit. The team took forward a QI project which aimed to improve mothers’ recovery following a planned caesarean delivery by improving patient preparation and limiting the stress of surgery.
Quality improvement priorities are agreed annually at directorate, service and team levels. These priorities are informed by national improvement programmes, service plans and local improvement priorities. Process and outcome measures are agreed for each improvement priority with progress monitored via line management and clinical governance processes. This ensures that scrutiny takes place from bedside to Boardroom. An organisational clinical portal (data warehouse) supports clinicians, clinical/operational managers and directors with the provision of ‘quality’ data over time to monitor progress and identify variation that requires improvement support.

During 2017 a wide range of improvements have been sustained at team, service and organisational levels, which have included process improvements, patient experience/outcomes improvements and improvement in staff experience. Examples include:

Organisational
- >10% reduction in Hospital Standardised Mortality Ratio during 2017.
- Introduction of flexible visiting across all areas – 100% of visitors felt welcome.
- Consistent compliance with the 10 essential acute adult SPSP safety essentials across Hospital sites.
- An increase in patient facing volunteers (by 30%) during 2017 to bring added value to the patient experience.

Service
- Re-design of the neuro-developmental pathway – assessments of young people completed within 6-8 weeks (previous wait was more than 12 months
- Re-design of pathway for foot and ankle patients – increased surgical conversation rate and significantly reduced waiting times (4 weeks).
- Re-design of the opiate replacement pathway has improved successful patient detoxification by more than 100%
- Re-design of Allied Health Professional Led rehabilitation pathway has reduced average length of stay by >60% and delivered patient/family goal setting.

Team
- Staff education at the Emergency Department at Crosshouse Hospital led to a 60% reduction in the use of ‘moonboots’ for fractures/sprains and improved outcomes for patients
- Introduction of a ‘handover form’ in neonatal care has cut the time taken to assess babies from 50 minutes to 10 minutes and improved the communication with parents.
- Education and awareness of staff led to an 84% reduction in peripheral venous cannula in-situ, which improved patients’ safety and significantly reduced the risk of infection.
- Telephone clinic support from the specialist diabetes team to newly diagnosed diabetes patients has eliminated the need for out-patient appointments and improved patient outcomes.
- Care home access to the minor injury practitioner service has supported rapid access to care and treatment for this type of patient in association with a timeous discharge from the Emergency Department.
Good examples of collaborative working include the Scottish Patient Safety Programme and the Early Years Collaborative. In addition to those programmes NHS Ayrshire and Arran has collaborated on the Excellence in Care standards with Boards across Scotland;

**Infection Control – Clostridium Difficile**

The next point highlighted relates to infection control. As I described NHS Ayrshire and Arran held a summit to focus on further action to improve CDI. The Board have focussed strongly on embedding measures for the prevention and control of Clostridium difficile infection (CDI) at ward level over a number of years.

In April 2016 the Board convened a Summit, supported by Health Protection Scotland, to review existing measures and determine if there were any further interventions that could be made.

- First the Summit re-affirmed that the existing infection prevention and control measures were the right ones and consistent with those implemented across the rest of Scotland. It was agreed that these should remain a priority to ensure good operational grip that aims to be sustainable and reliable for every case every time continuing the virtuous circle of less cases resulting in a reduced risk of transmission which in turn leads to fewer cases.
- Secondly it was agreed that a refocus of the Antimicrobial Stewardship agenda was required.

Operational grip is achieved at ward level by:

- All positive results from an inpatient with CDI are telephoned to the ward by microbiology on the day of the positive result.
- Advice is given on undertaking a disease severity assessment, initiation of appropriate treatment and implementation of infection control measures.
- Staff will initiate a CDI care plan which includes a daily assessment of the control measures.
- Each case is followed up on a regular basis by an Infection Control Nurse (ICN) to provide support to the ward staff and to ensure continued implementation of control measures.
- The ICNs audit the care plan of each case with results fed back to the nurse in charge in real time to allow any corrective actions to be implemented.
- In addition the audit results are included in the standing quarterly report on CDI submitted to the Prevention and Control of Infection Committee. This allows senior management oversight and intervention where required.

**Antimicrobial Stewardship**

- As part of the refocus on the antimicrobial stewardship agenda the medical membership of the Antimicrobial Management Group (AMG) was refreshed. This resulted in improved medical input into antimicrobial guidelines. It also enabled wider dissemination of the principles of good antimicrobial stewardship via peer discussion and specialty meetings.
- Themed antimicrobial ward rounds were undertaken by the consultant microbiologists and antimicrobial pharmacists. This not only directly impacted on antibiotic prescribing for individual patients it also resulted in increased opportunities for education of junior and senior medical staff on the practical application antimicrobial guidelines and principles of antimicrobial stewardship in the clinical environment – translating theory into practice. There was also the
added benefit of increasing the visibility of microbiologists within the in clinical areas

In your letter you ask what has changed from 2016/17 that is preventing the Board meeting the target in the current year. I offer the following by way of explanation. There has not been a specific change made that has made attainment of this year’s target more challenging. The causes of CDI are multi-factorial and the actual number of cases identified each year are subject to some natural variation. Our current levels of CDI are part of that natural variation. In addition the Board traditionally experiences an increase in CDI in the April – September period with a subsequent decline in the October to March period.

The data referred to at the Committee was for the first 6 months of the year. Our local data from October – December quarter shows a reduction in the number of CDI cases. Therefore as of 31st December the Board is on trajectory for meeting the 2017-18 target (89 cases against a target of 90). If the trend seen in previous years continues into the last three months of 2017-18 then the Board will meet the CDI Target by the year-end deadline.

Our focus on improvement means we continue to look for new initiatives that will support the reduction of CDI. Currently the focus is on exploring how best to use the potential offered by the rollout of electronic prescribing across the organisation. We are currently testing the production of reports that can be used by clinicians at ward level to make review of antibiotics prescriptions easier by highlighting those where a review is recommended either due to length of prescription or route of administration.

Outcomes
My comment regarding outcomes was as part of an answer to the report by Sir Harry Burns. Many of our measures look at inputs, and outputs. As we adapt our services across health and social care and consider the pathway of care, we need to have an emphasis on outcomes for individuals. I believe this is consistent with the ambition within Realistic Medicine and is increasingly part of the discussions in Health and Social Care planning. An outcome focus supports the work in Local Outcome Improvement Plans as part of Community Planning. We will take this forward through our transformational change programme and with the work in Health and Social Care and Community Planning.

Sharing of Skills
As I indicated in my evidence we work closely with other Boards in the West of Scotland both receiving support for services and providing support. My comment about this not always being a practical solution was intended to recognise that sharing of staff can be helpful in the short term but not always a long term answer where the service requires a full time commitment. We do however recognise that where there is a long term vacancy we need to consider alternative ways of providing a service and overcome any practical challenges that brings.

Performance Targets and Waiting Lists
The Committee asked for further information about access targets. Specifically, Treatment Time Guarantee and Referral to Treatment.
We work closely with the performance team at Scottish Government. We understand our demand and capacity and the gap that exists. This is multi-factorial caused by issues such as vacancy of medical staff and increasing referrals in some specialties. We have secured additional funding in recent years to support our plans in Ayrshire and this has had a positive effect on reducing the numbers waiting for outpatient care.

We recognise that some of what is required is to redesign the way that these services are delivered and are therefore focused on work to modernise outpatients. One aspect of that is to look at the value of return appointments and in this year we are seeing initial work that will convert 7500 return appointments into approximately 3000 new outpatient appointments.

As I indicated in my evidence the main challenge in meeting the 12 week Treatment Time Guarantee is in Orthopaedics. We work with our Orthopaedic Teams to maximise our theatre and bed capacity as well as purchase additional activity from the Golden Jubilee Hospital. As part of our ongoing review our orthopaedic teams are increasing throughput in theatre.

In NHS Ayrshire & Arran the 62 day cancer performance is not being met. Patients who are referred to the service as urgent/cancer suspected are prioritised for care and treatment. We employ cancer tracking staff, who proactively manage patients through our services, supporting rapid assessment/diagnostics and escalating delays.

The challenge we face relates in the main to vacancies across diagnostic services, including Pathology, Radiology and Endoscopy. A range of recruitment methods have been tested and are ongoing, with some recent success in Radiology. To support Pathology Services we have recently purchased digital technology which is currently being tested, and it will ultimately allow us to digitise slides to send to other Boards for reporting (where reporting capacity is available). In addition we have purchased voice recognition technology to speed up local pathology reporting.

In Radiology, NHS A&A has one of the highest number of reporting Radiographers and we will continue to train and develop Radiographers to this level to enable the Board to manage growth in demand and sustain local services. We have also recently invested capital monies to enhance our Radiologist reporting facilities and workstations, to help attract consultant level staff.

In the Endoscopy service the issue relates more to increasing demand, which has a knock-on effect on Upper GI cancers diagnosis. The service unfortunately has experienced significant sickness absence in recent months of Nurse Endoscopists, which has caused some delays; this is expected to improve over this year. In addition, to further develop the service, we are introducing a new technology which is Transnasal Endoscopy, which is a less traumatic procedure for patients and quicker, which will help with managing increasing demand.

In addition to the above: The Lung cancer pathway is difficult as it involves a number of steps to diagnosis and treatment. We have recently introduced new diagnostic pathways to help shorten time to diagnosis, and expect to see an improvement over the next few months for lung cancer patients.
All efforts continue to improve our waiting times position for patients, however demand continues to challenge capacity and this remains a difficulty for Imaging services. A range of initiatives continue to support service delivery:

- Transferring patients for MRI, CT, Ultrasound to GJNH
- Use of the mobile MRI van to provide additional sessions that have been secured until the end of March 2018
- Ongoing use of Medica, which is an external reporting bureau, and currently exploring options to increase outsourcing of reporting
- Engagement of Locum Consultant Radiologists and Locum Radiographers to support additional sessions in CT and MRI
- Delivery of additional sessions by department staff

We closely monitor waiting times and aim to ensure these are consistent across Ayrshire; imaging requests are frequently moved between sites to minimise patient waiting times (occasionally patients do not wish to travel and want to wait for an appointment at their nearest hospital).

In the longer term we foresee that we will be able to meet extra demand and achieve satisfactory waiting times in CT/MRI/US by providing services over 7 days. At present we have recruited three additional Radiographers to implement the 7 day working rota. Work is about to start on an expanded facility which will on completion provide an additional ultrasound room to further increase capacity.

With regard to recruitment, Radiographers as well as Radiologists are in short supply. We have advertised our recent vacancies on SHOW and in RAD magazine (which is a national radiology specific publication). At present recruitment remains problematic; we have interviews scheduled for 11th January 2018 – the majority of applicants are students who graduate in summer 2018 and will need to secure HCPC registration before they commence employment.

NHS Ayrshire & Arran currently uses an external reporting agency (Medica) to support Radiology reporting.

A Scottish Radiology Transformation Programme was established in October 2017. The deliverables of this programme are:

- A single IT and data infrastructure for Diagnostic Radiology
- Integrated working arrangements to allow staff to deliver services across boundaries
- Standardised national clinical governance and quality assurance arrangements to support cross-boundary working
- A national approach to Clinical Decision Support software
- Development of a sustainable national radiographer reporting/advanced practice model
- Written long-term vision for Diagnostic radiology, including sustainable workforce plans
Workforce
Turning to recruitment, the Committee sought further information on a number of areas and I shall take each in turn.

The first point relates to the consultant vacancies in Care for the Elderly. NHS Ayrshire and Arran has carried out a review of our services for Older People to ensure that we are best positioned to recruit and retain the skills necessary. We have recently been successful in recruiting a consultant who will lead our service for Older Adults in Acute Care. To support the consultant, 3 Acute Care of the Elderly Practitioners have been recruited, two of which are now in place with the third starting January 2018. The practitioners have a number of years’ experience working as Physiotherapists and Occupational Therapist with an interest in the care of older people. The aim of this team is to support older people attending the acute hospital to be transferred or discharged as soon as possible with the appropriate care and treatment plan. We will continue to recruit for consultant posts to bring our service to the required establishment and believe that this new model will be attractive to future candidates.

The Committee also asked about inventive or creative solutions to recruitment. It is possible to find alternative roles that can substitute for the role/skill/competency of a doctor; however it is more common to find complimentary roles, which still requires the input of a doctor; and NHS Ayrshire and Arran has a strong reputation for developing alternative roles.

An example of substitution roles is Reporting Radiographers and NHS Ayrshire & Arran has the highest number of in Scotland. The Board has a range of Nursing, Midwifery and AHP Consultant posts where they are the lead clinician/responsible clinician for a caseload of patients with minimal involvement from doctors on an escalation basis only:

- Consultant OT for Rehabilitation;
- Nurse Consultant for Urology;
- Nurse Consultant leading heart failure and cardiac rehabilitation team;
- Consultant Physiotherapist;
- Consultant Midwife; and
- ANP Hysteroscopist.

Where we have vacancies in our medical trainee staff we have successfully recruited Clinical Teaching Fellows/ Clinical Development Fellows and a small number of doctors through the Medical Training Initiative.

Beyond advertising through SHOW and the BMJ, the Board has also sought the support of Permanent Recruitment Agencies in recruiting to key posts. This has not yet borne fruit; but we will continue to consider opportunities through this route.

National work involving the Scottish Government and Employers is underway to identify actions to improve the recruitment and retention of consultants. Specifically steps are being taken by the National Shared Service Reference Group to lead a pan Scotland recruitment campaign for Consultant Radiologists which will allow the approach to be tested and further developed. NHS Ayrshire & Arran will fully participate in both areas. Whilst we have recruitment challenges in some areas of our service it is important to draw to the Committee’s attention that since September 2010 the consultant workforce in
Ayrshire has increased from 235.7 wte to 259.2 wte. In the period April 2017 to December 2017, 26 consultants have been recruited for vacancies and new posts.

**Emergency Admissions**

Your letter sought further information on how we are using digital technology to support individuals and how in doing so we are specifically working with individuals with chronic conditions. The following provides information on our work.

NHS Ayrshire and Arran currently use digital technologies as part of assessment and discharge planning for people with Long Term Conditions. Home and Mobile Health Monitoring is used by clinical staff as part of the clinical pathway of care for patients with multiple long term conditions such as Chronic Obstructive Pulmonary Disease (COPD), Coronary Heart disease (CHD), Hypertension, Diabetes and Mental Health. The technology is used by a range of staff and services including Intermediate Care and rehabilitation, Advanced Nurse Practitioners, General Practice and Specialist Nurses. The main goal of home-based health monitoring is to support people with long-term health conditions to manage their own health and care. It supports self-management, anticipatory care planning and fundamentally changes the relationship between patient and the care system as patients takes more control over their own health and wellbeing. It supports improved clinical outcomes and access to care while reducing complications, hospitalisations and clinic or emergency department visits.

Prior to development and use, the Technology Enabled Care Transformation Team (specialist team and office with skills and expertise in digital technology, service transformation and clinical knowledge) work with staff to review the pathways of care, implement best practice and provide education, governance, support and evaluation alongside the use of the technology in everyday care.

Specific evaluation which is part of a national framework and logic model related to achieving 9 long term 2030 national outcomes, demonstrate that the use of Home and Mobile Health Technology enables:

- Higher % of patients self managing
- Higher % increase in condition control
- Avoided emergency admissions, repeat and length of stay
- Improved access to services

The recruitment target to end of June 2018 which NHS Ayrshire and Arran has committed to achieving is 1449 citizens to have monitored using HMHM. As at the end of October, a total of 1140 citizens had commenced monitoring which represents 79% of overall target, therefore it is anticipated that by 30 June 2018 NHS Ayrshire and Arran are likely over achieved target by more than 50% (based on recruitment continuing as per 3 month period Aug-Oct 2017). Graph 1 describes recruitments in comparison to targets.
Early Impact Evidence
Analysis 12 months prior to home and mobile health monitoring versus 12 month after has been completed specifically looking at the impact on Emergency Admissions, and Accident and Emergency presentations for patients with COPD and CHF. All of these patients also had full Self Management and Anticipatory Care Plans and were supported for a minimum of a 12 week period. Graphs 2 and 3 describe the results below. Graph 2 describes a 29% reduction in the number of emergency admissions and 40% reduction in bed days for patients with COPD. In patients with Coronary Heart Failure (CHF), similar results were also shown, with a 74% reduction in the number of admissions and a 58% reduction in bed days. These results were compared by the specialist nurses to case load co-ordination/management by specialists and the impact of same. Both interventions describe similar results and therefore the Home and mobile health monitoring results were seen and believed to be validated by the specialists in this field.

Graph 2: COPD Emergency Admissions Analysis

29 % reduction in the number of admissions, 40% reduction in bed days
Graph 3: CHF Emergency Admissions Analysis

74% reduction in the number of admissions, 58% reduction in bed days

The Committee also sought some information on Anticipatory Care Planning. All patients receiving Home and Mobile Health Monitoring have a full Anticipatory care Plan and Self Management Plan. The contents of these plans are recorded within the General Practice System and are also held by the patient in their own home. The need for clinical intervention, such as prescription change, rehabilitation etc or the need for a change to the anticipatory care plan is identified by the patient digitally in their own home. These results are monitored remotely by the clinician through a hub and care is consistently co-ordinated and planned in a proactive joint manner between the clinician and the patient.

Each general practice is also supported to develop skills in Anticipatory Care and multidisciplinary team working to develop Anticipatory Care Plans for patients who are deteriorating in health, increasing in complexity and at risk of hospital admission. Patients are identified to the practice by a complexity case finding tool. This tool identifies patient before they have had an emergency admission. Since the inception of this approach practices and the aligned multidisciplinary teams have shown an increase in the number of patients benefiting from ACP and proactive co-ordinated care as well as an improvement in the quality of the ACP itself. Indicators were established by which to measure the quality of the ACP. These indicators were adapted and used within a toolkit which measured improvements in key information within the ACP. For example; was Power of Attorney (POA) in place; was there information regarding patients’ medical condition and self management goals.
Understanding the population health need is key to designing services that will support citizens in their home and community. It is important that the model of care starts with the citizen and is then built on local care and subsequently hospital and specialist care. This requires the health and care system to work together to ensure that plans are effective and resourced. This will determine how to redesign care pathways and the strategic resourcing framework that supports the care model. In Ayrshire we are working to establish our change programme and the pathways of care that will support change. Areas of priority are Older People’s Services and Unscheduled Care.

In order to make the change we need to be clear on the case for change and the success measures and to establish the services in the community that will support citizens before reducing hospital capacity. This is difficult if the resources are not available to establish the new service.

The Strategic Plans of the 3 Integrated Joint Boards are currently under review and will be the basis for future change and any shift of resource.

Set aside budgets have not been an issue in Ayrshire as we work collectively and our unscheduled care planning has been developed on a collaborative basis. The level of change has been constrained by the capacity of our community health and social care teams albeit we have seen important improvements in recent years through the IJBs with changes in community models and maximising the new funds to support General Practice with highly effective use of Pharmacists, Physiotherapist and Community Connectors/Link Workers.
In Ayrshire we need to bring our Acute Hospitals into balance as we are utilising additional beds to meet the existing need that is presenting.

In this financial year the Board agreed all budgets in March.

**Complaints**

As indicated in my evidence we recognised that we needed to be more person centred in our approach to complaints and to introduce the opportunity of a face to face meeting if the complainant felt that would be helpful. We believed that this approach would bring an earlier and more satisfactory resolution for the person complaining and a better opportunity for staff to learn by engaging directly with patients and families who did not feel that they had had a good experience. NHS Ayrshire and Arran reviewed its handling of complaints in 2016 and issued a toolkit on complaints and feedback. The Toolkit was developed to assist staff in handling complaints with a focus on early resolution and to do so with six principles in mind;

1. Get it right
2. Be person centred
3. Be open and accountable
4. Act fairly and proportionately
5. Put it right
6. Seek continuous improvement

The first step in this revised process (2016) is to contact the person raising the concern or complaint and to offer the opportunity of a meeting.

In the last year approximately 63% of complaints were resolved by early contact or meetings discussed with those raising concerns.

In addition we believe that the revised approach is reflected in the Scottish Public Sector Ombudsman’s data for NHS Ayrshire and Arran;

- A reduction in SPSO contacts about NHSA&A from 105 in 2015-16 to 94 in 2016-17
- Only 32 (34%) of the 94 warranted investigation in 2016-17 which is a reduction from 45 of 105 (42%) in 2015-2016
- A reduction in fully upheld decisions from 10 (9%) in 2015-16 to 6 (6%) in 2016-17

I note the comments by Mr Fraser Morton. I can advise the Committee that I met with Mr Morton along with the Board’s Chair of Healthcare Governance on the 11th December. The meeting followed discussion with Mr Morton at the Board’s Annual Review on the 20th October. Mr Morton described his experience and I apologised to him as it is not the way in which I would expect those raising concerns to be treated.

Learning from complaints is a key part of our approach. Examples would include;

- Addition of guidelines to HEPMA for specific conditions eg acute delirium
- Change to electronic requests for endoscopy to reduce waiting times
- Use of learning notes to update staff of policy and guidelines
- Introduction of Treatment Escalation plans to improve end of life decision making and communication
Contact at point of referral when child referred to CAMHS to improve communication and engagement with parents

**Serious Adverse Events Review**

In alignment with the Healthcare Improvement Scotland (HIS) Adverse Event Management Framework an adverse event is defined as “an event that could have caused, or did result in harm, loss or damage to a patient/service user, member of staff, visitor, contractor or to NHS Ayrshire and Arran property or reputation.”

All adverse events are reported/recorded on the DATIX electronic incident reporting system and categorised using the HIS national approach:

- **Category I**
  - Events that may have contributed to or resulted in permanent harm
  - *Consequence 4 or 5*

- **Category II**
  - Events that may have contributed to or resulted in temporary harm
  - *Consequence 3*

- **Category III**
  - Events that may have contributed to or resulted in minor or insignificant harm
  - *Consequence 1 or 2*

*We also assign a consequence score, using the nationally recognised and HIS recommended New Zealand and Australia Risk Management standards.*

The HIS review into our management of Adverse Events in the Ayrshire Maternity Unit found that there could be confusion over the type of adverse event review (AER) assigned to the categories identified. All Category I, consequence score 4 and 5 events require to have a Significant Adverse Event SBAR (SBAR is a document that describes succinctly the Situation; Background; Assessment; Recommendation) completed, and all these are reviewed by the relevant Adverse Event Review Group (AERG). Following this a recommendation is made to the Medical Director/Nurse Director on the type of review to be carried out. The Medical Director/Nurse Director commission SAERs based on the SBARs with a clear audit trail with regard to this decision making process.

There are currently 3 levels of review, Significant Adverse Event Review (SAER), Directorate Adverse Event Review (DAER) both of which use Root Cause Analysis (RCA) methodology, the third level is a ward or departmental review.

A Category I event might not always be an SAER. This is compliant with the HIS National Adverse Event Management Framework.

Definitions are important as this enables us to be consistent and evidence our decision making. We review our Policy every 2 years and have incorporated learning from the HIS review into our revised Adverse Event Policy (2018 draft).

I also agreed to write regarding CTG training in NHS Ayrshire and Arran. I can advise the Committee of the following:
There was a specific action in the HIS review that NHS Ayrshire and Arran must make sure that the training and development needs of staff in the Ayrshire Maternity Unit are met in a timely manner. We have undertaken a training needs analysis of all nurse and midwifery staff and are committed to ensure all nursing/midwifery staff (for whom this is relevant for their practice) attend the multidisciplinary PROMPT training on an annual basis together with their medical colleagues; we will deliver a minimum of forty face to face CTG training sessions per annum. Each session will take one hour. Locally it is mandatory for all midwives who require to interpret CTGs in their role to attend a minimum of 2 CTG training sessions per annum and all midwives to undertake K2 training.

There is also a national group led by NHS Education Scotland reviewing the training needs analysis of nursing/midwives on behalf of the Chief Nursing Officer and we will abide by any recommendations that are forthcoming.

**Finance**

In relation to the cash releasing efficiency savings for 2017/18 I can confirm that the position described by Derek Lindsay was a shortfall of approximately £6million. Examples of cash releasing efficiency savings would be procurement, energy, estate rationalisation, primary care and hospital prescribing, review staffing structures in support teams such as finance and HR.

When vacancies arise they are required to be reviewed to ensure that we still need the position, have the right skills and whether the vacancy offers an opportunity for any change. Roles will also be reviewed as part of redesign of services.

The comment made in evidence about; “Some non-recurring savings have been identified that need to recur in future years”, was to highlight that where we had managed to use non recurring savings, we need to continue to identify recurring savings going forward. NHS Ayrshire and Arran has not received brokerage in previous years. We continue to discuss this year’s position with colleagues in Scottish Government and so it would be premature to comment on repayment options.

NHS Ayrshire and Arran has developed a transformational change plan in collaboration with the 3 Health and Social Care Partnerships. This sets out an understanding of our population and proposes a number of areas where change will be necessary. Key themes are primary/community and social care; digital; developing the model of care across local and hospital services with the focus starting with the citizen. This work will align with Regional delivery planning in the West of Scotland. Changing reliance on hospital services will shape the future of unscheduled care and determine the bed requirement. In addition to these redesign programmes we will continue to pursue best value by working with colleagues on shared services and benchmarking our services against upper quartile performance. We understand that there are significant challenges ahead and that the status quo must change. We are committed to meeting our statutory obligations balancing the challenge of delivering services with workforce, quality and money, whilst ensuring our care is safe and effective.

In relation to the question from the Convener I can advise that we are making changes in unscheduled care constantly as part of our drive to improve patient and staff experience. Examples include continued evaluation and learning through our Combined Assessment Units; developing community based services through the Health and Social Care
Partnerships; changing our model of care for Older Adults with the appointment of a Clinical Lead for Older Adults in Acute Care supported by Acute Care of the Elderly Practitioners. We need to do further work to address delayed discharges. In terms of medical workforce challenges these are addressed in the more detailed workforce section of this response.

**Prevention**

Prevention and Early Intervention across the life course are central to improving the population of Ayrshire’s health and social outcomes along with reducing health inequalities. Ultimately better outcomes will positively impact on all of our health and social care services.

Some key examples of targeted preventative activity:

1. **Mental health and wellbeing**

**Training and education:**
Mental health improvement training locally has been reviewed and a range courses developed including: Mentally healthy workplaces for education; AHEAD for health - a practical approach; School of wellbeing. In partnership with key statutory and third sector organisations, all training delivered across Ayrshire and Arran has been mapped and a training brochure produced which outlines types of training available.

Children and Young People seminars for people working with young people in different settings, are organised and delivered regularly. Over the last year these have included: work in schools; early brain development and attachment; positive mental wellbeing in young people.

**Initiatives:**
Mapping of mental health resources available to schools was carried out in East and North Ayrshire. Following this, East Ayrshire used the results to develop a 3 – 18 framework to support schools to address mental wellbeing. The framework was shared with North and East Ayrshire to inform the development of their strategies.

CAMHS and educational psychology are working with 3 secondary schools plus their ‘feeder’ primary schools to develop a school based model to support resilience building with young people this includes basing a CAMHS worker within the school.

Wellness Recovery Action Planning (WRAP) supports individuals and groups to identify ways to support their mental wellbeing and includes how to get well, how to stay well and to consider how to ask for support. WRAP workshops have been delivered by the Health Improvement team across Ayrshire including community groups in Girvan, Break the Silence in Kilmarnock and Largs Academy.

A key focus of mental health and well being work has been on social isolation. An asset based community builder programme (AHEAD) was piloted in North and South Ayrshire to increase community connection and involvement. The 3 year evaluation report indicates that this programme has been successful in building connections at neighbourhood level with many groups now in existence as a result of community building efforts. To support action to address social isolation and loneliness as a cause of mental ill health, focussed work has been undertaken by the Health Improvement team.
The aim is to highlight the impact of social isolation and loneliness locally, to identify actions that can be implemented to address this and to consider ways in which programmes can be evaluated to measure their impact on social isolation.

Social media:
In consultation with young people, a list of suitable apps, websites and help lines were agreed and circulated. A process for update which included consultation with young people will be implemented.

2. Adverse Childhood Experiences (ACEs)
Adverse Childhood Experiences (ACEs) impact on population health, both physical and mental and also have a negative impact on health inequalities. ACEs can affect people across the life-course, having implications for children, young people, adults and older people. Experiences of childhood adversity can have direct and indirect impacts on how we respond to stress, our resilience and our ability to form lasting relationships. Research on ACE’s has demonstrated a significant correlation between experience of ACE’s in early life and negative physical and mental health outcomes in later life, including; diabetes, depression, COPD, liver disease, heart disease etc. As such it is clear that ACEs have a significant impact on our society and contribute strongly towards demands across all our public services. The ACE’s conceptual framework can therefore be used as a model around which we can further develop the preventative agenda, highlighting the fact that poor health amongst the adult population ultimately has its roots in childhood.

Understanding the impact of ACEs and how we can prevent and respond to adversity in childhood will help us improve wellbeing and address some of the most persistent and complex inequalities in health (Polishing Our Gems Conference 2016).

It is crucial that ACEs are not seen in isolation of the wider agenda and currently across Ayrshire we are working with a wide range of partners to develop a shared understanding and way forward. We are currently developing our approach and have developed national and local links to ensure we drive this forward in an evidence-based, co-ordinated approach supported by data. Examples of local activity include:

- Compilation of ACEs profile for North, South and East Ayrshire utilising available data
- Translation of research findings into accessible and meaningful format to present to a range of partners such as Community Justice, IJB’s and Looked after nursing teams
- Linking with colleagues across a wide range of services such as CAMHs, Paediatrics, Fire Scotland etc.
- Supporting Ayrshire Police to develop their trauma informed approach
- Purchased license for ‘Resilience’ documentary to promote universal awareness
- Developing ACEs learnpro module
- Community Justice Ayrshire ACEs conference in February to inspire partners and harness enthusiasm and call for action to move forward across all sectors
- Active engagement in national discussions regarding routine enquiry
- Developing regional thinking of potential models for working
This is a new area of work for Ayrshire & Arran and we are developing our approach however it adds to the evidence that investment in the early years is crucial to reduce and prevent adversity. This has been demonstrated in the ACE’s research from Wales and England which suggest that prevention of ACEs could result in; 44% reduction in unintended teenage pregnancies, 25% reduction in smoking across the population, 50% reduction in incarceration rates and a 22% reduction in binge drinking amongst other findings.

While there is a focus on child health and the early years the ACE’s framework is also highly relevant to adult health needs and demands. Findings from a large cohort study of 130,000 individuals undergoing comprehensive medical evaluation, demonstrated a 35% reduction in GP visits and an 11% reduction in their A&E visits during a year long-follow up period subsequent to discussion between patients and care providers regarding their personal experience of ACE’s.

Although most of the research around ACE’s has taken place outside of Scotland, the replicability of findings across a number of different countries with varied healthcare systems adequately demonstrates the relevance of this research to NHS Ayrshire & Arran.

3. Health Protection

Though the bulk of the work of the Health Protection Team may at first appear to be reactive, in fact the mainstay of health protection is prevention, both of further spread from known cases of infectious diseases in the community, and prevention of initial infection through promotion of good infection control practice and immunisation.

Through the immunisation team, the HPT is also involved in the coordination of routine and seasonal vaccinations and provision of advice regarding travel vaccines, a key area of prevention. Additionally the HPT work closely with the three local authorities on the Joint Health Protection Plan, both planning preventative health protection work which involves Environmental Health colleagues and generating joint learning from previous events to inform future work.

The HPT also takes part in other pro-active preventative measures. This Winter they prepared and distributed pre-emptive information and advice packs regarding norovirus and influenza to care homes and schools within Ayrshire and Arran. Following this, the team noted an increase in the number of calls seeking advice around proper infection control procedures, or notifying us of illness in residents or pupils which allows us to intervene and potentially prevent further spread. Similarly, the team have prepared a Spring newsletter which will be distributed to acute and community teams across the health board, providing advice and updates about relevant infectious diseases and immunisation news to raise the profile of the HPT and promote good public health.

4. Health improvement in the Prison

There have been two Health and Wellbeing days held at HMP Kilmarnock with both days being organised and facilitated by the Health Improvement team, prison staff and prisoners.

Kilmarnock Prison has been involved in the “Tobacco in Prisons” study in conjunction with Glasgow, Aberdeen and Stirling Universities.
Our Health Improvement team are supporting HMP Kilmarnock through the process of working towards achieving the Healthy Living Plus award.

*Football Fans in Training* programme, which was piloted in HMP Kilmarnock, was redesigned to be more prison specific. This was a collaboration between Serco, NHS Ayrshire & Arran, Kilmarnock Football Club and Glasgow University. This training programme was rebranded “Fit for Life” and has now been delivered as a Train the Trainers course at the Scottish Prison Service College with representation from every prison establishment in Scotland.

*Health Champions in Prison Programme*
HMP Kilmarnock is the only prison in Scotland which delivers an accredited training programme to prisoners to allow them to become peer health champions within the prison. This programme provides prisoners with skills and knowledge to support their fellow prisoners by providing basic health messages.

5. **Sexual health**

*Campaigns:*
In partnership with national organisations we have designed, delivered and evaluated a number of public facing campaigns including: the Scottish Government’s National Cervical Screening Campaign; World Hepatitis Day, BBV Testing week, and World AIDS day.

*Website: www.shayr.com*, NHS Ayrshire & Arran’s Sexual Health & BBV website has seen an increase in number of visitors to the site each year.

*Health Events:*
Support has been provided at a variety of health events hosted by partners such as HMP Kilmarnock and Ayrshire College sites. This includes one to one interactions / interventions across Sexual Health, C Card sign up and BBV information.

*Training & Education:*
We continue to design, deliver and evaluate a suite of training to a range of partners, staff and population groups across Ayrshire. Training is delivered in partnership with our commissioned service and with other specialists across the organisation. E learning continues to be accessed by a wide range of staff across NHS Ayrshire & Arran.

*Initiatives:*
We have been working in partnership with our colleagues in Mental Health Services to develop Sexual Health Guidelines for Mental Health Inpatients. A supportive training programme has been established and will undergo evaluation.

*Ccard:*
The team monitor, deliver and evaluate NHS Ayrshire & Arran’s free condom scheme (Ccard).

6. **Fetal Alcohol Spectrum Disorder (FASD)**
Fetal alcohol syndrome (FAS) and fetal alcohol spectrum disorders (FASD) are diagnostic terms covering a range of permanent and irreversible lifelong conditions caused by antenatal alcohol exposure. The central message surrounding this work is ‘No Alcohol,
No Risk’ which needs to be recognised by the population at large and most significantly delivered by all key partners throughout Ayrshire and Arran.

In 2014-15, NHS Ayrshire & Arran was selected amongst competition from a number of other Health Board’s to be Scotland’s only test site for developing a new Fetal Alcohol Spectrum Disorder pathway. The FAAST (Fetal Alcohol Assessment and Support Team) are now in their second year of government funding and continue to assess, diagnose and support children and families affected by prenatal alcohol exposure. Research is being undertaken during this pilot to help ensure vital information is collected on the impact of diagnosis of children, for them, and for their families, to ensure improved outcomes and effective planning to support them to reach their potential. Whilst 36 children are being assessed within the pilot, it is approximated around 60-80 children currently known to child health services within Ayrshire and Arran, warrant assessment for FASD.

Once diagnosis is confirmed, professional meetings are arranged by our FASD Clinical Co-ordinator to establish packages of care and identify what support is required to be put in place. This frequently involves bespoke training for education establishments to ensure best outcomes for children in these environments.

- Specific resources have been developed for Parents/Carers. Further work developing a resource pack for professionals and education is currently underway.
- The three Alcohol and Drug Partnerships (ADP’s) have funded a Substance Misuse Specialist who continues to work with a range of partners throughout Ayrshire and Arran, delivering tiered and bespoke training, developing resources, collating Alcohol Brief Intervention figures, highlighting gaps in service, and supporting services users and staff. Our ADP’s have identified specific priorities within their own areas and work is ongoing to support these.
- A new Maternal Public Health/FASD post has been created which will facilitate more robust links between alcohol prevention and practitioners.
- Ayrshire and Arran’s FASD assessment and support team are working nationally to develop SIGN guidelines.
- A draft FASD Strategy for Ayrshire and Arran is in consultation
- The local training and support network has been established within Ayrshire and Arran is now being considered to be rolled out at a national level.
- A Making Sense of FASD Conference: Breaking Barriers was held on 22 March 2017 with 200 attendees. Feedback highlighted there is no current provision for FASD diagnosis of adults in Ayrshire and Arran: this is an area for future exploration.
- Our Clinical Co-ordinator currently supports the families of children with FASD across Ayrshire and Arran, offers bespoke training and advice to education establishments once a diagnosis is given, and runs a well-attended local support group for those affected by FASD, and sustainability of services after the end of Scottish Government funding is currently being explored. As the numbers above reveal, there are many more families within Ayrshire and Arran affected by FASD that require ongoing support and interventions to ensure the best possible outcomes for these children.

7. **Health Promoting Health Service (HPHS)**

We have established a ‘Better Health Hub’ at University Hospital Crosshouse to provide patients, visitors and staff with a service to support them improve their health and wellbeing. The service helps to connect people to local services and supports. We are
also exploring the potential for a similar service to be set up at Woodland View, at Ayrshire Central Hospital.

8. **Encouragement of physical activity**

**Walking challenges:**
The Staff Wellbeing Group has taken forward and promoted a number of step challenges to staff throughout NHS Ayrshire & Arran to encourage our staff to become more physically active.

Local walking challenges have been carried out in a variety of settings which includes local nurseries participating in a virtual walking challenge with Health Improvement Staff. Active travel:

New walking routes have been created around the site of University Hospital Crosshouse in conjunction with Kilmarnock Active Travel Hub.

Cycle Friendly Employer assessments were carried out across the three main hospital sites in Ayrshire and Arran. Health Improvement staff at University Hospital Ayr, University Hospital Crosshouse and Ayrshire Central Hospital are now progressing actions to achieve Cycle Friendly Employer status at each site.

The three locality Health Improvement Teams are working with the North Ayrshire Sustrans Employer Engagement Officer and the Ayr and Kilmarnock Active Travel Hubs to provide active travel opportunities for staff within our acute and community hospitals. Information sessions, bike maintenance, safety checks and Cycle Leader training have all taken place in the last year with a view to changing behaviours and encouraging staff to become more active in their commute to and from work.

**Early years:**
Health Improvement staff worked in partnership with colleagues in Education to support the distribution and promotion of over 6000 Play@Home preschool books within Early Years Centres across Ayrshire and Arran.

We continue to deliver ‘JumpStart’ which is our community based Child Healthy Weight programme specifically for families with children and young people aged five to 15 who are above a healthy weight. We also continue to deliver ‘JumpStart Choices’ which is an eight week school based healthy lifestyle programme in primary schools.

**Smoking Cessation**
I also advised the Committee that I would provide information on smoking cessation. Please find information below;

Reducing smoking requires a comprehensive package of Public Health interventions delivered through a co-ordinated tobacco control programme, including public education, professional education, smoking cessation services, regulation and economic strategies.

**Hospital setting**
Fresh Air-Shire offers Smoking Cessation Support in the hospital where patients have an automatic referral system route. Referral cards can be accessed in all wards and staff nurses ensure patient information is included on the card and posted into the Fresh Air-
shire boxes. The cards are collected every day and patients are seen by an advisor, where the cessation service is discussed and where appropriate Nicotine Replacement Therapy (NRT) is discussed. On the advice of the smoking cessation advisor, NRT is prescribed by the hospital pharmacist or the doctor responsible for the patients care. The advisor reviews the patient during their hospital stay, on discharge the patient’s information is passed to the local Fresh Air-shire team who provide telephone support, group support or one to one in the community.

Fresh Air-shire has continued to work on building relationships and referral pathways in secondary care. Over the past year, work has been ongoing with outpatient departments. As a result, Fresh Ayrshire has introduced a referral pathway with respiratory and cardiac teams. Activity includes regularly attending Inspire sessions for intensive care survivors, engaging with the pre-op clinic, developing links with the paediatric diabetic team to provide attendance at their clinics.

**Groups and 1-2-1 support**
A selection of groups (including evening) and 1-2-1s run across Ayrshire within an assortment of venues. These venues are in the areas of highest smoking prevalence. Venues include:- community centres, workplaces, GP surgeries, pharmacies, schools. We provide telephone support for those who are housebound. In North Ayrshire, for example, we have recently started working within the new Fullarton Hub in Irvine and Cafe Solace within Fullarton Connexions in Irvine. The emphasis is to work more closely within communities alongside other partner agencies.

A drop-in smoking cessation group has been set up at Ayrshire College (Kilwinning campus).

**Support to Woodland View**
We have been working with staff at Woodland View (the new Mental Health Facility and Community Hospital in Irvine) to encourage them to discuss with their smoking clients the benefits of stopping. We attend Woodland View weekly to support any clients who wish to stop/manage their smoking. We have also met with Community Mental Health Leads to discuss smoking within their client group and we are attending future team meetings where we will discuss referral pathways with staff.

**Pharmacy Support**
We have continued to train a number of pharmacy staff to help increase their quit rates for clients who join the community pharmacy service. In the New Year, more training is planned with both Boots and Lloyds pharmacies keen to work with us to ensure their staff in all their stores are better trained re-smoking cessation.
We have also trained a number of NHS staff, HSCP staff and third sector staff in how to discuss smoking with their clients and how to refer these clients in to the Fresh Air-shire service should they wish.

**Performance management**
We run off weekly reports from ISD and any outstanding pharmacy 12 week follow-ups that haven’t been collected, we try and contact individuals to collect this information. If they have relapsed we encourage them to have another try and give them details of support local to them.

**Target Groups**
We work with the midwifery teams across Ayrshire to ensure that all pregnant women who smoke (or blow 4+ on the CO monitor) are automatically referred to Fresh Air-shire where they will be offered support to stop smoking.

On a weekly basis, advisors from the Fresh Air-shire team offer support to stop smoking on a group basis to approximately 65 prisoners within HMP Kilmarnock.

**Communication**

We use social media (including Twitter, Facebook) to advertise the Fresh Air-shire and community pharmacy stop smoking service for anyone looking to quit, as having support doubles your chances of stopping smoking. We also promote health messages around the benefits of stopping smoking as well as messages about the detrimental effects of continuing to smoke on an individual.

I trust that this information is helpful to you; however please do not hesitate to contact me should you require any further information.

Yours sincerely

[Signature]

Mr John G Burns
Chief Executive