

Health and Wellbeing Board

29 January 2020

Health Protection Assurance Annual Report 2018-19



Report of Amanda Healy, Director of Public Health, Durham County Council

Electoral division(s) affected:

All.

Purpose of the Report

- 1 This report provides an update to the Health and Wellbeing Board on health protection assurance arrangements in County Durham.
- 2 Updates come from the implementation of the health protection action plan, which is overseen by the Health Protection Assurance and Development Group (HPADG).

Executive summary

- 3 In County Durham, new health protection assurance arrangements were established in August 2018 following a cross-organisational event focusing on this topic.
- 4 The HPADG was subsequently convened and oversees the implementation of a local health protection action plan.
- 5 HPADG meets quarterly and seeks assurance on five main strands of health protection activity, in addition to data and communications which are threaded throughout:
 - (a) Screening programmes
 - (b) Immunisation programmes
 - (c) Outbreaks and communicable diseases
 - (d) Strategic regulation interventions
 - (e) Preparedness and response to incidents and emergencies
- 6 Key achievements overseen by HPADG to date include:
 - (a) Sustained local coverage of national cancer screening programmes above the national and regional averages

- (b) Sustained local uptake of national childhood vaccinations above the national and regional averages (see Appendix 2)
- (c) Working group established to raise awareness and increase uptake of vaccinations at Aycliffe Secure Centre, including promoting vaccination uptake amongst staff members
- (d) Establishing a County Durham and Darlington Flu Prevention Board to improve uptake, particularly amongst priority groups
- (e) Development of a local operating protocol to ensure a rapid response to non-routine outbreaks of infectious diseases – the first of its kind in the North East
- (f) Changes to licensing policy include encouragement of licensees to raise alcohol health awareness, make the offer of free tap water visible, and support local efforts to take action on obesity
- (g) Review of Scientific & Technical Advice Cell (STAC) arrangements to increase robustness of cover arrangements.

7 Areas for future development include

- (a) Improving uptake of certain vaccinations including shingles and pneumococcal
- (b) Ensuring equitable coverage and uptake of screening and immunisations programmes
- (c) Taking account of a national review of adult screening programmes, and a forthcoming national immunisations strategy
- (d) Development of a sexual health strategy for County Durham
- (e) Ensuring health protection and public health related emergency preparedness is assured during organisational change.

Recommendation(s)

8 Members of the Health and Wellbeing Board are requested to:

- (a) Note the content of the report
- (b) Note that local performance continues to be higher than England and regional averages and above target for most screening and immunisation programmes
- (c) Note that the report provides broad assurance that effective processes are in place for each of the key strands of health protection activity
- (d) Support the need for further assurance in relation to flu immunisation and the outcome of a national review of screening
- (e) Support further identification and response to emerging health protection priorities and be updated accordingly.

Background

- 9 The protection of the health of the population is one of the five mandated responsibilities given to local authorities as part of the Health and Social Care Act 2012. The Director of Public Health (DPH) for County Durham is responsible under legislation for the discharge of the local authority's public health functions.
- 10 The health protection element of these statutory responsibilities and the mandatory responsibilities of the DPH are as outlined below:
 - (a) The Secretary of State's public health protection functions
 - (b) Exercising the local authority's functions in planning for, and responding to, emergencies that present a risk to public health
 - (c) Such other public health functions as the Secretary of State specifies in regulations
 - (d) Responsibility for the local authority's public health response as a responsible authority under the Licensing Act 2003, such as making representations about licensing applications
 - (e) A duty to ensure plans are in place to protect their population including through screening and immunisation.
- 11 Within Durham County Council, the remit for health protection is delivered by Public Health in conjunction with the Community Protection Service (CPS) and the Civil Contingencies Unit (CCU). The local Clinical Commissioning Group employs an Infection Prevention and Control Team (IPCT) through an agreement with Public Health.
- 12 Public Health England (PHE)'s core functions include protecting the public from infectious diseases, chemicals, radiation and environmental hazards and supporting emergency preparedness, resilience and response. Teams responsible for delivering these functions in the North East sit within the PHE Centre based in Newcastle upon Tyne.
- 13 NHS England (NHSE), working jointly with PHE, is responsible for commissioning and quality assuring population screening and immunisation programmes. This includes a team covering the Cumbria and the North East, also based in Newcastle.
- 14 Regular liaison between Directors of Public Health (DsPH), the Centre Director of PHE in the North East, and the Head of Public Health for NHSE in Cumbria and the North East occurs via monthly North East DsPH meeting and monthly telephone catch ups as well as via the Public Health Oversight Group.

Health protection assurance arrangements in County Durham

- 15 The HPADG, chaired by the DPH, was established in 2018, and aims to enable the Director of Public Health to fulfil the statutory role in assuring the Council and Health and Wellbeing Board that satisfactory arrangements are in place to protect the health of the local population.
- 16 The HPADG has developed a detailed action plan built on five pillars of health protection, in addition to data and communications which are threaded throughout:
 - (a) Screening programmes
 - (b) Immunisation programmes
 - (c) Outbreaks and communicable diseases
 - (d) Strategic regulation interventions
 - (e) Preparedness and response to incidents and emergencies
- 17 The action plan is supported by a scorecard that includes a range of appropriate health protection indicators and outcomes (see Appendix 2).
- 18 The Health, Safety and Wellbeing Safety Strategic Group (HSWSG) is in place in DCC to ensure that suitable priority is given to the management of Health, Safety and Wellbeing across the Council. This includes representation from Public Health.
- 19 NHSE established a County Durham & Darlington Screening and Immunisations Oversight Group which provides assurance to the DPH in relation to screening and immunisation programmes. In addition, the management of incidents and the quality assurance for screening programmes are reported separately to the DPH. Programme boards have been established for each of the screening and immunisation programmes.
- 20 PHE established the County Durham and Darlington Area Health Protection Group and this brings together organisations involved in protecting the health of the population. The group meets quarterly and is attended by a Consultant in Public Health. The purpose of the group is to provide a forum to discuss strategic and operational health protection issues; review outbreaks and incidents (local, regional and national) and learn from lessons identified; provide a forum where cross-boundary and cross-organisational issues can be discussed and solutions identified; identify local priorities alongside implementing national policy and guidance, and identify any joint training and development needs. The group does not have a formal accountability or governance structure.

- 21 PHE NE has a bespoke surveillance system in place for communicable diseases with daily and weekly alerts for exceedances and identification of linked cases. The DPH is informed of outbreaks, incidents and exceedances via email alerts. The DPH is represented at all local outbreak control meetings and outbreak reports are also shared.
- 22 The DsPH for County Durham and Darlington established the County Durham and Darlington Healthcare Acquired Infections (HCAI) Assurance Group in 2004. This group is chaired by a DPH and has wide membership from all provider organisations, enabling the DsPH to have a clear line of sight to all providers in County Durham and Darlington. HCAI information is also reported directly to CCGs where action plans are put in place to address identified issues. These are reported to the CCGs' Governing Bodies as part of the regular quality reports.
- 23 County Durham has retained an in-house team of community IPCT nurses who can support the care homes, GP surgeries with infection control issues (especially reducing rates of reportable infections such as C difficile, MRSA and E.coli bacteraemia).The team also complete yearly environmental audits to ensure care homes and GP practices are compliant with current legislation. As a result of joint working with colleagues in Adult and Health Services, DCC training sessions have been provided for domiciliary care trainers.
- 24 The IPCT deal with alert organisms on a daily basis and offer advice and support to care homes, staff and patients on HCAI. Progress against national targets are fed back to the DPH on a monthly basis.
- 25 NHS England established the County Durham and Darlington and Tees Local Health Resilience Partnership (LHRP) in 2013. This has now merged with the LHRP in the north of the patch to form a North East group. One of the responsibilities of the LHRP is to provide the DPH with assurance that the health sector has well tested plans to respond to major incidents that contribute to multi-agency emergency planning. The LHRP is co-chaired by NHSE and a DPH and attended by a County Durham Consultant in Public Health.
- 26 NHSE and CCGs have a duty to cooperate with local authorities on health and well-being under the NHS Act 2006. This includes cooperating on health protection, including the sharing of plans. The 2012 Health and Social Care Act makes clear that both NHE England and the CCGs are under a duty to obtain appropriate advice in the protection of the public health. CCGs are also Category 2 responders under the Act giving them a duty to provide information and cooperate with civil contingency planning as needed.

- 27 The Civil Contingencies Unit (CCU) is essentially the local authority's point of contact for business continuity and emergency planning both internally and externally in response to incidents and emergencies. The CCU are also a conduit for information for multiple agencies through the Local Resilience Forum (LRF) and have a duty officer on call at all times.
- 28 CCU holds a community risk register which provides assurance to the DPH about key risks to the community including: pandemic influenza; flooding; adverse weather; emerging infectious disease; fuel shortage; widespread long duration electricity network failure; animal disease and building collapse.
- 29 The CCU produce extensive emergency preparedness plans on 'Resilience Direct' and work with the LRF to co-ordinate the training exercise calendar. This also includes running exercises for the local university.
- 30 All internal plans are reviewed on a regular basis. The DPH is involved in the initial development of relevant plans and is sent updates once plans are reviewed. Access to LRF plans is through 'Resilience Direct' from the LRF or the CCU. The DPH is a member of the LRF.
- 31 Durham County Council leads the recovery co-ordination group, responsible for community engagement and recovery assurance in the event of an incident (for example an extensive fire that may have led to land contamination).
- 32 PHE's Health Protection, NHSE's Screening and Immunisation and the local IPCT produce annual reports.
- 33 PHE's annual report covers the NE geography and includes details of the prevention and surveillance of communicable diseases, their response to communicable disease outbreaks and incidents; emergency preparedness, resilience and response, environmental issues and quality and health inequality issues in health protection. The annual report is supplemented by quarterly reports to the DPH that detail outbreaks and issues in County Durham.
- 34 NHSE's annual flu programme report describes uptake amongst eligible groups and highlights areas for improvement. This is preceded by a local evaluation of the flu programme delivered locally.
- 35 The IPCT annual report details the range of support and interventions initiated to reduce HCAI and reports in year activity details. This report also includes the work plan for the IPCT for the upcoming year.

- 36 The DCC Community Protection Service (CPS) provides assurance to national regulators including Department for Environment, Food & Rural Affairs (DEFRA), Food Standards Agency (FSA) and Health & Safety Executive (HSE) through the implementation and regular reporting on their air quality strategy; contaminated land strategy; food safety plan; food hygiene plan; annual enforcement programme; various licensing and enforcement policies and disease contingency plans. Services provided by CPS are regulated nationally by the FSA, HSE and DEFRA to provide further assurance on the quality of service provision.
- 37 A Local Air Quality Management Area currently exists within Durham City. Action and implementation plans are in place to reduce Nitrogen Dioxide emissions and improve air quality standards within that area.

Updates on key areas

- 38 Data provided below are collated from numerous sources and compiled in the scorecard attached at Appendix 2.

Screening and immunisations

Screening

- 39 Breast screening coverage rates in County Durham are consistently above the 70% minimum standard.
- 40 Coverage rates for cervical screening are higher than the England average, but fail to meet the 80% standard. Rates are showing a slight decline in recent years.
- 41 A Cervical Cancer Task and Finish Group has been set up by a Public Health Advanced Practitioner to increase and reduce inequalities in uptake. Actions to be taken forward by the Group include improving communications and community engagement and exploring incentives to service users and providers.
- 42 County Durham has the second highest coverage for bowel screening in Cumbria and the NE (above 60%) and is performing above the England and regional average.
- 43 Where data is available for the seven antenatal and new-born screening programmes, performance for the County Durham population is good. Some data is missing from CDDFT due to problems with their IT systems, which is currently being addressed although this remains a concern.

- 44 The diabetic retinopathy screening programme covering County Durham and Darlington consistently exceeds the national quality standard attendance rate of 80%.
- 45 The Abdominal Aortic Aneurysm (AAA) screening programme covers the North East and North Cumbria. By the end of March 2018, 100% of eligible individuals were offered AAA screening. Testing rates also reached the acceptable standard (77.2%).
- 46 A report on the independent review of adult screening programmes led by Professor Sir Mike Richards was published in October 2019. This stated that the national decline in bowel, breast and cervical cancer screening 'must be reversed' and made several recommendations to reform the current system. These include the creation of single a) advisory and b) commissioning/ quality assurance functions.

Immunisations

- 47 Overall, the universal childhood immunisation programmes demonstrate high uptake rates across County Durham, with rates generally above national targets and averages (see Appendix 2). This includes the following coverage:
- (a) 97.3% of the combined diphtheria, tetanus, whooping cough, polio and Haemophilus influenzae type b (Dtap / IPV / Hib) vaccine at 1 year
 - (b) 97.4% of pneumococcal vaccine (PCV) at 1 year
 - (c) 98.8% of the Dtap / IPV / Hib vaccine at 2 years
 - (d) 97.5% of the PCV booster at 2 years
 - (e) 97.14% for one dose of Measles, Mumps and Rubella at 2 years
 - (f) 98.1% for one dose of MMR at 5 years
 - (g) 96.4% for two doses of MMR at 5 years
- 48 The World Health Organisation withdrew measles elimination status from the UK in 2018 (after granting it in 2017) as the percentage of children receiving a 2nd dose of MMR at 5 years old fell to 87.8% nationally.
- 49 The evaluation of the 2018/19 seasonal flu vaccination programme led to the establishment of a County Durham and Darlington Flu Prevention Board in July 2019. Separate papers are available on the flu programme evaluation and the development of the Board. Highlights from the work overseen by the Board are given in the following paragraphs.
- 50 The DCC staff vaccination programme, which is targeted at staff who provide up close and personal care, has been extended to include a

parallel scheme covering around 300 staff working in integrated teams with the NHS.

- 51 Preliminary results of the internal campaign indicate that:
- (a) Of the five staff teams that received a voucher only offer, 51% of identified eligible staff intended to receive a vaccination through the voucher scheme (or are eligible through the NHS). This compares with a 25% uptake of the voucher offer within the four staff teams last year.
 - (b) 55% of identified eligible staff intended to receive a vaccination at an on-site clinic (or are eligible through the NHS). This compares with a 18% uptake through on-site clinics in the previous year.
- 52 The Board has a coordinated action and communications plan that complements the plans of member organisations.
- 53 Members of the Health and Wellbeing Board were challenged to champion flu vaccination within their organisations and have fed this work back to the Board.
- 54 An evaluation of the 2019/20 campaign will be produced by the Board in Spring 2020. This will inform the flu programme for 2020/21.
- 55 Uptake of Shingles vaccine remains stubbornly low. Discussions have been held with NHSE on ways to improve uptake locally.
- 56 There is a national shortage of pneumococcal vaccine covering 23 strains of the bacteria that may be impacting on uptake.
- 57 There have been challenges in the delivery of the flu programme in 2019/20 relating to the complexity of commissioning arrangements and interdependencies within the vaccine supply chain. These issues have led to the DsPH in the region and the local Flu Prevention Board writing to NHSE to raise their concerns.
- 58 The recent Government Green Paper on prevention proposed a vaccine strategy in addition to the implementation of the existing Measles and Rubella Elimination Strategy. It was expected that the Department of Health and Social Care, working with PHE and NHS England, would deliver this comprehensive strategy this Autumn.

Communicable disease control and outbreaks

- 59 IPCT support a network of infection control champions provided by the care homes, who have the potential to attend regular study days depending on resources. This was particularly valuable in 2018/19 as, due to a reduction in capacity within the IPCT, care homes undertook

self-audits of infection control practices. Targeted homes were visited and re-audited against their returns. IPCT expect to be back at full capacity in Winter 2019.

- 60 In hours, information about infection exceedances and outbreaks is easily communicated between organisations. There are also good working arrangements between the health protection team and Environmental Health officers in hours.
- 61 The CCU provides a conduit for dissemination of information across the local authority both inside and outside of normal working hours. However, dissemination of information across and within CCGs, NHSE, local authorities, PHE and provider organisations can be challenging in the event of an outbreak when out of hours.
- 62 There is no formal environmental health officer rota out of hours, which can lead to delays in gathering the requisite information for risk assessments to be accurately undertaken in the event of an outbreak of infectious disease. Whilst the CCU cannot elicit information required for outbreak risk assessments, they are the best route for PHE to make contact with an EHO out of hours. A proposal relating to out of hours cover is currently being considered in DCC.
- 63 It can be challenging to mobilise NHS resources to respond to cases or outbreaks of infection such as influenza, pneumococcal outbreaks, meningococcal infection, hepatitis A in care homes or schools that require swab testing, or provision of antivirals, vaccination or antibiotics. Much of what happens currently works informally on the basis of longstanding relationships. There is no formal commissioning of services to meet these requirements besides the contract with Harrogate and District Foundation Trust, which provides vaccination services children. Work is well underway to develop a protocol to describe how the system will respond to these incidents.
- 64 The presence of several prison establishments in Durham presents challenges in the management of infectious diseases, particularly blood borne viruses and TB. Changes in IT systems expected in 2020 are expected to improve communications between primary care and prisons.
- 65 The Public Health in Prisons North East meetings have been held since June 2017. These are chaired by one of the Consultants in Health Protection. The meetings allow for the dissemination and discussion of key material and learning relating to health protection and infection control; opportunities for individual prisons to share learning and good practice in relation to public health; and CPD for prison staff and commissioners in relation to public health.

- 66 A working group has been established in relation to health protection at Aycliffe Secure Centre. Public Health (PH), Occupational Health (OH), and Adult Social Care attended an initial meeting.
- 67 Public health and colleagues from PHE developed a briefing programme around Blood Borne Virus, MMR and Flu. The briefing raised awareness and the implications of any illness and the importance of being vaccinated to protect against common and rarer viruses. Efforts are underway to improve vaccination rates through a combination of onsite delivery or signposting into primary care.
- 68 The Sexual and Reproductive Health Activity Dataset (SRHAD) together with Genito-urinary Medicine Clinic Activity Dataset (GUMCADv2), form the basis for the sexual health dataset collected from sexual health clinic settings. The integrated sexual health service (ISHS) is requested to provide data analysis relating to GUM attendances, activity and sexually transmitted infection (STI) trends on a quarterly basis.
- 69 PHE Sexual and Reproductive Health profiles continue to show County Durham as having a lower than average diagnosis rate for STI's.
- 70 Antimicrobial resistance (AMR) remains a growing threat to public health. At the time of writing, NHS Durham Dales, Easington And Sedgefield (DDES) ranked 10th highest amongst 191 CCGs in the number of prescribed antibiotic items per 1000 resident individuals. North Durham ranked 38th highest. The CCGs employ a Medicines Optimisations Team who take the lead on appropriate prescribing practices. PHE are leading campaign work on this and more in depth action is anticipated locally in 2020.
- 71 In September 2019, PHE published an Infectious Diseases Strategy 2020-2025. This is organised around six core functions: Prevent & protect; Detect & control; Prepare & respond; Build & apply; Advise & collaborate; Generate & share. Implications for practice will be considered at the next meeting of the HPADG in December 2019.

Strategic regulation intervention

- 72 The Community Protection Service (CPS) delivers key frontline services which are mainly regulatory in nature and encompass environmental health, trading standards and licensing functions. The service is adopting a more strategic and risk-based approach to regulation and works closely with a range of key partners to achieve better regulatory outcomes which protect and promote the health and wellbeing of local communities. The Service is now responsible for community safety, including Anti-Social behaviour and the Vulnerability Interventions

Pathway Team who signpost into a variety of support services including addictions, mental health, alcohol and drug misuse and crisis services.

- 73 CPS' food safety team are integral to the management of cases and outbreaks of food-borne infection. The incidence of some gastrointestinal (GI) infections is similar higher in Durham compared to the England average. However, the latest annual data date back to 2017.
- 74 Despite team capacity issues and a constant uncertainty around workload (due to the nature of the work), the team work to deliver proactive projects alongside their statutory duties (including business and housing inspections, air water and land quality improvement work) and reactive work (including infectious disease outbreaks and accidents in the workplace etc.) These projects include a 'community action team', and the 'better business for all' initiative.
- 75 The team are also capitalising on their access to businesses and people in the community to deliver health improvement initiatives alongside their statutory duties. Examples of this include alcohol harm reduction linked to licensing applications, smoking cessation linked to illicit control work, and gas safety inspections linked to food hygiene inspections. Future opportunities include work on falls, and fuel poverty linked to housing inspections, including a recent empty property protocol to reduce the risk of arson and antisocial behaviour as well as improving the health of the wider community.
- 76 There may be challenges around succession planning, as 38% of staff are over 50.
- 77 In October 2019 DCC published a revised Licensing Act 2003 Statement of Licensing Policy for 2019 to 2024. Changes to licensing policy include the encouragement of licensees to raise alcohol health awareness, make the offer of free tap water visible, and support local efforts to take action on obesity.

Preparedness and response to incidents and emergencies

- 78 The LHRP has played a key role in coordinating communications between Government and health organisations across the North East region in planning and preparing for EU Exit. Representation from the Public Health team has ensured there is a clear line of communication into the local Brexit group.
- 79 There are now 2 Control of Major Accident Hazards (COMAH) sites in Durham.

- 80 The Cabinet Office has extended the period for the National Capabilities Survey (NCS) to 3 years. County Durham is due next in or around May 2020.
- 81 An Excess Death Framework has been written by the excess deaths task and finish group, co-chaired by Durham and Darlington DPHs. The next stage for the framework is for it to undergo an exercise. This will be in the form of a table top exercise, Exercise Coil, which will be held at in February 2020. Planning for the exercise is currently ongoing. The exercise will be focusing on excess deaths caused by a series of heatwaves.
- 82 The Director of Public Health, along with other DsPH across the North East are part of a Scientific & Technical Advice Cell rota in a major incident when a STAC is called by the Strategic Co-ordinating Group the DPH will chair the STAC. The DPH has undergone Major Incident Gold Command Training this year. This is to ensure the DPH can operate at SCG level and understands the working arrangements of STAC and the SCG.
- 83 Following a major incident on Teesside where a STAC was called changes have been made to the arrangements. These include a review of contractual arrangements with PHE and additional CPH training to ensure cover arrangements locally and across the North East.

Main implications

- 84 It is critical that the DPH receives assurance in relation to the health protection functions of: screening; Immunisation; outbreaks and communicable disease management; strategic regulation interventions and; preparedness and response to incidents and emergencies.
- 85 Following engagement with representatives from Public Health England, NHS England, DDES CCG and DCC Civil Contingencies Unit, Department for Environment, Health and Consumer Protection and community infection control assurance mechanisms are now in place through the formulation of a health protection action plan. This action plan has identified priority areas for action, achievement of which will be monitored through the HPADG and health protection scorecard. The HPADG group meets quarterly and reports to the HWB.

Conclusion

- 86 The health protection functions delivered by a range of organisations in County Durham continue to demonstrate good overall performance.
- 87 On the whole, good communication exists between the commissioners of the various programmes and the DPH and remedial and corrective

interventions are instigated when necessary. Escalation procedures are in place in the event the DPH needs to raise concerns. There have been some challenges this year in relation to the seasonal flu vaccination programme. Furthermore, the reporting of antenatal and newborn screening needs to be resolved.

- 88 There remain areas for potential improvement across screening and immunisation services, communicable disease control and outbreaks, strategic regulation intervention, and preparedness and response to incidents and emergencies. This includes understanding and addressing variation in access to services by sociodemographic characteristics. Monitoring towards achievement of the identified actions will be undertaken by the HPADG and using the health protection scorecard. The HPADG meets quarterly and reports to the HWB.

Background papers

- None

Other useful documents

- None

Author Amanda Healy

Tel: 03000 264323

Appendix 1: Implications

Legal Implications

Section 2B NHS Act 2006 places a duty on each local authority to take such steps as it considers appropriate for improving the health of the people in its area.

The steps that may be taken include:

providing information and advice; providing services or facilities designed to promote healthy living; providing services or facilities for the prevention, diagnosis or treatment of illness; providing financial incentives to encourage individuals to adopt healthier lifestyles; providing assistance (including financial assistance) to help individuals to minimise any risks to health arising from their accommodation or environment; providing or participating in the provision of training for persons working or seeking to work in the field of health improvement; making available the services of any person or any facilities; providing grants or loans (on such terms as the local authority considers appropriate).

Finance

Funding for the staff flu vaccination programme comes from the Public Health (health protection) budget.

Consultation

There is no requirement for consultation in relation to this report.

Equality and Diversity / Public Sector Equality Duty

There are no implications in relation to the Public Sector Equality Duty in relation to this report.

Climate Change

Exposure to potential harms arising from the effects of climate change would fall within the umbrella of health protection, for example severe weather patterns.

Human Rights

This report has no implications for human rights.

Crime and Disorder

This report has no implications for crime and disorder.

Staffing

This report has no implications for staffing.

Accommodation

Not applicable.

Risk

No risks are identified for the Council.

Procurement

Not applicable.

Appendix 2: Health protection scorecard

Attached as separate document