Director of Public Health
Annual Report
2018

HSC Public Health Agency

Contents

Foreword

Foreword

Dr Adrian Mairs

It was Ban Ki-moon, the eighth Secretary General of the United Nations, who said that "broad partnerships are the key to solving broad challenges".[1] The Public Health Agency's ambition is to create the conditions in which all people living in Northern Ireland can achieve their full health and wellbeing capacity, and in order to meet this broad challenge we are committed to creating, maintaining, and building broad partnerships with many different stakeholders.

Welcome to the 10th annual report of the Director of Public Health. The theme of this year's report is 'Public Health in Partnership', an approach that has defined the work of the Public Health Agency (PHA) since its inception. The PHA works in partnership with health and social care trusts (HSCTs), the community and voluntary sector, international funding bodies, universities, national, regional and local government, and many other organisations and individuals.

Partnership working aims to achieve something that we could not do alone; the acknowledgement that we work better when we work together. A shared vision is required, with common goals and a practical way of achieving those goals collectively. Communication of that vision is imperative, as is ensuring collective ownership and commitment. Partnership working allows multiple voices to contribute, makes best use of individual knowledge and skills, inspires new ideas, allows sharing of experiences, provides new opportunities, helps reach new audiences, strengthens relationships, and provides new insights into old problems. Partnership working is not only preferred but necessary to achieve the healthier Northern Ireland that we all aspire to.

The Northern Ireland Executive's draft Programme for Government and *Making Life Better*, the strategic framework for public health, set out the broader context for working together.[2,3] These documents highlight the inter-relationships between health, economic growth, deprivation, inequality, childhood development, education, and the social and physical environment. A collaborative, cross governmental approach is necessary to build a healthier society, and it is through partnership in both policy and practice that we influence these wider determinants that have such a significant impact on our health. There is a part for everyone to play in this journey, from individuals to communities, to the public, private and third sectors. Collaboration, engagement, and empowerment are key values set out in *Making Life Better*, underlining the importance of including all voices in the conversations about our future.[3]

This year's annual report highlights some of the 'Public Health in Partnership' work that has taken place across Northern Ireland in 2018, demonstrating the breadth and depth of collaborative working across the service and the region. Included are programmes aimed at giving children the best start in life such as the comprehensive work to tackle antimicrobial resistance in secondary care; equipping them through life with projects such as THRiVE which aims to improve outcomes for children and young people in Rathcoole and Monkstown; empowering healthy living with campaigns such as '#hackthepain', a social media campaign for supported pain self-management; creating the conditions for good health with the cervical screening social media campaign; empowering communities with such projects as the Twilight Arts and Wellbeing project, a regional arts project for looked after young people in residential care settings; and of course developing collaboration through projects such as the Cross-border Healthcare Intervention Trials in Ireland Network (CHITIN).

Dr Adrian Mairs
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Further information

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Overview

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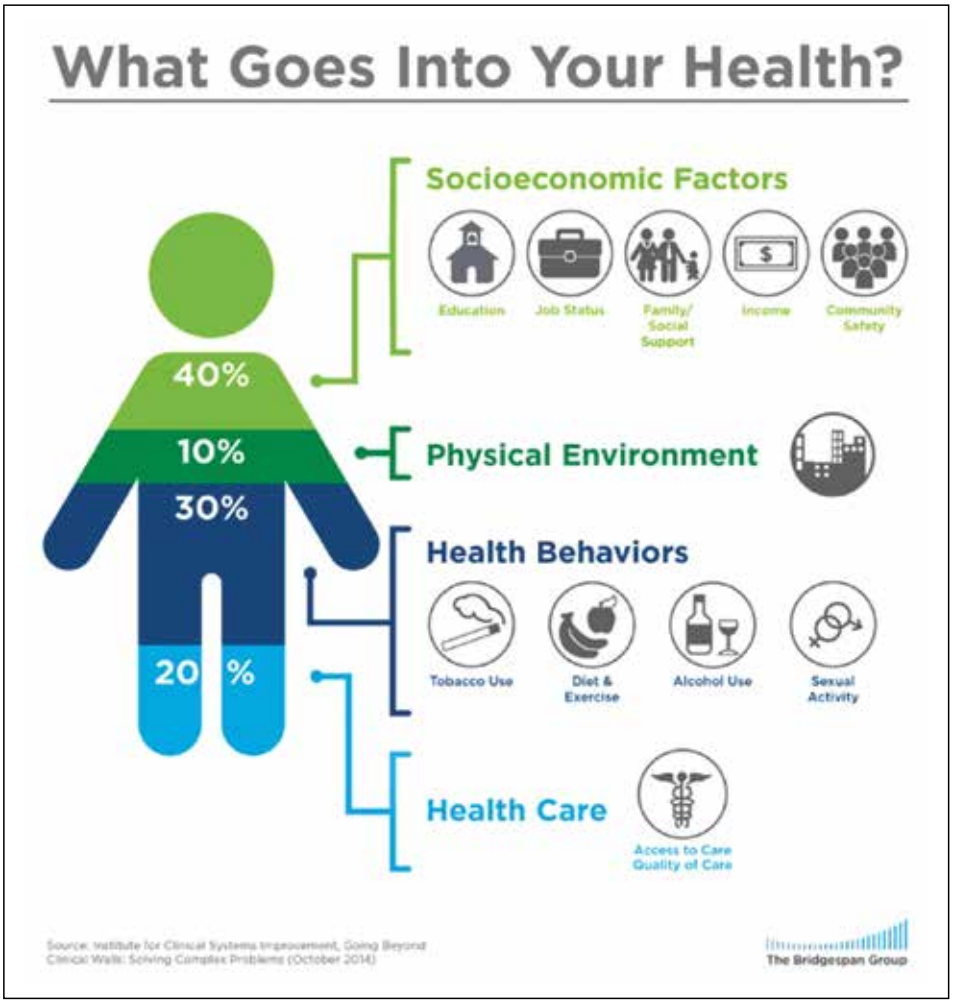
'Public Health in Partnership' is an apt theme for this year's Director of Public Health report, as it recognises that to effectively improve public health and wellbeing we require a holistic, integral approach. This is reflected in the strategic framework *Making Life Better*.[3] The message is clear and consistent throughout the life-course. We must empower our population from an early age by imparting the knowledge and skills required to enable people to take care of their own physical and psychological health, and fundamentally enhance their own wellbeing within an environment that facilitates this.

It is widely acknowledged that individual health behaviours account for only 30% of overall health outcomes (Fig 1), with the remainder accounted for by the physical environment in which we live (10%), clinical care (20%) and socioeconomic factors (40%).[4]

Figure 1: Factors affecting health outcomes



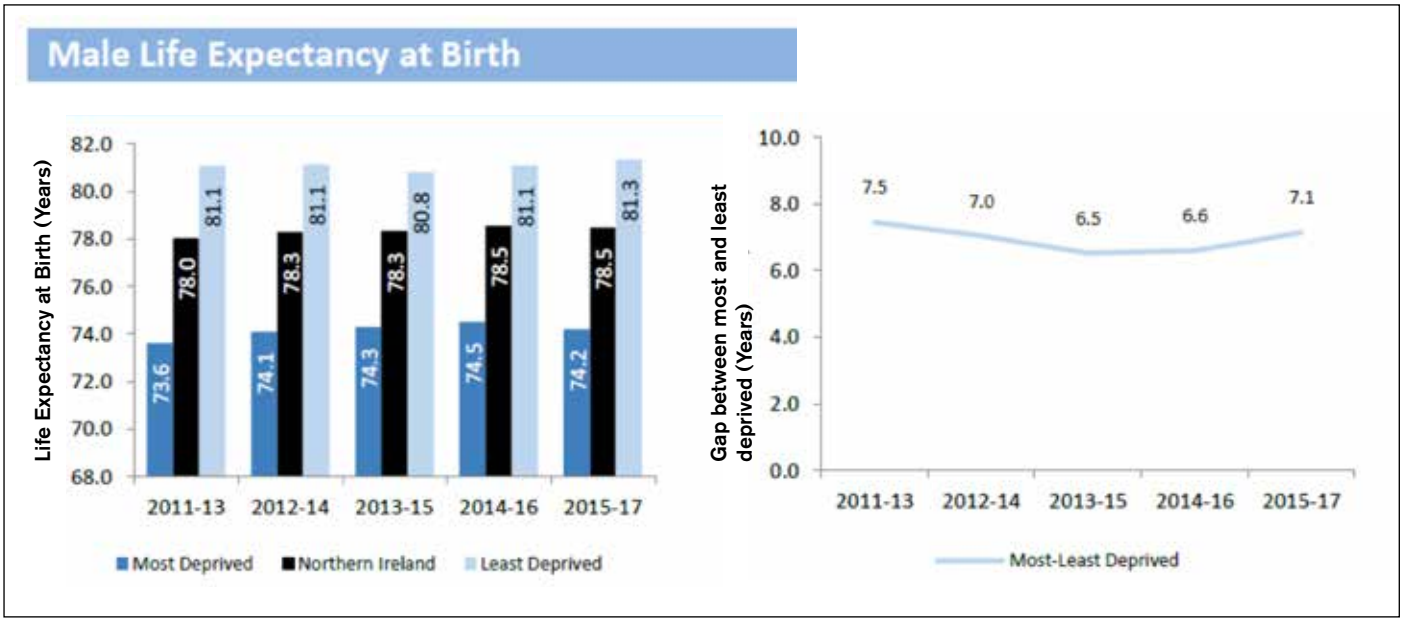
(Source: https://www.bridgespan.org/insights/library/public-health/the-community-cure-for-health-care-(1) Infographic created by The Bridgespan Group)

Empowering individuals to make healthier choices is therefore only one component (albeit an important one) of improving overall health and wellbeing. Vital relationships exist between health, inequality, education, employment, social, physical and economic environments that contribute to overall health outcomes.

Optimal health and wellbeing is most likely to be achieved when health and social care services work in partnership with other sectors to allow every individual to thrive in ways that are meaningful to themselves, their family, and the community. Resilience is widely accepted as an integral component of overall emotional health and wellbeing. Most commonly, it has come to mean "an individual's ability to overcome adversity and continue his or her normal development".[5] As with individuals, resilience is an integral part of an effective health and social care system. This report gives current examples of the PHA working in partnership to create this resilient system, with partners spanning health and social care trusts, and local councils to the community and voluntary sector.

There are many challenges faced by the health and social care system in Northern Ireland which makes partnership working between those who work within and beyond the system so important. Substantial differences in the health of those who live in the 20% most and least deprived areas in Northern Ireland still exist, a difference known as a health inequality gap. Having consistently increased over many years, the growth in life expectancy at birth in both males and females has recently flattened. For males the life expectancy inequality gap has widened slightly in recent years and now stands at 7.1 years (Fig 2), a concerning trend that is not unique to Northern Ireland but is being seen across the UK.[6,7]

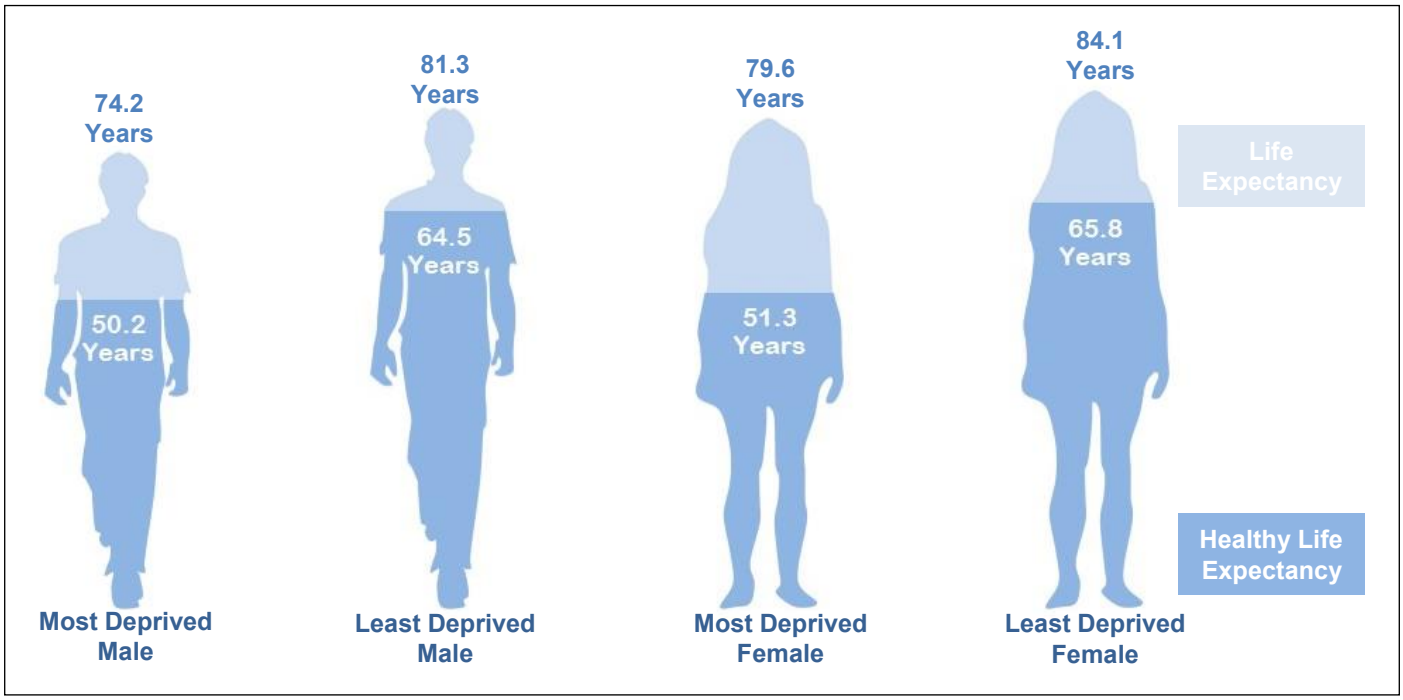
Figure 2: Differences in life expectancy for males born in the most and least deprived areas of Northern Ireland



(Source: Health Inequalities Annual Report 2019, Department of Health)

The inequality gap for female life expectancy is smaller at 4.5 years and has remained fairly stable over recent years.[6] In terms of healthy life expectancy, the average number of years a person can expect to live in good health, males in the most deprived areas on average can expect to spend 68% of their life in good health, while their counterparts in the least deprived areas can expect to live 79% of their life in good health (Fig 3).[6] The gap is larger for females, with those in the most deprived areas on average spending 64% of their life in good health, compared to 78% in the least deprived areas.

Figure 3: Differences in healthy life expectancy for males and females born in the most and least deprived areas of Northern Ireland



(Source: https://www.health-ni.gov.uk/sites/default/files/publications/health/hscims-report-2019-infographic.pdf)

While standardised death rates in Northern Ireland have improved, every year approximately 3,500 people die prematurely from potentially avoidable causes.[8] These deaths are avoidable either by medical intervention or lifestyle change and substantial inequality issues remain. In comparison to those living in the least deprived areas, people living in the most deprived areas in Northern Ireland are:

- 2.5 times more likely to die from lung cancer;
- 3.5 times more likely to be admitted to hospital due to self-harm;
- 3.5 times more likely to die from suicide;
- 4.5 times more likely to die from alcohol or drug related causes.

Rates of mental illness in Northern Ireland continue to be approximately 25% higher than the rest of the UK, with around 45,000 children here suffering a mental health problem at any one time.[9,10] Unique to Northern Ireland, we continue to see the impact of the Troubles, whereby generational trauma is recognised as a risk factor for poor mental health outcomes. As for other non-communicable diseases, identifiable and modifiable risk factors exist for mental illness, such as loneliness and isolation. The impacts of these risk factors on mortality are comparable to that of other well known risk factors (such as smoking, alcohol and poor diet) and have been shown to increase the likelihood of mortality by up to 26%.[11]

Although this report highlights ongoing challenges, it is important to recognise that when we consider subjective indicators of health and wellbeing it paints a brighter picture of the health of our population. In the Northern Ireland Health survey 2017-2018 over two thirds of respondents rated their general

health as good or very good, 88% were either satisfied or very satisfied with life, and 86% described the life they lead as fairly or very healthy.[12] The importance of self-reported measures of wellbeing cannot be overlooked, as it allows for a single rating which encompasses both physical and mental health from the perspective of the individual.

Early successes have demonstrated that greater impact can be achieved by all sectors of society working together toward a common goal. For the PHA and its partners, this goal is a healthy and happy population and this report showcases examples of strong partnership working. Together we strive to realise the global public health vision – to build healthy bodies and minds, not merely fix broken parts.

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Health improvement

Using the arts to promote health and wellbeing

THRiVE: improving outcomes for children and young people in Rathcoole and Monkstown

Twilight Zone Arts and Wellbeing Project: regional arts project for looked after young people in residential care settings

Using the arts to promote health and wellbeing

Who?

The PHA in partnership with key strategic agencies has been able to provide a wide range of arts and health interventions across Northern Ireland. Key to delivery of this work have been partnerships with the Arts Council of Northern Ireland, Arts Care, the Baring Foundation, local councils, health and social care trusts and the community and voluntary sector.

What?

The challenge is to improve the mental health and emotional wellbeing of the most disadvantaged and marginalised people in the community who often experience stigma and discrimination, isolation and loneliness.

Research by the New Economics Foundation on the 'Foresight Project on Mental Capital and Wellbeing' concluded that connecting, being active, taking notice, keeping learning and giving, are the behaviours required to maintain and improve emotional wellbeing.[13] This approach has been adopted regionally by the PHA under its 'Take Five' campaign.

How?

The PHA, the Arts Council and the Baring Foundation delivered the Arts and Older People programme across Northern Ireland. A range of small to medium size grants were awarded to 19 projects. The projects covered all art forms such as music, writing, circus, craft and drama. All of the projects aligned themselves with the strategic themes which were isolation and loneliness, older men, carers and area of need.

As part of its 50th anniversary celebrations, the QFT in Belfast has been working with three over 60s community groups in an arts project based on memories of cinema over the last 50 years, supported by the Arts Council of Northern Ireland's Arts & Older People Programme. Pictured (L-R) are participants Diane Weiner, Jane McCarthy and Sue McCrory.

The PHA also supported the Arts Council to deliver the Young People and Wellbeing project 'ARTiculate', a regional small grants programme focusing on the mental and emotional wellbeing of disadvantaged young people. In total 21 projects were funded, addressing stigma and discrimination and providing young people with a platform to raise awareness around these issues.

In partnership with Arts Care, the Here and Now Festival has delivered 235 workshops with 3,000 participants across the five health and social care trusts, providing access to high quality arts activities across a variety of art forms such as dance, music, drama, art, film making and photography.

In 2018-19, 19% of the 451 small grants awarded by the PHA under the 'Take Five' banner had arts as a core element, including dance, visual art, music, literature, film, craft, photography, drama, digital arts.

Pictured (L-R) are participants John Carlin, Paddy Tyre, Raymond Finnegan and Brendan Molloy, from the Derry City & Strabane District Council's 'Music to Your Ears' project who performed for guests at the recent Art of Dementia Conference.

Lisnaskea Ladies perform work developed with Arts Care dancer in residence Carmel Garvey, in an event organised for older people from rural areas at Seamus Heaney Home Place as part of the Here and Now festival.

Key messages

- Research shows that arts and health programmes can positively impact mental health and emotional wellbeing.
- These initiatives have demonstrated that impact through enhanced lifelong learning, reduced social isolation, better relationships, increased levels of physical activity and a heightened sense of happiness and belonging.

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THRiVE: improving outcomes for children and young people in Rathcoole and Monkstown

Who?

This project involved the PHA, Department of Education, Education Authority Northern Ireland, Controlled Schools Support Council, Stranmillis University College, Department for Communities, Antrim and Newtownabbey Borough Council, Northern Health and Social Care Trust, Barnardos, Monkstown Boxing Club, Abbey Sure Start and local schools (one post primary and five primary). All partners are represented on the THRiVE Project Board, which is chaired by the PHA.

What?

Educational attainment and the aspirations of children and young people in Rathcoole and Monkstown are significantly below the Northern Ireland average.[14] The areas also have a higher than average proportion of pupils entitled to free school meals and with special educational needs. Both of these measures are linked to poverty and deprivation which are acknowledged as presenting barriers to children's education. This means that they are likely to enter post primary school with lower than average attainment and dealing with social and emotional problems which impact on their ability to learn.

How?

The THRiVE Project Board has secured investment and is overseeing this work which includes:

- supporting a Schools' Group (of all six schools involved) which has been established to contribute to and influence the work in schools through an agreed development plan. The plan includes actions around goal setting and wellbeing, attendance and procedures, and additional support for potential underachievers (outcomes to be tracked);

Top left to right – Caroline Woods, Education Authority, Hilary Johnston, PHA, Maria Quinn, Abbey Community College, Frazer Bailie, Education Authority. Middle left to right - Paul Johnston, Monkstown Boxing Club, Hugh Nelson, NHSCT, Brenda Doherty, Abbey Sure Start, Sara McCracken, Controlled Schools Support Council. Front left to right - Audrey Curry, Stranmillis University College, Carl Frampton, Courtney Cooper, Abbey Community College, Claire Humphrey, Barnardo's, Elaine Manson, Antrim and Newtownabbey Borough Council

Pupils from Kings Park Primary with their banner showing what THRiVE means to them.

- recruitment and support for community and parent champions to involve parents as educators;
- support for early interventions and positive parenting, including Adverse Childhood Experience and Solihull Approach training;
- a community campaign which has been developed to support aspirational messages at community level;
- facilitating research and evaluation of the interventions through measuring impact on the achievements of the pupils.

The learning from this project and the evaluation will be formally documented and shared across government departments.

Key messages

- THRiVE is committed to improving outcomes for children and young people in the key areas of aspiration, attainment and wellbeing.
- THRiVE supports children and young people to believe that together WE CAN learn, be well and be connected.
- THRiVE involves local parents to spread key messages about helping children and young people to be healthy and well, and to engage in learning and get involved in what interests them.
- THRiVE facilitates a social media campaign to spread messages of aspiration and achievement, and to inspire young people to make positive life choices.

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Twilight Zone Arts and Wellbeing Project: regional arts project for looked after young people in residential care settings

Who?

This looked after young people's arts and wellbeing project is delivered through PHA funding by Arts Care artists, musicians and creative writers in partnership with Trust social workers in 18 residential units across the five health and social care trusts involving 50 young people.

What?

Looked after children and young people are at greater risk of suffering from poorer physical and mental health and having lower educational outcomes than their peers.[15,16] In particular such children and young people can have lower self-esteem and confidence resulting in low motivation and a higher risk of self-harm and substance abuse. On leaving the care system they are also at greater risk of unemployment and homelessness.[17]

How?

The project, now in its eighth year, commenced with an arts-based induction day for healthcare staff. Following this, a series of arts activities and workshops were organised across all trust areas from October through to December. The children and young people and social work staff were then able to showcase their artwork at a celebratory regional art exhibition in December with every young person receiving a certificate and taking their artwork back to display in their room or elsewhere. Bursaries were awarded to those young people who excelled in their commitment and artistic expression, enabling them to purchase arts material and equipment, with some availing of the opportunity to enrol in other community art classes to further develop their interest in the arts.

One young person who has enjoyed the project for a number of years stated: "Taking part in the Twilight Zone and trying out the different types of art has definitely helped me to decide that I want a career in music and already I have been working towards making my future as a DJ."

Another young person taking part in the project said: "I find every year that although I struggle continuously with suicidal thoughts, when I take part in the Twilight Zone Project it gives me a safe place to express exactly how I feel. This year I have created about eight paintings of all the different ways in which I feel. It is such a release."

Some examples of artwork created by children and young people taking part in the Twilight Zone project, which were exhibited at Arts Care in Belfast in December 2018.

Key messages

- Many of the art works and music/creative writings that the young people produce deal directly with suicidal thoughts, feelings of isolation, low value, alienation from society, self-harm and loathing.
- The project has reduced levels of frustration, and through self-expression resulted in an increased level of respect for self, others and the environment.
- Some of the young people report that taking part in the project over a number of years has given them a definite direction in terms of what they would like to do for their future careers.

Further information

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Health protection

Opportunistic MMR vaccination in the Northern Ireland New Entrants Service (NINES)

Tackling AMR: the development of a national "one stop shop" for local information about gram-negative bacteraemias and antimicrobial consumption in secondary care

Partnership working in emergency response and crisis management

Opportunistic MMR vaccination in the Northern Ireland New Entrants Service (NINES)

Who?

The PHA has been working in partnership with the Northern Ireland New Entrants Service (NINES) in the Belfast Health and Social Care Trust (BHSCT). NINES is a nurse-led service, which was set up in 2012 to provide a regional, holistic service supporting the health and social wellbeing of new migrants, asylum seekers and refugees entering Northern Ireland. This includes screening for communicable diseases and the provision of health promotion advice and support. The service is based in the trust's Maureen Sheehan Centre.

What?

Northern Ireland is part of a UK-wide commitment to meet World Health Organization (WHO) European targets to eliminate measles and rubella infection by 2020.[18] This will be facilitated by high uptake of the safe, effective and inexpensive combined measles, mumps and rubella (MMR) vaccine. Evidence shows that both children and adults from some migrant groups, for example asylum seekers, refugees, individuals from the Roma community, and undocumented migrants, have lower uptake of vaccinations than the general population. This is for a variety of reasons including awareness of, and

difficulty accessing, a new healthcare system. As such they are an important group to focus on in achieving the WHO target.[19] In 2016 the Department of Health issued recommendations to all relevant health professionals to establish MMR immunisation history in all children and adults born after 1970, and to offer MMR vaccine to those with a history of less than two doses.[20] This is particularly important for new arrivals into Northern Ireland.

How?

Opportunistic vaccination at dedicated migrant health clinics, such as NINES, is one intervention that can increase coverage in this vulnerable group. A project was thus developed aiming to facilitate MMR vaccination being offered and administered to those that need it within NINES clinics. The PHA worked with NINES staff to identify and address barriers to implementation of this service, including issues around vaccine storage and management, training requirements and staff capacity. The plan and supporting information are now outlined in the service specification, which has been successfully implemented within NINES in the Belfast Trust.

Key messages

- NINES has successfully implemented this service, obtaining a vaccination history during consultation with clients and offering opportunistic MMR as appropriate.
- The pilot started at the end of November 2018. By the end of March 2019, 61 clients were eligible and had been offered vaccination, with 52% uptake.
- This intervention supports Northern Ireland's commitment to achieving WHO European targets to eliminate measles and rubella infection by 2020.

Further information

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Tackling AMR: the development of a national "one stop shop" for local information about gram-negative bacteraemias and antimicrobial consumption in secondary care

Who?

This project was developed by the PHA's Healthcare Associated Infection and Anti-microbial Resistance Team in collaboration with infection control teams, consultant microbiologists and pharmacists from the health and social care trusts, the Department of Health (DoH), the Business Services Organisation and a regional pharmacist manager.

What?

One of the roles of the Health Protection Service is to support the five trusts in monitoring progress towards reductions in healthcare associated infections (infections which are contracted in a hospital or other healthcare setting) and use of antibiotics, in an effort to reduce antimicrobial resistance (AMR). Over the years, targets have been set for a number of infections, and more recently for reducing the use of antibiotics, where trusts must not exceed a set number of infections for a particular time period. The role of Health Protection is to ensure that trusts know how many infections they've had or can tell when they have had an unusually high number, which allows them to take action and to continue to work towards achieving the target.

In 2018, a target was introduced for healthcare associated gram-negative bacteraemias (GNBs) and for antibiotic consumption in hospital settings. While there are many gram-negative organisms, the most medically important ones include *Escherichia coli*, *Pseudomonas aeruginosa*, and *Klebsiella pneumoniae*. These bacteria can cause a range of symptoms from mild disease to life threatening conditions when the bacteria get into the blood (bacteraemia). GNBs are a major public health problem as they are responsible for prolonging illness in individuals and causing death. This type of infection has been increasing in Northern Ireland year on year. The milder infections are also an issue as they are much higher in number and result in the prescription of many antibiotics, which is a driver for AMR. It is therefore a priority to reduce GNBs, to reduce antibiotic prescribing and ultimately reduce the threat of AMR.

At the time the target was introduced there was no system in place to monitor the occurrence of these infections. Understanding of what causes GNBs was also limited and therefore it was going to prove challenging reducing these infections.

Healthcare professionals can examine the data for their trust to help guide decision-making.

How?

The PHA Health Protection Service set about developing a web-based platform which was built in-house, to create a "one-stop shop" for health professionals to access information to help guide the decisions they make when treating patients. The system also allows health professionals to enter information that may help identify what causes the infections. This will ultimately help patients by providing the knowledge to try and prevent infections occurring in the first place.

The system was developed through engagement with healthcare professionals across a number of disciplines. The PHA also hosted a workshop in February 2018 for infection control doctors and nurses, information analysts, antimicrobial pharmacists and DoH colleagues. In March 2018, the PHA conducted a series of trust visits to meet with local teams and conducted training/took feedback and made further updates to ensure that the system was fit for purpose for healthcare professionals.

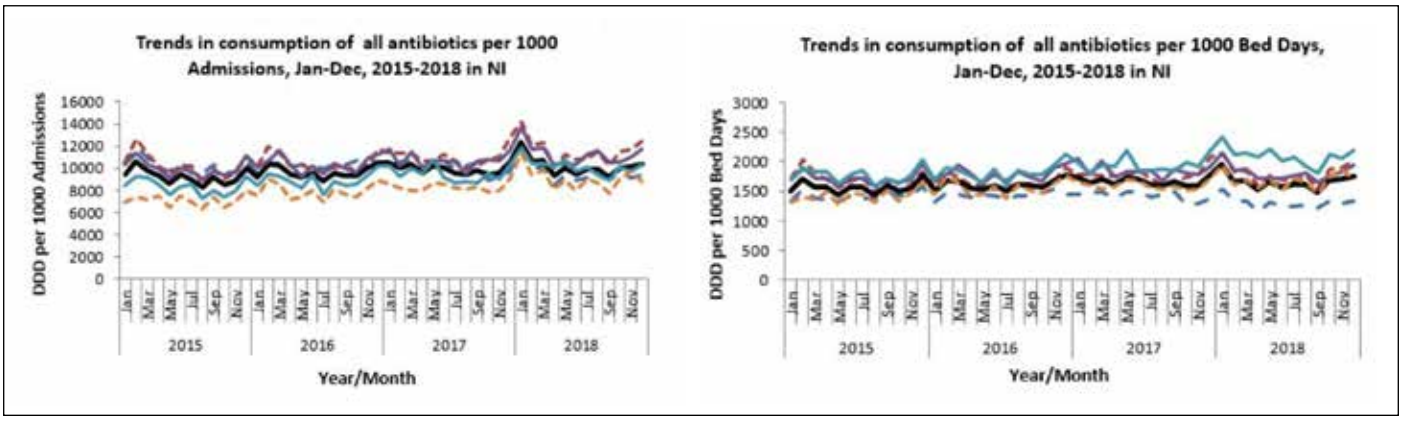

Figure 4: Graphs showing the consumption of antibiotics over time for the five trusts in Northern Ireland.

The unit of measurement in Figure 4 is the defined daily dose (DDD) which is a standardised measure of antibiotic consumption which allows for comparison across trusts. Two rates are shown: admissions, which allows healthcare professionals to examine how many people get antibiotics when they are admitted to hospital and bed days, which takes into account the duration of hospital stay and therefore allows healthcare professionals to consider the total amount of exposure to antibiotics.

Key messages

- Healthcare professionals now have access to antimicrobial usage data. This is encouraging the appropriate use of antibiotics in hospital settings.
- Using the data, healthcare professionals are starting to understand the profile of patients who have GNB, which will help to prevent similar infections happening in the future.
- Developing this solution within the PHA has allowed staff to enhance their own skills and enabled the creation of a responsive system that ensures the right information is available to benefit the patient.

Further information

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Partnership working in emergency response and crisis management

Who?

In adherence to the processes outlined in the Civil Contingencies Framework NI, the PHA Health Protection Team is involved in multi-agency coordination and participates in special emergency arrangements required to deliver a response to severe weather events.[21] The PHA Health Protection Team has well established partnerships with multiple agencies and is involved in the development of plans as part of the Regional Community Resilience Group, members of which include the Department of Agriculture, Environment and Rural Affairs, local councils, the Met Office, Northern Ireland Water, the Police Service for Northern Ireland, Northern Ireland Fire and Rescue Service and the Department for Infrastructure.

What?

Severe weather, hot or cold, can have a big impact on people's health. The role of the Health Protection Team is to work with partner organisations as part of planning and response and ensure that vital services can cope during severe weather. The team's responsibility is to ensure that public health advice is accessible to members of the public and to advise what measures people can take to protect themselves and others against the impacts of the weather. Communication may include information about:

- seasonal flu and vaccination programmes;
- the dangers of carbon monoxide poisoning and how to prevent it;
- keeping warm during adverse weather;
- looking after the vulnerable and elderly;
- what to do if flooding occurs;

Severe weather, such as heavy snow or flooding, can have a big impact on people's health.

- using emergency water supplies;
- water use following restoration of supplies.

How?

Good partnership working was demonstrated on several occasions in 2018 with the activation of the multi-agency response in adherence to the Civil Contingencies Group Northern Ireland (CCGNI) Protocol for the Northern Ireland Central Crisis Management Arrangements (Sept 2016). During storms Ophelia, Emma and Ali, the PHA Health Protection Team participated in a number of multi-agency teleconferences and face to face meetings as determined by the incident response. Working with partner organisations, the PHA supported a response that:

- protected people and infrastructure from the effects of the cold weather;
- advised people on how they can protect themselves and elderly neighbours;
- supported recovery for the community.

Post event debriefs with partners facilitated shared learning and review of emergency response and planning arrangements across all organisations.

Key messages

- Severe weather, hot or cold, can have big impact on people's health.
- Well established working relationships with multi-agency partners allow the PHA Health Protection Team to respond promptly to adverse weather events.
- Working collaboratively ensures that public health advice is accurate and timely, and that the public can be signposted to other appropriate sources of information.

Further information

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Research and development

Cross-border Healthcare Intervention Trials in Ireland Network (CHITIN)

Improving services for people living with dementia in Northern Ireland through research partnerships

Cross-border Healthcare Intervention Trials in Ireland Network (CHITIN)

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kite-tin
Cross-border Healthcare Intervention Trials in Ireland Network

Who?

The Cross-border Healthcare Intervention Trials in Ireland Network (CHITIN) project is supported by European Union funding (through the EU INTERREG VA Programme). In total €8.84m, including a 15% contribution from the Department of Health in Northern Ireland and Health Service Executive in the Republic of Ireland, has been awarded to this unique cross-border partnership between the HSC Research and Development Division of the PHA and the Health Research Board (HRB) in the Republic of Ireland, to fund interdisciplinary teams working in partnership to deliver health intervention trials.

What?

Public health outcomes can be enhanced by evidence-based health research, including health intervention research, which can investigate if a new intervention is safe, determine if it is better than current practice, or direct resources to improve and protect people's health and reduce health inequality. In Ireland there is inequity of access to some health and care services and in the opportunity for involvement in health intervention research, particularly in more rural areas. This inequity is exacerbated by the existence of a border.

How?

CHITIN has enabled the PHA and HRB to fund 11 health intervention trials recruiting in excess of 3,500 participants in Northern Ireland and the Republic of Ireland border counties in the priority areas of population health, primary care and older people's services, mental health, acute services, disability services and children's services. The trials include interventions for medicines management, healthy neurocognitive ageing, improving mental health in at-risk young people, tackling adolescent inactivity and addressing obesity in pregnancy. They aim to provide citizens and HSC professionals with greater breadth and reach of opportunity to participate in and deliver health intervention research.

The knowledge and understanding generated will impact service users and the HSC professionals delivering the services. Interdisciplinary trial delivery teams, working in partnership, will form a network

wherein mentoring, training and skills development will be supported, resulting in enhanced capability and capacity to plan and deliver further health intervention trials, creating a legacy for future research in the region.

CHITIN – HITs

Trial Icon	Trial Name	Lead Partner	Trial Title
	BRAIN-Diabetes	Queen's University Belfast	BRAIN-Diabetes: Border Region Area lifestyle Intervention study for healthy Neurocognitive ageing in diabetes
	10 Top Tips	Queen's University Belfast	Delivery of a habit-based intervention '10 Top Tips for a Healthy Weight' to overweight or obese pregnant women on the Island of Ireland: a feasibility study exploring integration into existing antenatal care pathways
	WISH	Ulster University	The Walking In ScHools (WISH) Trial: a cross-border trial to evaluate a walking intervention in adolescent girls
	Murray Trial	Ulster University	Improving mental health among at-risk young people in a challenging border region
	PolyPrime	Queen's University Belfast	A randomised pilot study of a theory-based intervention to improve appropriate polypharmacy in older people in primary care (PolyPrime)
	My COMRADE PLUS	NUI Galway OÉ Gaillimh	MY COMRADE PLUS: A pilot cluster randomised controlled trial, for patients with multimorbidity, of the MultimorbiditY COllaborative Medication Review And DEcision Making intervention (MY COMRADE), practice based pharmacists (PBP's) or PBP's plus an adaptation of MY COMRADE
	REFLECTS	Ulster University	A randomized controlled trial (RCT) of mirror box therapy in upper limb rehabilitation with sub-acute stroke patients
	PAIGE2	Belfast Health and Social Care Trust	Pragmatic Lifestyle Pregnancy and Post pregnancy Intervention for Overweight Women with Gestational Diabetes Mellitus: a randomised controlled clinical trial (PAIGE2)
	ACP	Queen's University Belfast	Anticipatory Care Planning Intervention for Older Adults at Risk of Functional Decline: A Primary Care Feasibility Study
	WORtH	Ulster University	The feasibility of a walking intervention to increase activity and reduce sedentary behaviour in people with serious mental illness
	INCA-Sun	RCSI	The use of digital technologies to enhance adherence and inhaler technique and guide treatment among patients with severe asthma

The Cross-border Healthcare Intervention Trials in Ireland Network: participating organisations, working in partnership to deliver health intervention trials.

Key messages

- The Cross-border Healthcare Intervention Trials in Ireland Network (CHITIN) is enhancing involvement in health intervention research.
- Through strong and enduring cross-border collaboration the PHA and HRB can improve and protect people's health, and reduce health inequality.
- Evidence generated from research can be used to change lifestyles, prevent illness, improve care and drive policy change.

Further information

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Improving services for people living with dementia in Northern Ireland through research partnerships

Who?

HSC R&D Division collaborated with The Atlantic Philanthropies to commission a research programme in dementia care, to take forward the research recommendations from the Northern Ireland Dementia Strategy. The Atlantic Philanthropies was founded by entrepreneur Chuck Feeney, who maintains that people of wealth should use it to better the world during their lifetimes.

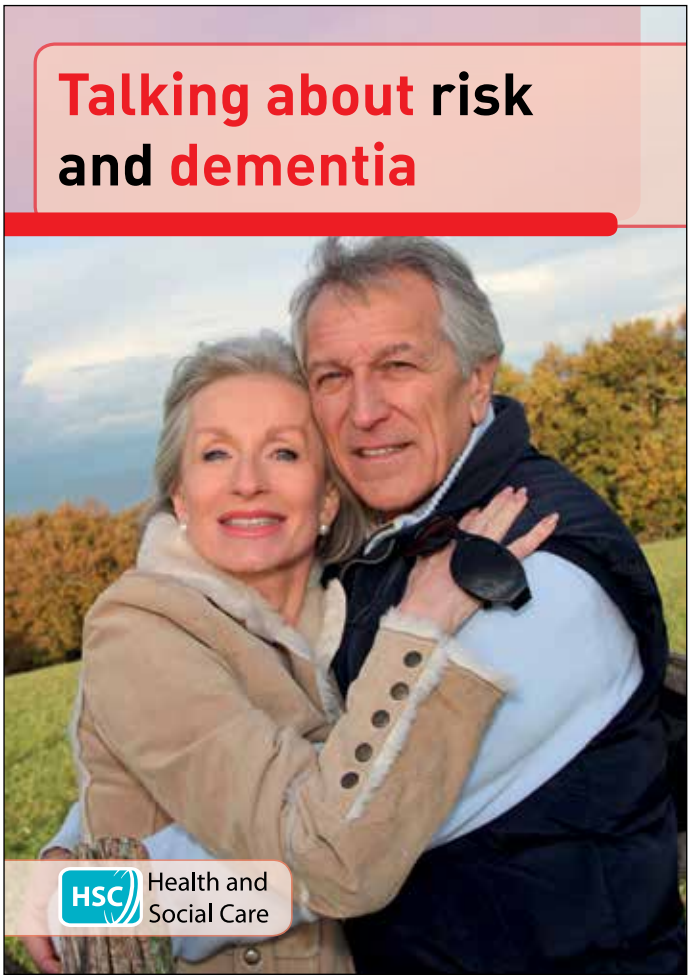
What?

It is estimated that at present in Northern Ireland 23,735 people live with dementia, of whom 1,269 have early-onset dementia.[22] In common with other parts of the developed world, as the local population ages, dementia is increasingly becoming a major public health and social issue. The number of people living with a dementia is projected to rise to around 57,500 by 2051.[22] If it is considered that each of these people will have a network of lay and professional carers then it can be estimated that, by 2051, upwards of 500,000 people could be coping with the impact of dementia in their everyday lives in Northern Ireland.

How?

To develop the local priority areas for this programme, consultation with key stakeholders (including service users, health professionals and commissioners) used topics initially identified by national priority setting exercises in the UK. These were led by the James Lind Alliance and the Alzheimer's

These artworks were created by people living with a dementia in focus groups carried out as part of the TESA project. The art was displayed at a recent event organised to share the research findings.



Society in order to derive a list of topics for which robust evidence was currently unavailable. Topics agreed following the consultation included staff and training; quality of care; coordination of care; information and communication; management of behaviour and management of symptoms. Seven projects were awarded funding for up to three years. Questions addressed advanced care planning in nursing homes, pain management at the end of life, evaluation of a healthcare passport, risk communication, facilitated reminiscence, medicines management and technology assisted living. The research findings are available at pha.site/dementia-care-research

This leaflet was developed by researchers focusing on risk communication in dementia care, in partnership with the PHA, and the HSCB, to help people living with a dementia and their carers to manage risk in everyday life.

Key messages

- This programme brought together over 30 different organisations.
- People living with a dementia and their carers helped co-design and carry out the studies.
- Findings from the projects have been published in journals, disseminated in leaflets, produced as a play, commissioned as an app and displayed in art exhibitions.

Further information

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Screening

The Northern Ireland Abdominal Aortic Aneurysm (AAA) Screening Programme

Cervical screening social media campaign

The Northern Ireland Abdominal Aortic Aneurysm (AAA) Screening Programme

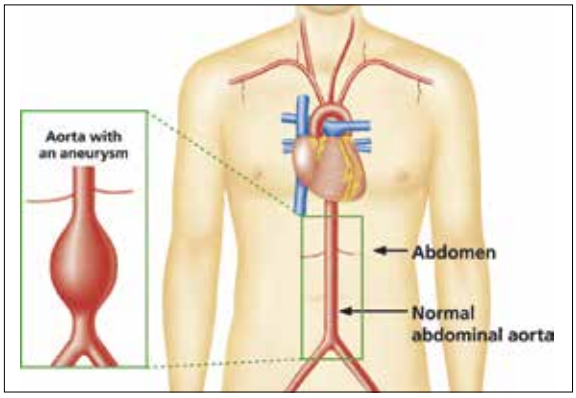
Who?

The Northern Ireland Abdominal Aortic Aneurysm (AAA) Screening Programme was introduced in 2012. It aims to reduce deaths from ruptured abdominal aortic aneurysms through early detection, monitoring and treatment among men aged 65 and over. Since implementation, staff in the PHA and BHSCT (who provide this regional screening service across all trust areas) have fostered effective partnership working with the programme's main service users – men aged 65 and over, alongside their partners/spouses.

What?

An AAA is an enlargement of the aorta. This is the main artery that supplies blood to the body, running from the heart, down through the chest and into the abdomen (belly). Most people with an AAA have no symptoms. However, if an aneurysm is rapidly increasing in size or rupturing, there will be symptoms which can include: severe abdominal, back or flank pain (this can radiate to the chest, groin or leg); shock or low blood pressure (due to loss of blood) and a pulsating abdominal mass.

The screening programme offers a quick, free and painless scan to all men in their 65th year. Men over the age of 65, who have never attended for AAA screening, can self-refer by calling the Programme Office on 028 9063 1828.



As some people get older, the wall of the aorta in the abdomen can become weak and balloon out to form an aneurysm, rather like a bulge in a worn car tyre.
Diagram courtesy of the NHS AAA Screening Progamme.

How?

To ensure provision of safe, effective, high quality and equitable screening – with continuous service improvement built into service delivery – programme staff realised that input from men aged 65 and over was essential. Fostering engagement was, however, initially challenging due to:

- men being traditionally less likely to interact with healthcare providers than women;
- lack of awareness about what an AAA is and its implications;
- the risks associated with screening and treatment;
- lack of funding for a publicity campaign following programme implementation;
- service users being unaware of the pivotal role they play in ensuring effective service transformation.

Nevertheless, programme staff were also aware that such challenges strengthened the case for partnership working. Therefore, in April 2013, men screen-detected with an AAA – along with their wives/partners – were invited to meet programme team members at the first service user event to discuss what was good about the programme and what could be improved.

Six years later, programme staff are preparing for their seventh event as the programme – and its service users – continue to benefit from outcomes from previous events. This has included appointing three patient representatives to the programme's main management group to help embed partnership working. Participation rates at these annual events have also increased from 18 service users in 2013 to 73 in 2017.

Pictured (L-R) are Mr Gerard Quinn, PHA Chair Mr Andrew Dougal, Mr Frank Mills and Mr Jim Kenny at the 2018 service user event in Belfast.

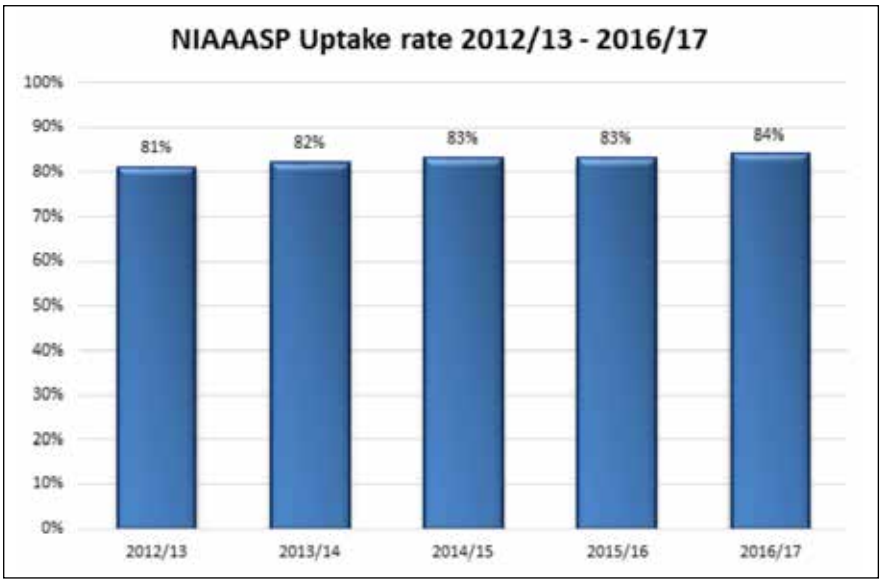


Figure 5: Uptake rates for the AAA screening programme from its inception in 2012.
Engagement/promotional work with partners has helped improve uptake: 81% in 2012/13 – 84% in 2016/17 (and just under 84% in 2017/18). High uptake rates help ensure the screening programme is as effective as possible.

Key messages

- The AAA screening programme invites all men aged 65 to have an ultrasound scan of their abdomen to check for an abdominal aortic aneurysm. Men over the age of 65, who have not been screened previously, can phone the screening office on 028 9063 1828 for an appointment.
- Successful partnership working has been key to sustained programme delivery and improvement in AAA screening.
- Partnership working with service users is an opportunity to help meet their needs and effect positive programme change through, for example, the provision of patient centred post-operative information leaflets.

Further information

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Cervical screening social media campaign

Who?

The Cervical Screening Team worked with the PHA Communications Team and a number of national and local charities and organisations, including Jo's Cervical Cancer Trust, Cancer Research UK, the Women's Resource & Development Agency and the Northern Ireland Cancer Network (NICaN) to develop a social media campaign aimed at promoting cervical screening.

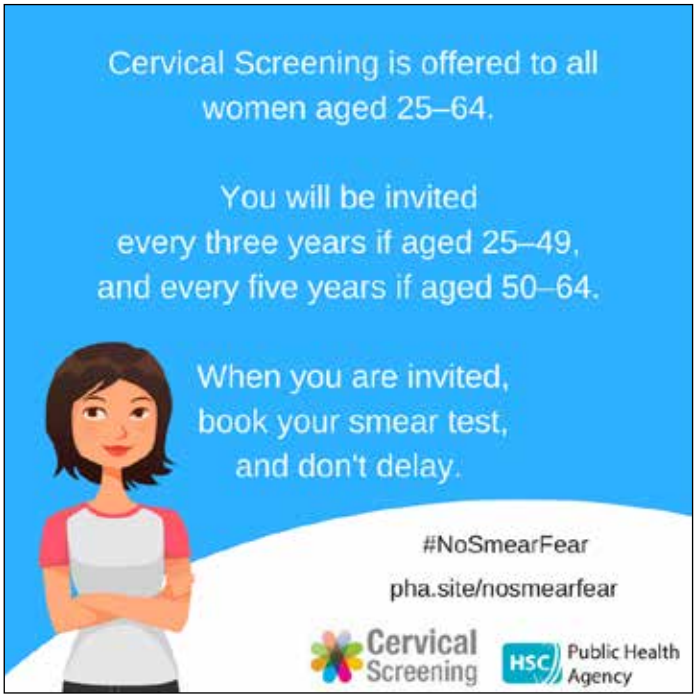
What?

The Northern Ireland Cervical Screening Programme invites eligible women to have a regular cervical screening test. Screening is offered to women aged 25–49 every three years and to women aged 50–64 every five years. The test is intended to detect abnormalities within the cervix that could, if left untreated, develop into cancer. Early detection and treatment can prevent up to 75% of cases of this cancer.

Coverage is used as a measure of the population's participation in the screening programme, defined as the proportion of eligible women, aged 25–64 who have at least one adequate test result recorded in the previous five years. Coverage in Northern Ireland is currently lowest in the 25–29 age group at 64.4%, compared to 76.4% overall.[23]

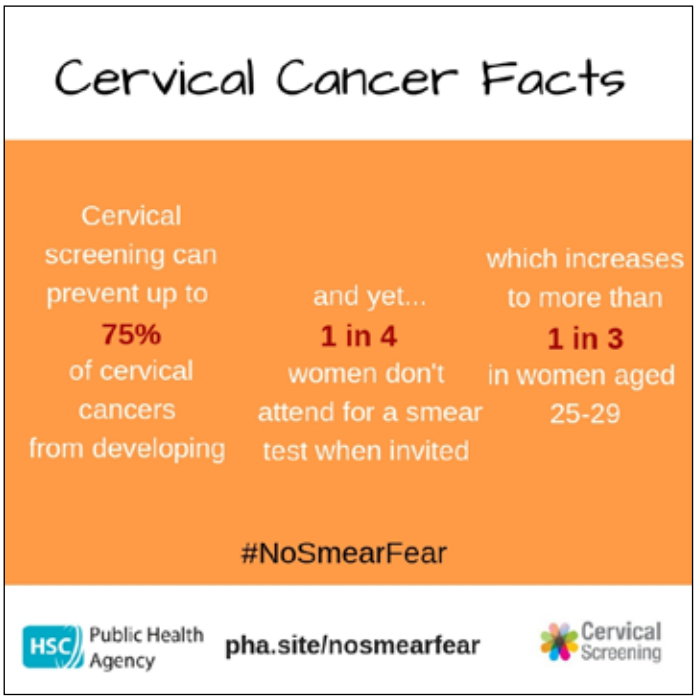
How?

To address the lower numbers in the younger age group attending for screening, a social media campaign was developed, engaging with relevant stakeholders. Service user input from Jo's Cervical Cancer Trust volunteers and service users from the NICaN Gynaecology Group helped ensure the campaign was as relevant and engaging as possible.



The campaign aimed to highlight the importance of screening in preventing cervical cancer as well as helping to tackle feelings of embarrassment or fear that may discourage younger women from attending their cervical screening appointment.

A series of posts and infographics were developed and shared via the PHA Facebook, Twitter and Instagram platforms. Two videos were also shared on these platforms as part of the campaign. The campaign ran from September 2018 to February 2019 and targeted women in the 25–29 age range and those living in geographical areas where coverage is known to be lowest. The campaign had a 'reach' of over 510,000 on Facebook.



Key messages

- Cervical screening can prevent 75% of cervical cancers from developing, yet 1 in 3 women in the younger age group (25–29) do not attend.
- The cervical screening social media campaign targeted younger women, aiming to promote cervical screening and tackle recognised barriers, such as embarrassment and fear.
- A video of Alison, a local service user telling her story *'Going for a Smear Test Could Save Your Life'* may be viewed at pha.site/smear-test-save-life
- A video showing *'What Happens at Cervical Screening'* may be viewed at pha.site/cervical-screening-what-happens

Further information

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Service development

#hackthepain: a MyNI social media campaign for supported pain self-management

Sexual health clinic for young people

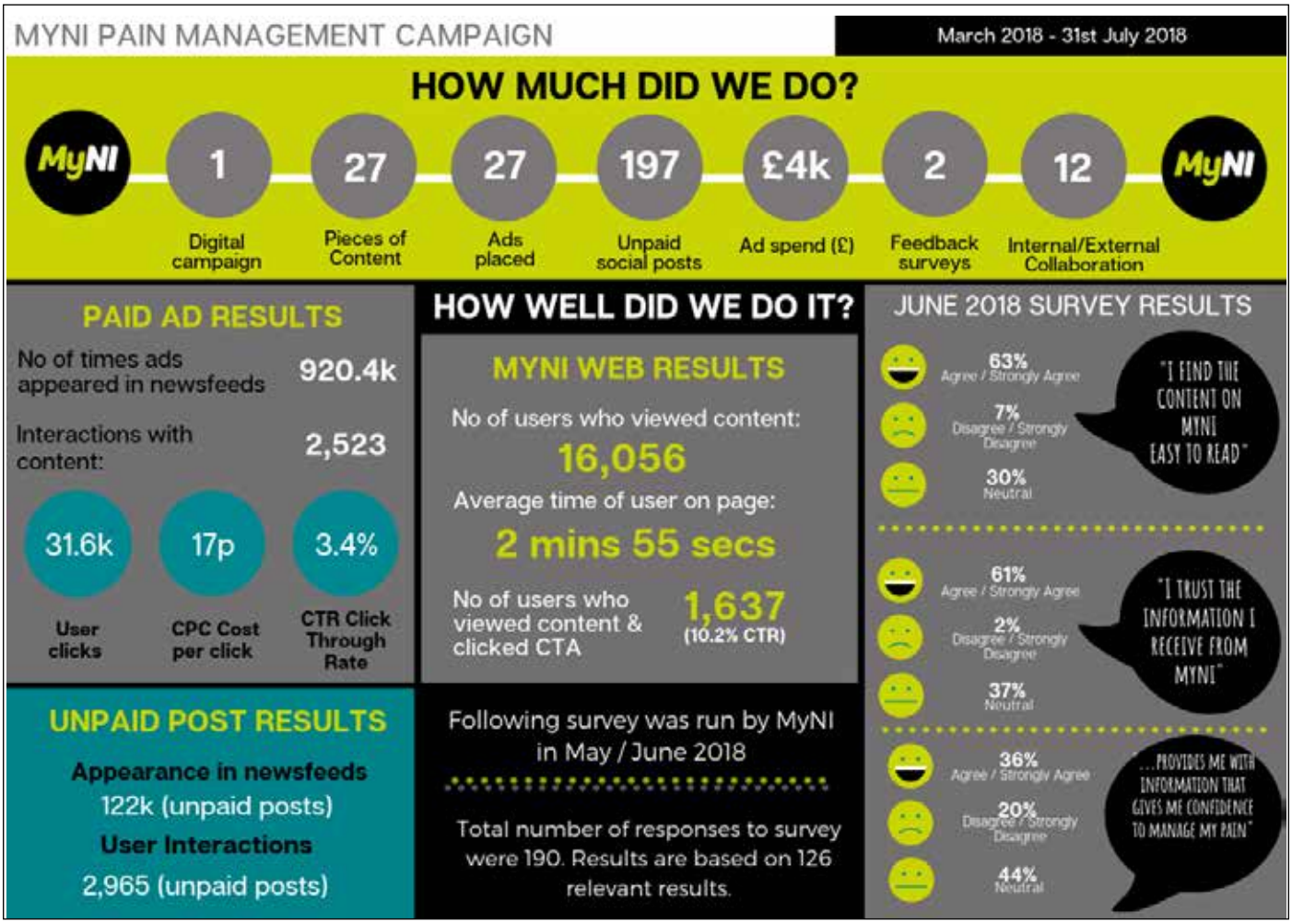
#hackthepain: a MyNI social media campaign for supported pain self-management

Who?

Following publication of *The Painful Truth* report by the Patient Client Council (PCC), the PHA developed and continues to lead the Northern Ireland Pain Forum.[24] This is a multidisciplinary practitioner and patient network for persistent pain prevention, supported self-management and service improvement. The Pain Forum brings together health and social care trusts, the HSCB, the PHA, the PCC, the Business Services Organisation, Integrated Care Partnerships, GP Federations, the Healthy Living Centre Alliance, the Pain Alliance for Northern Ireland and Versus Arthritis. It works with academics, artists, private entrepreneurs, several government departments and international pain experts.

What?

Persistent pain costs between 3 and 10% of GDP.[25] Alongside mental health problems, it is the most common disabling condition and often the most troubling for patients.[26] Almost 500,000 people in Northern Ireland are believed to be affected.[27] Numbers are rising due to obesity, multi-morbidity and an ageing population, but information on prevention and good pain management is scarce.



The campaign evaluated positively, with a high click through rate (CTR) and a relatively high average time spent on each web page. This shows that both the campaign and the website were successful in getting users to engage with the content.

Insights into the needs of people living with pain were brainstormed by 45 coders, pain service providers and service users at the #hackthepain participatory hackathon held at the QUB Computer Sciences Building on 3 June 2017.

Pictured at the end of the MyNI pain management social media campaign are (L-R) Ms Joanne McKissick, External Relations and Policy Manager with the Patient Client Council, Ms Rebecca Walsh, service design engineer with the Department of Finance Innovation Lab, and Dr Christine McMaster, Public Health Consultant with the PHA.

Key messages

- The Forum has supported Healthy Living Centres to offer pain support groups that are helping people to live better with pain.
- It has facilitated the development of a fibromyalgia pathway and its implementation in the Western HSCT.
- It has invested in pain management services to improve equitable access for patients, outcomes and staff morale.

Most people can self-manage with GP support and community health care to remain active and well, but many need peer and multidisciplinary support for a good quality of life, and some require hospital pain services, complex treatments and rehabilitation. These are difficult to access, and there is an overreliance on prescribed pain medication, which contributes to a rising tide of dependency, addiction, expenditure, suffering and death. Many patients lose employment and educational opportunities, friends and family as well as hobbies and social lives.

How?

With colleagues from the Department of Finance Innovation Lab, the PCC and a £5,000 PHA grant, the Pain Forum organised a participative hackathon in 2017 to test digital solutions for better information about pain and supported self-management (see pha.site/pain-hackathon). In 2018, the Forum worked with the Department of Finance Digital Transformation Service to deliver a social media campaign.

Its content was coproduced by Pain Forum members and was very successful, receiving almost 17,000 unique page views and a high click through rate. The evaluation survey indicates that 37% of respondents tried alternative and complementary therapies, connected with others living in pain or started attending support groups as a result of the pilot.

The Forum has now secured funding to develop a sustainable and innovative solution for the remaining information challenges in partnership with private industry and researchers. This aims to meet the specific needs of patients with persistent pain.

Further information

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Sexual health clinic for young people

Who?

This project demonstrated partnership working between colleagues in HSCB, PHA, BHSCT and Queen's University Belfast to provide weekly, term time, walk-in sexual health clinics in the Students' Union.

What?

Some sexually transmitted infections (STIs) continue to increase locally.[28] In 2017, the most recent year for which surveillance data are available, the highest diagnostic rates of the common STIs occurred in 16–24 year old females and 20–34 year old males. Young people aged 16–34 years old account for 82% of new STIs. A further at-risk group is men who have sex with men (MSM) who are at a disproportionate risk of contracting certain STIs. The challenge is therefore to ensure that young people are aware of the safe sex messages and are enabled to seek help and get tested if they feel that they have put themselves at risk.

How?

Earlier diagnosis and treatment reduces the risk of onward transmission of any infectious disease, so improving access to services will help to reduce STIs. Funding was secured for a weekly walk-in clinic in the Students' Union during term time. The university provides accommodation for the clinic, support for the running of the clinic and promotes it via various social media outlets. The trust provides the staff, treatments and follow up. Patients are assessed and offered full STI testing, sexual health advice and signposting to other services as appropriate.

Key messages

- This clinic provides a large number of young people with information, support and a clinical service in a convenient venue.
- It is targeting at-risk young people, 72% of whom have never previously attended a genito-urinary medicine clinic, and significant levels of infection have been diagnosed and treated.
- Feedback from students has been extremely positive; they felt their needs had been met. This is an important new service reaching high risk young people.

Further information

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List of core tables 2017

List of core tables

Page numbers refer to the PDF of Core Tables 2017, which is available to download from the PHA website at www.publichealth.hscni.net

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