livewell Cheshire East

Public Health **Annual Report**

2020-21

Contents

The Cheshire East Health and Wellbeing Board: 2019-2020

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It gives me great pleasure to present my first annual report as Director of Public Health for Cheshire East. The last two annual reports from my predecessor covered the themes of "people" and "place". This year the theme is "partnership".

One of the most important partnerships is that between people and place: connecting the people who live, work and study in the area to their environment and communities, adding benefit all round. That is a recurring message throughout this report.

Partnership is integral to the definition of Public Health:

"The science and art of preventing disease, prolonging life and promoting health through organised efforts of society" (Sir Donald Acheson, Chief Medical officer for England, 1988).

This report outlines some of our key partnerships and plans. It covers the main threats to healthy life expectancy and to wellbeing. There is a special section on Covid-19 which has been a major new threat to the health of the public this year. The causes, the consequences and the response to this pandemic threat all relate to the social determinants of health and wellbeing. This pandemic was not just a viral phenomenon – it was a sociological and economic one too. The same can be said of the other threats to health, and this report refers to these too.

The Cheshire East Partnership Five-Year Plan for 2019-2024, reminds us of evidence that 40% of the contribution to health outcomes comes from socioeconomic factors, a further 30% from health behaviours and 10% from the public environment. Only 20%, albeit a highly important and skilled element, is from health care itself.

An innovation in this year's report is an account of public health resources. It outlines briefly where the money earmarked for public health went and what it was for. But our even greater resource is our staff and the wide partnerships into which they contribute, so this report shows the public health "family tree": who we are, what we do and how to contact us.

A report of this nature cannot cover every threat to wellbeing, every initiative undertaken and every result, but there should be something of interest and relevance to anyone who lives in our borough. There is a role in the overall public health effort, summarised in the definition above, for all the people of East Cheshire to connect with their place and, through partnership, make their personal impact on health and wellbeing of all.

I hope you will find the report informative, insightful and inspirational in making your contribution to our collective partnership.

Cheshire East Partnership Five-Year Plan for 2019-2024

"Our vision is to enable people to live well for longer; to live independently and to enjoy the place where they live."

The Plan has four main areas of focus.

1. Tackling inequalities through an integrated approach to reducing poverty, isolation, housing problems and debt. The next two chapters of this annual report show current inequalities and measures being taken to address them.
2. Prevention of ill-health, early intervention, health improvement and healthy environments. These themes are very much to the fore in the four workstreams of the Integrated Care Partnership (ICP) for Cheshire East, namely: respiratory health, cardiovascular health, mental health and child health.
3. Recognising strengths and helping individuals and communities to help themselves. In the ICP workstreams mentioned above, the emphasis is on health rather than disease, building on the positives rather than just the deficits. Instead of asking "what is the matter with you?", the question becomes "what matters to you?". Interactions between individuals and the caring services is more of a partnership relationship than dependency relationship.
4. Sharing planning and decision-making with residents. This is partnership at collective, population level.

The Plan sets out four strategic goals.

1. Develop and deliver a sustainable, integrated health and care system. This goal is now reinforced by the latest NHS White Paper, subtitled: "Integrated and innovative".
2. Develop a financially balanced system. The emergency response to the Covid19 pandemic, both nationally and locally, has put financial planning on a radical new trajectory, but as the "new normal" settles in, this requirement returns. It is possible to be innovative with the same or even reduced financial resources – it just requires deploying resources in new ways, and perhaps drawing on new resources such as neighbourliness social capital.
3. Build a sustainable workforce.
4. Significantly reduce health inequalities.

The Plan points to four main outcomes.

1. Create a place that supports health and wellbeing. The NHS White Paper on reform recognises and emphasises the importance of place – of planning, built environments, green spaces, and sustainability to health. There is a lot more potential for "social prescribing" in all its forms to build a stronger link between people and their place, with benefits in both directions.
2. Improve the mental health of those living and working in Cheshire East. This outcome was written before the current pandemic but is more important than ever as we enter recovery. There are two especially important new aspects: the mental of health of children and young people and the rebuilding of fitness and resilience in older people.
3. Enable more people to live well for longer.
4. Ensure happiness of children and young people – physical and mental wellbeing.

The Cheshire East Health and Wellbeing Board: 2019-2020

The Health and Wellbeing Board is a strategic partnership of the Council, the health commissioners and the providers of health services. The voice of the public is represented by Healthwatch Cheshire East. Health and Wellbeing Boards were established across England in 2013 to be a forum in which leaders from the local health and care system could work together to improve the health and wellbeing of their local population.

The Board is tasked with promoting greater integration and partnership between bodies from the NHS, public health and local government and has a number of aims to:

- bring together the key decision makers across the NHS and local government;
- develop a common understanding of needs and assets (the Joint Strategic Needs Assessment);
- set a clear direction for the commissioning of health care, social care and public health (the Cheshire East Partnership Five Year Plan);
- drive the integration of services across communities;
- improve local democratic accountability;
- tackle inequalities in health.

In 2019-2020 the Board met four times, with the March meeting having to be cancelled because of the COVID-19 outbreak.

At each meeting there were updates on the work of the Cheshire East Place Health and Care Partnership, which is leading on the work to integrate health and care. This ensured that Board members were aware of the progress made and could comment on key issues being raised. In September the Board endorsed the Partnership's 'Five Year Plan' which set out the vision and priorities through to 2024.

With regard to Children and Young People the Board considered the Children and Young People's Plan 2019-2021 and agreed to revised arrangements regarding the Child Death Overview Panel. Progress in relation to the Special Educational Needs and Disability Written Statement of Action was also reported. The new model of locality working for the Children and Families Service, 'Together in Communities' was endorsed and the Local Safeguarding Children Board Annual Report was received.

Other key issues considered included the new All Age Autism Strategy 2020-2023, the proposed merger of the Cheshire Clinical Commissioning Groups and the new Falls Prevention Strategy, all of which were supported. Annual reports were received regarding Influenza, Healthwatch Cheshire East and the Safeguarding Adults Board and the Board received updated reports regarding the Better Care Fund.

A Mental Wellbeing Strategy for Cheshire and Warrington, 'Heading in the Right Direction' was considered and supported and the Cheshire End of Life Partnership presented their strategic priorities for palliative and end of life care.

The Cheshire East Wellbeing Network Group

The Cheshire East Wellbeing Network Group is a networking group set up by Cheshire East Council (CEC) and previously Eastern Cheshire Clinical Commissioning Group. With the recent merger of the 4 CCGs to become one Cheshire Clinical Commissioning Group (CCG), the group has started to expand the footprint of the network to cover the whole of Cheshire.

Cheshire NHS Trust (ECT), Cheshire and Wirral Partnership NHS Foundation Trust (CWP), Everybody Sport and Recreation (ESAR), One You, Healthwatch, Connected Communities, Plus Dane Housing Trust and the Cheshire East Council for Voluntary Services (CVS).

The Network's aim is to align our communications and actions during four quarterly campaigns for maximum impact across the population and the staff of the member organisations. A successful campaign for 2020, using a collaborative approach, was Mental Health Awareness Week. It offered support to other organisations and the sharing of resources, and resulted in reaching a wider target audience and greater community engagement.

NO MORE Suicide Partnership – Working Together to Prevent Suicide. The Cheshire and Merseyside NO MORE Suicide Partnership consists of a wide range of partners, including charity and voluntary sector organisations, people with lived experience, local Councillors, emergency services, mental health trusts, NHS clinical commissioning groups, HMP Prisons & Probation, Highways England, Public Health England and the Cheshire and Merseyside Health and Care Partnership. The Zero Suicide Strategy outlines the priorities which every local authority across Cheshire and Merseyside is working to improve.

Collaboration is used to deliver awareness campaigns which promote positive messages on mental wellbeing and suicide prevention, letting people know it is ok to ask & ok to talk about suicide and that support is available. Training courses have been commissioned to raise awareness and give people the confidence to talk to people when they are in a difficult place.

A Real Time Surveillance system has been implemented in order to support the closest people affected and the Amparo support after suicide service was developed and commissioned to help people bereaved by suicide. The latest development is a Lived Experience Network, where people who have experienced suicidal thoughts or have been affected by suicide, who can support others in a variety of ways. This collaborative approach across Cheshire and Merseyside has resulted in receiving the Suicide-Safer Community designation by Living Works Education Inc.

https://no-more.co.uk/wp-content/uploads/2021/01/Suicide-Safer-Communities-2017.pdf

Partnerships between "people" and "place": health and wellbeing from green spaces

"The art of healing comes from nature, not the physician."
(Paracelsus, 16th century BCE)

"Action by the NHS is a complement to – not a substitute for – the important role of individuals, communities, government and business in shaping the health of the nation."
(NHS Long Term Plan, 2018)

What's the problem?

The local NHS has a huge problem from life-style and environment-related illnesses for which greater access to green spaces would be beneficial in terms of improved health outcomes, reduced health inequalities and reduced demand on services. These illnesses can reduce quality of life in areas such as mental health, impaired mobility and addictive behaviours, or reduce length of life through diseases such as cancer, heart disease and respiratory disease.

The Council's "people" directorate has similar problems that could ameliorated by greater access to, and involvement in, green spaces: for example loneliness, antisocial behaviour, acquisition of skills and demands on child and adult social care, and the "place" directorate has a problem of lack of human resources to maintain and regenerate, let alone create, green spaces.

What's the proposed solution?

In principle this is simple. We need to tap into the large potential human resource that is currently in good health, or seeking better health, that could benefit from "purposeful activity, outdoors, with other people". We need to direct this human resource towards the need for green spaces: creation, restoration and maintenance of healthy outdoor environments, and spending more time in them. This needs to be done at scale to realise significant and lasting benefits, and release savings for redeployment. We need a wide menu of opportunities, many of them small and very local but collectively reaching all 370,000 people living in Cheshire East. That's how big the ambition is. It requires imagination and flexibility (and a bit of courage) from of all the caring agencies, and then communicating the excitement and benefits to the population at large.

Some of this is already happening through commissioned and voluntary efforts – we now need to act as a catalyst to speed up the reaction. In addition to the untapped potential in social capital mentioned above, we could bid for initiatives as they come up. We might also unlock resources from services like NHS medicines prescribing that could be deployed in new ways. There is an evidence base where this has been tried successfully elsewhere.

Is there an evidence base?

There is a huge evidence base for the health benefits of access to green spaces, ever since civic reformers around the world started building large urban parks and model housing estates. The UK, Ireland and Holland were earliest pioneers of "social prescribing", where clinicians would refer patients to social interventions in green spaces to achieve health benefits. There is a large and growing database of evidence of effectiveness and cost-effectiveness, including social return on investment, from the National Institute for Health and Clinical Effectiveness (NICE), Public Health England, and around the world. This includes research into the mechanisms by which referral to green spaces works.

The New Economics Forum in Manchester has published evidence on the "5 ways to wellbeing", which are: be active, be mindful, keep learning, be connected and make a contribution. Much of the evidence comes from mental health and cardiovascular illness, but other body systems benefit too, and not just at individual level but at population level on things like reducing social inequality and boosting economic growth. The added benefit of activities in green spaces is that they bring all of these "ways" together so that they reinforce each other and promote sustained engagement.

The Oxford textbook of nature and public health, edited by Matilda van den Bosch and William Bird, published in 2018, is a standard reference work.

What are the potential benefits and how would they be evaluated?

"Evaluation" is measuring the degree to which a programme meets its stated objectives. It follows that the anticipated benefits in Cheshire East should be clearly stated and then measured (in numerical and narrative form) at intervals.

Here are some areas of benefit to be anticipated and evaluated:

- At personal, individual level. Participants could be invited to rate improvement in all five of the "ways to wellbeing" listed above, or by one of the other wellbeing tools such as "SF36" for which there are huge comparative databases. Other measures are activities of daily living and independence. Biomedical markers such as weight, blood pressure, serum cholesterol, diabetes control, depression score, could be measured by the referring clinician where these were desired outcomes, and validated reductions in smoking, alcohol and illicit drug use. Personal scores could be aggregated to assess overall effectiveness of specific projects. Note that those schemes which draw simultaneously on all five of the "ways to wellbeing", such a community tree-planting initiative, have an additive benefit and tend to be more sustainable than, say, exercise alone.
- At population level. Examples of measures that have been used elsewhere are markers of antisocial behaviour, crime, addictive behaviours, educational and skills attainment, employment, and membership of leisure facilities, volunteer groups and clubs (such as book clubs, walking groups).
- Impact on services. Examples include reduced visits to the GP (overall, and in those referred to specific schemes), reduced prescribing of medicines (especially antidepressants, antihypertensives, statins and diabetes medicines), reduced hospital attendances or re-attendances, reduced school absences and exclusions, reductions in falls in the home and prolonged independent living for older people.
- Economic outcomes. These could include savings or scope for redeployment of current funds falling to caring services and markers in the wider economy of economic regeneration.
- Environmental outcomes. Depending on the scheme and locality, outcomes might be measures of air and water quality, increased numbers and diversity of plants, insects, birds and mammals, flooding, acreage of green space, new green corridors. Even turning fences into hedges would be a benefit aesthetically and environmentally. For planners, there may be scope for insisting on more green space (eg active green space for gardening, walking, cycling) in all new developments, and water capture to support green areas. Measuring increased footfall in desired open spaces would help.

How would people find their way to green schemes?

- Self-referral is probably the best way to achieve participation and benefits at scale. These would be people in good health or recognising early risk factors (such as smoking, alcohol, overweight, loneliness) who are able to find their own way, or by a friend's recommendation, to one or more green schemes.
- Referrals from schools (or projects within schools). These are a good way of involving young people early and setting healthy life-long interests. There are many examples around the country of schools bringing gardening or other green activities into the curriculum or as an extracurricular club. This can include inter-generational projects with older people or twinning a school with an older people's home – with spin-off benefits for both groups. For older children, especially those with special needs or at risk of exclusion, there are GCSE-equivalent schemes outdoors in regeneration or agriculture. Forest schools at younger ages are another educational model. In individual cases, it might be helpful for pastoral care teachers to be able to refer pupils in need to a specific local project.
- Referrals from GPs, Hospitals and Social Workers. This is a potentially large pool, addressing secondary prevention in the main, where a lifestyle factor is impeding recovery. Some such patients and clients need skilled behavioural interventions first so they are ready and accepting of change. There is a big role for the GP networks and link workers in this, though that model cannot cater for all demand so we need to facilitate access to green schemes to get this route widened up. Potential partners in this are the Cheshire Wildlife Trust, National Trust, Areas of Outstanding Natural Beauty, Royal Horticultural Society, etc. When it comes to rehabilitation after hospital admission, we should aspire to making a social referral part of the plan every time. A relatively new term is that of "pre-hab", ie preparing a patient for a major operation or course of therapy before the event, or to a new chronic progressive illness, so they are in the best state of mental, physical and social resilience to face the treatment and the future.

Where to start?

- Identify some priority "Green Schemes" already planned by Cheshire East, eg in Crewe, and get these off the ground. It would, for example, be helpful to re-instate a few Rangers as we used to have, to lead walks, ensure sensible developments take place, and to give leadership and governance to volunteers.
- A communications strategy and campaign. Develop a wider awareness and publicity of this sea change in approach, and its advantages, to the population and the professional caring agencies. Canvass for ideas for schemes, especially low-cost or no cost ideas.
- Compile a succinct summary of the current evidence base, collect our own evidence as it grows, and share the learning.
- Be clear of intended benefits and how evaluation will be carried out, including economic, environmental, and markers of both personal and population-level wellbeing.
- Work with NHS colleagues in primary and secondary care to see if there are realistic opportunities for redeploying money, staff or buildings to better effect through use of green spaces – in the immediate term, medium term and strategic long term. We should seek advice on how best to engage and enthuse clinicians, social workers and teachers, and also check that these schemes are clinically sound and safe.

The future is bright – the future is green.

A snapshot of health and inequalities

Healthy life expectancy and the link with affluence

Figure 1 and Figure 2 clearly show, for females and for males respectively, that there is a correlation between healthy life expectancy at birth and the Index of Multiple Deprivation (IMD) score in wards in Cheshire East. As the IMD score rises (deprivation gets worse), healthy life expectancy decreases.

The IMD combines information from the seven domains to produce an overall relative measure of deprivation. The domains are combined using the following weights:

- Income Deprivation (22.5%)
- Employment Deprivation (22.5%)
- Education, Skills and Training Deprivation (13.5%)
- Health Deprivation and Disability (13.5%)
- Crime (9.3%)
- Barriers to Housing and Services (9.3%)
- Living Environment Deprivation (9.3%)

Figure 1: Female healthy life expectancy at birth vs index of multiple deprivation

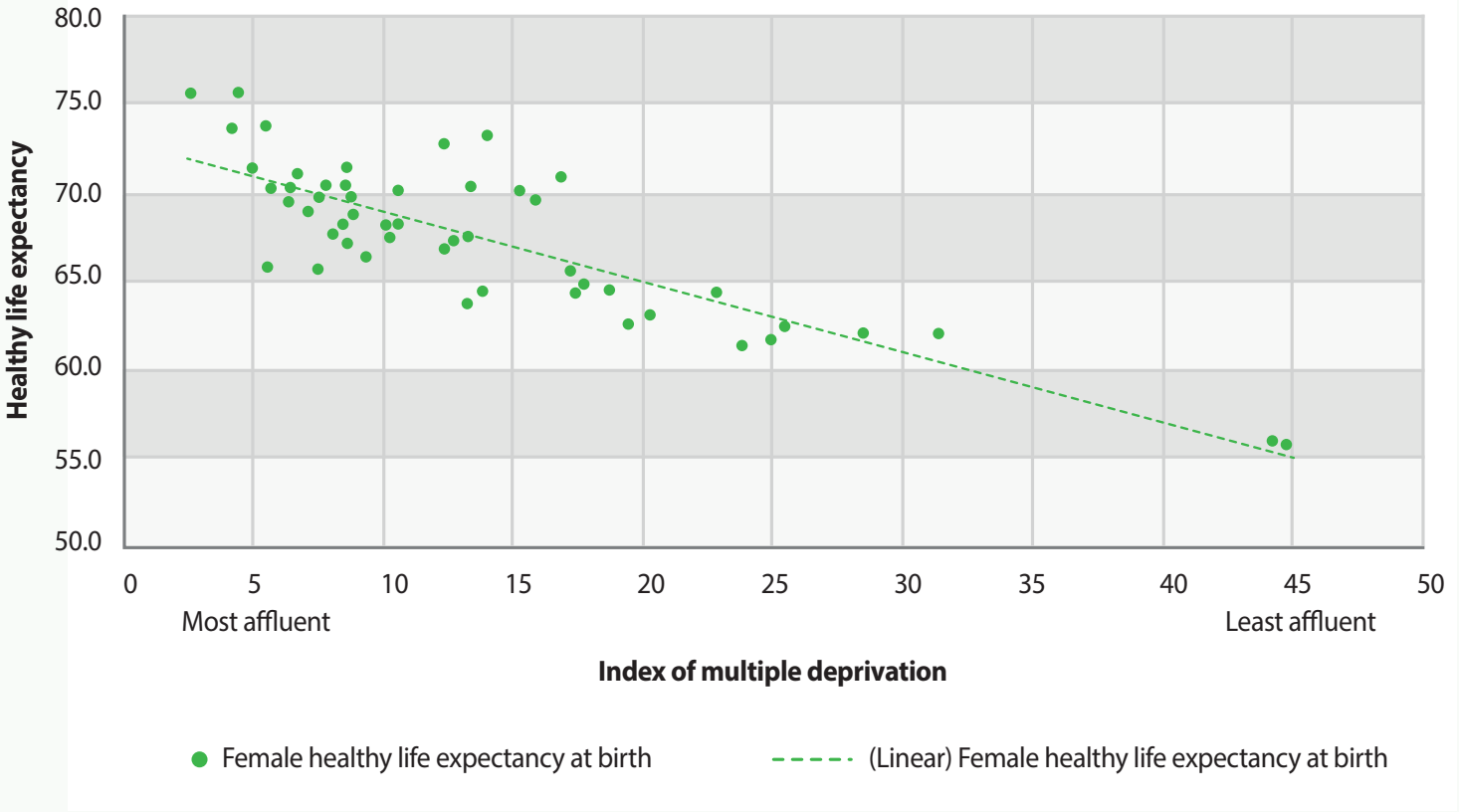
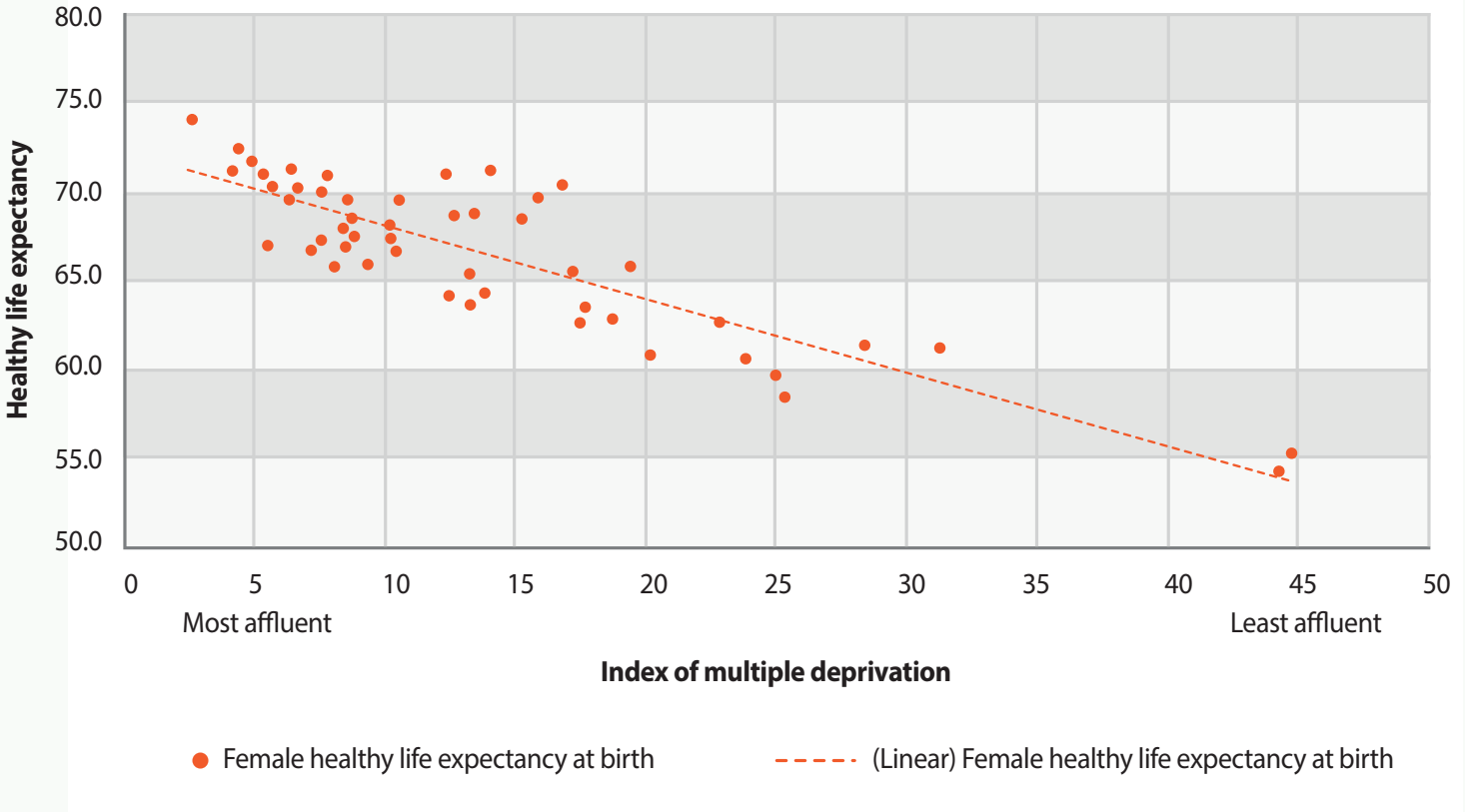


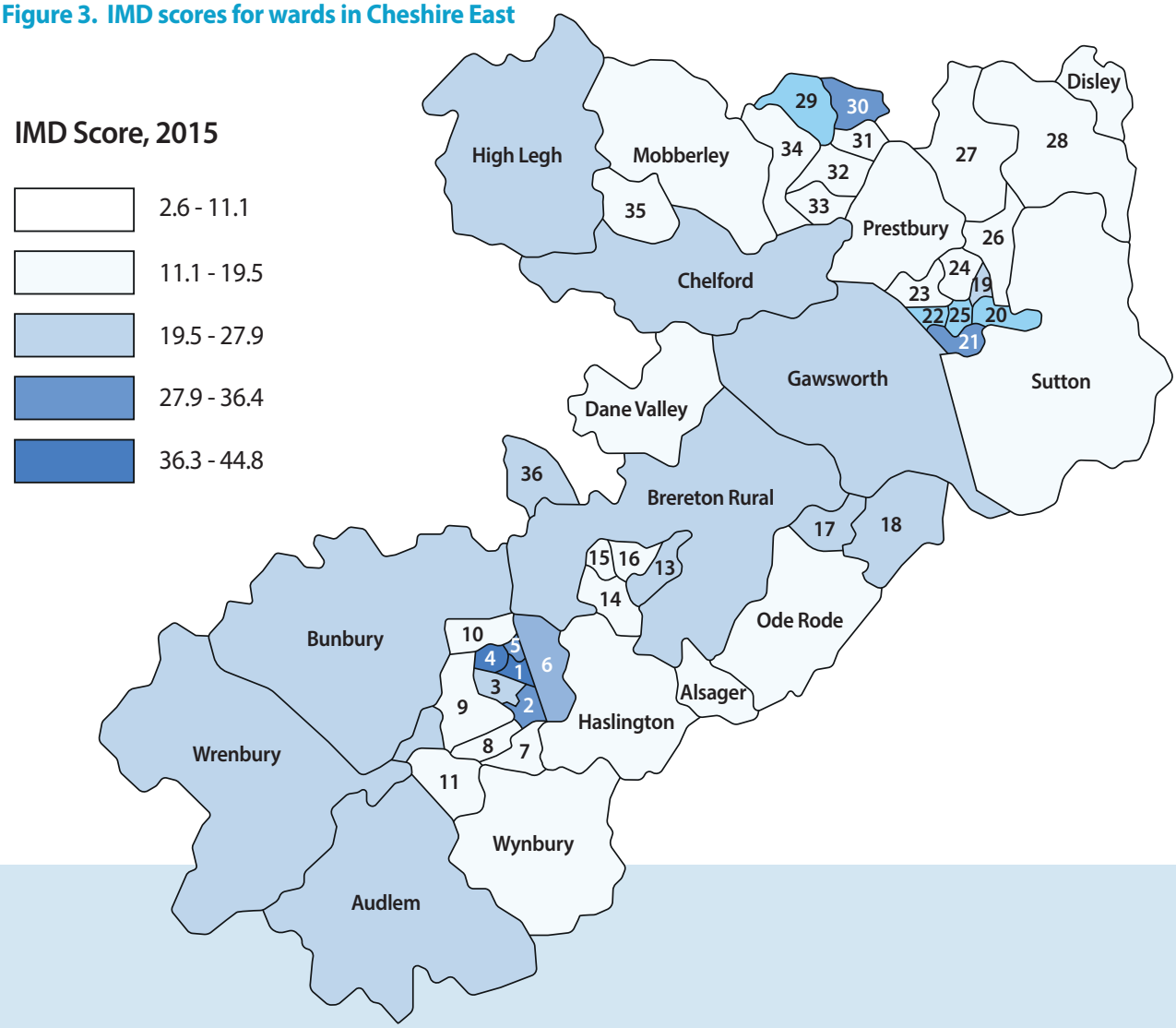
Figure 2: Male healthy life expectancy at birth vs index of multiple deprivation



Respiratory Disease

Figure 3 is a map which shows the IMD score for all wards in Cheshire East. Most of the area has a relatively low score (ie relatively affluent by the norm for England). Scores are higher (ie relative deprivation) in urban areas of Crewe and Macclesfield. The ward of Handforth (30) also has a relatively high score.

Figure 3. IMD scores for wards in Cheshire East

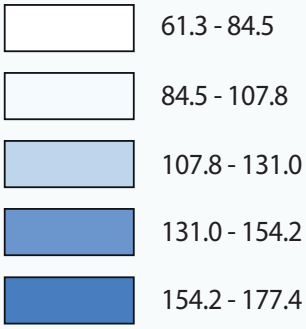


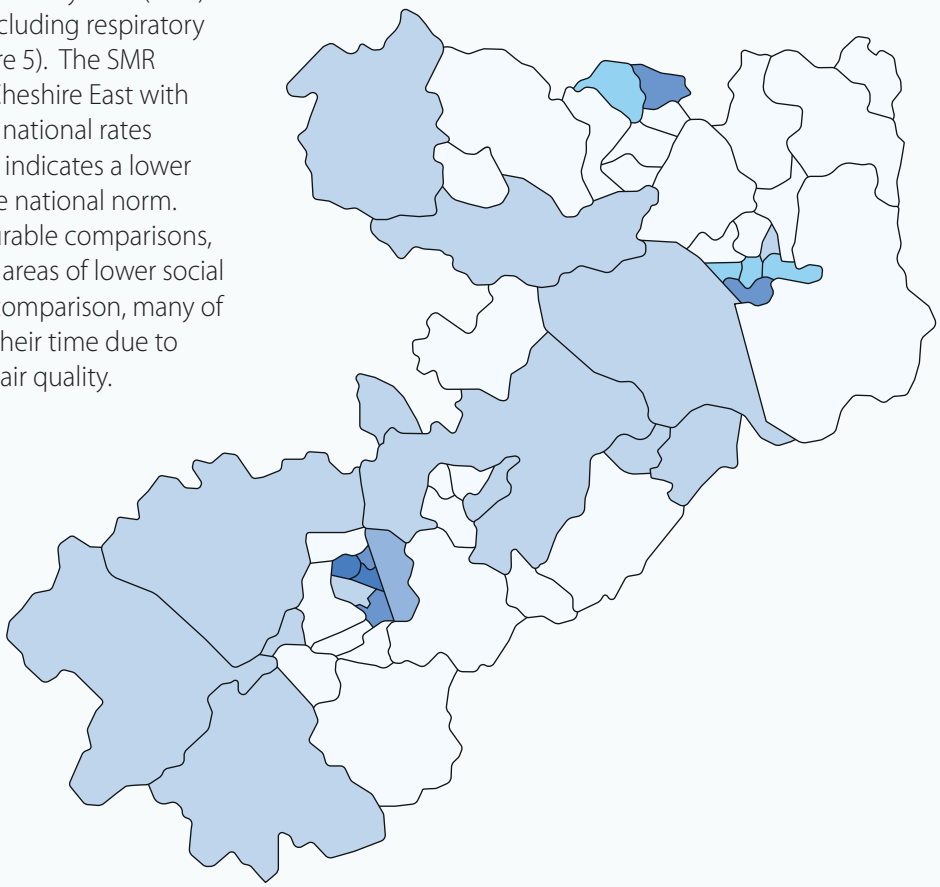
1. Crewe Central
2. Crewe South
3. Crewe West
4. Crewe St Barnabas
5. Crewe North
6. Crewe East
7. Shavington
8. Willaston and Rope
9. Willaston
10. Leighton
11. Nantwich South and Stapeley
12. Nantwich North and West
13. Sandbach Heath and East
14. Sandbach Ettiley Heath and Wheelock
15. Sandbach Elworth
16. Sandbach Town
17. Congleton West
18. Congleton East
19. Macclesfield Hurdsfield
20. Macclesfield East
21. Macclesfield South
22. Macclesfield West and Ivy
23. Broken Cross and Upton
24. Macclesfield Tytherington
25. Macclesfield Central
26. Bollington
27. Poynton West and Adlington
28. Poynton East and Pott Shrigley
29. Wilmslow Lacey Green
30. Handforth
31. Wilmslow Dean Row
32. Wilmslow East
33. Aderley Edge
34. Wilmslow West and Chorley
35. Knutsford
36. Middlewich

Figure 4 shows the standardised mortality ratio (SMR) for deaths from respiratory disease (excluding respiratory cancers, which are included in figure 5). The SMR compares the death rates seen in Cheshire East with what would have been expected if national rates applied, so a low score (below 100) indicates a lower (better) mortality outcome than the national norm. Much of Cheshire East enjoys favourable comparisons, but this is markedly not the case in areas of lower social affluence. Despite the favourable comparison, many of these deaths are occurring before their time due to avoidable causes like smoking and air quality.

Figure 4

Deaths from respiratory disease



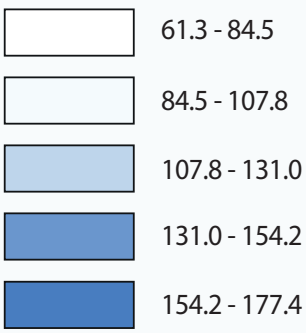


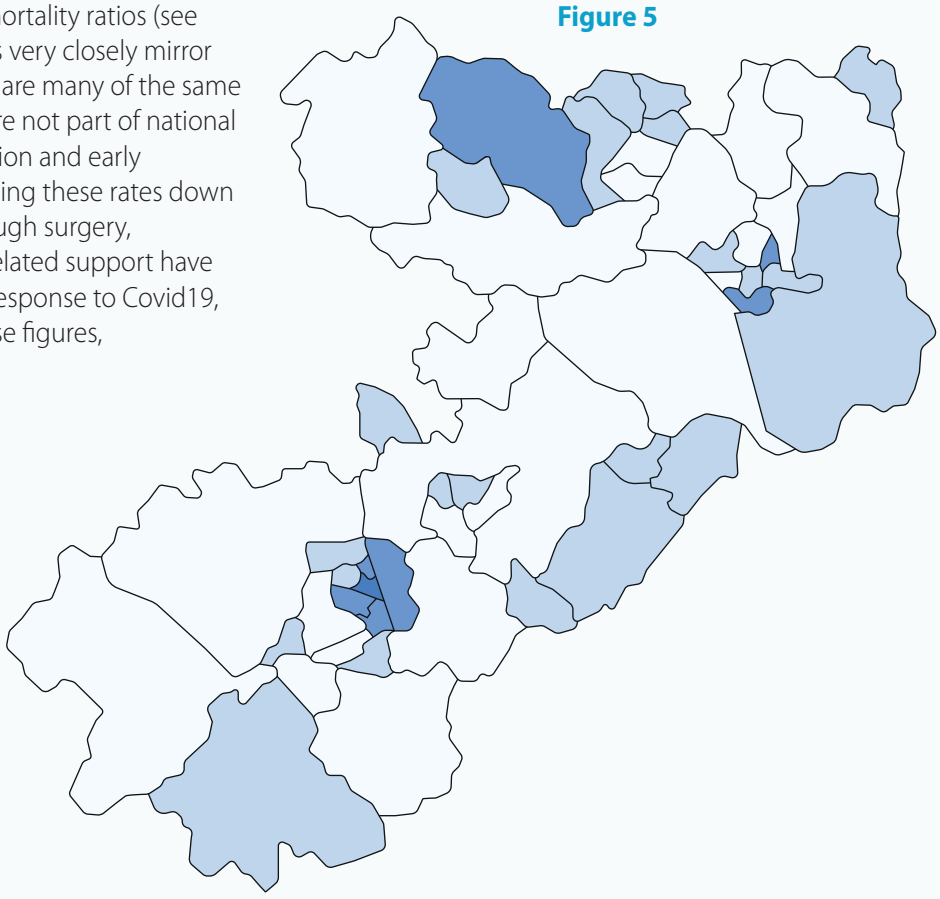
Cancers

Figure 5 shows the standardised mortality ratios (see figure 4 for explanation) for cancers very closely mirror those for respiratory disease and share many of the same underlying causes. Most cancers are not part of national screening programmes, so prevention and early detection are fundamental in bringing these rates down further. Effective intervention through surgery, radiotherapy, chemotherapy and related support have suffered delays due to the urgent response to Covid19, so there is renewed scrutiny of these figures, comparisons and trends.

Figure 5

Deaths from all cancers, all ages 2013 - 2017





Circulatory diseases (chiefly heart attacks and strokes)

Figure 6 shows the standardised mortality ratios (see figure 4 for explanation) for circulatory diseases in the wards of Cheshire East. Once again, they correlate closely with the pattern for respiratory diseases and cancers and point to common causes. Up to date figures for the Covid19 pandemic period are not available when going to press, but indications are that there is already an increase in these rates during the pandemic, for reasons which are under investigation by Public Health England regionally and nationally.

Figure 6

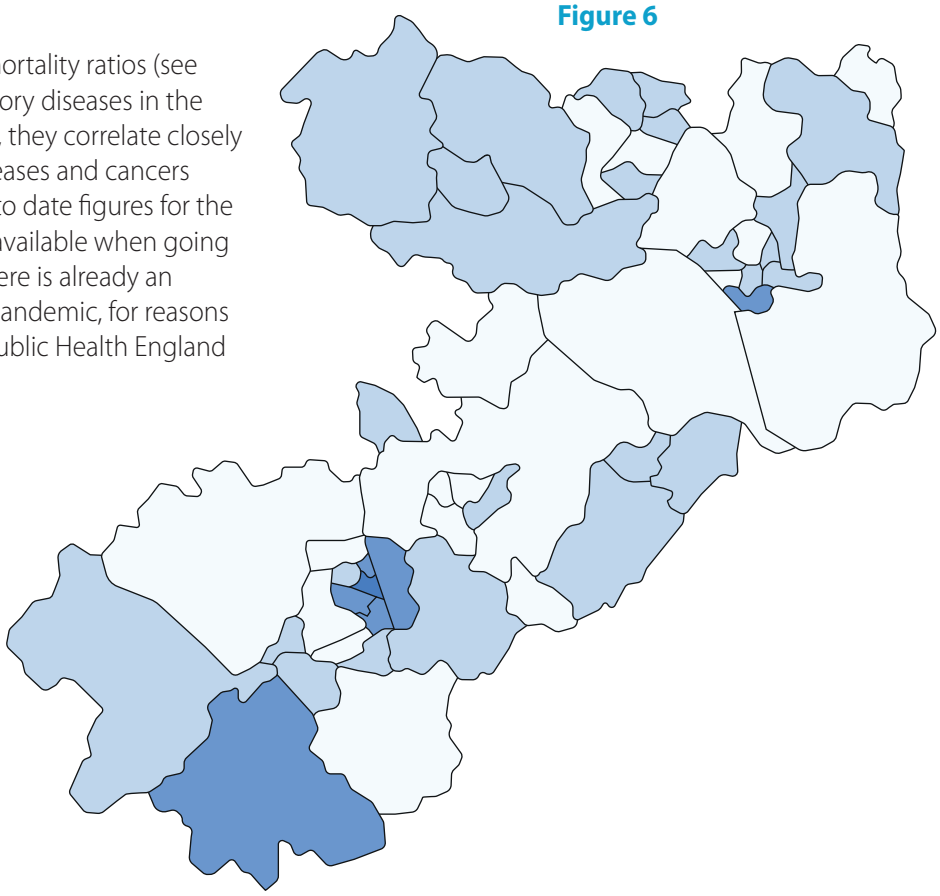


Table 1 shows how Cheshire East compares with the North West Region and with England on a number of key indicators. These examples are illustrative, taken from a much richer source which can be obtained from the references cited.

A more detailed list of indicators at ward level is also available in the "Tartan Rug" spreadsheet.
www.cheshireeast.gov.uk/pdf/jsna/ward-profile-tartan-rug/ward-profile-tartan-rug-nov17-ce-produced-18-08-23.pdf

Affluence (or a lack of it) is a strong determinant of length and quality of life, as are educational attainment and employment, which are listed here. The main diseases that shorten life are listed here, but not those that impair quality of life, such as sensory impairments, mobility problems and mental health struggles. We have relatively weaker data on these, but their importance is increasingly recognised as we look at living longer better. Suicide rates have been a particular focus for this Council, so a figure is included.

Overall, the comparisons with the region and with England are favourable, but we will try to improve further.

Table 1: Indicators of health, wellbeing, and underlying causes: how does Cheshire East compare?

Indicator	Cheshire East	North West	England
Index of Multiple Deprivation (IMD) Score 2015	14.1	28.1	21.8
Educational attainment (5 or more GCSEs): % of all children	60.5	56.3	57.6
Percentage of people aged 16-64 in employment	81.5	74.9	76.2
Estimation of Life Satisfaction	7.7	7.6	7.7
Female Healthy Life Expectancy at Birth, 2016 - 2018	69.8	63.3	63.9
Male Healthy Life Expectancy at Birth, 2016 - 2018	66.5	61.6	63.4
Deaths from respiratory diseases, all ages, standardised mortality ratio & 2013 - 17	94	111.2	100
Deaths from all cancer, all ages, standardised mortality ratio & 2013 - 17	91.2	107.8	100.0
Deaths from circulatory disease, all ages, standardised mortality ratio & 2013 - 17	91.4	108.4	100
Suicide rate (Persons)	10.2	10.6	10.1

Sources:

Public Health England Fingertips - https://fingertips.phe.org.uk
Office for National Statistics - https://www.ons.gov.uk/
Cheshire East Joint Strategic Needs Assessment - https://www.cheshireeast.gov.uk/pdf/jsna/ward-profile-tartan-rug/ward-profile-tartan-rug-nov17-ce-produced-18-08-23.pdf
Local Government Association LG Inform - https://lginform.local.gov.uk/reports/

A commentary on health inequalities

Health inequalities have been defined as: "Avoidable, unfair, systematic differences in health between different groups of people."

Inequalities in health cannot be completely eliminated. This is because each of us has a unique genetic endowment, undergoes unique life experiences, makes unique personal choices, and encounters unique contact with services. Not every baby will be born with the same birth weight, grow up in identical housing, earn an identical wage, suffer the same accidents and diseases and die at the same age. So we cannot eliminate health inequality but we can address the causes, diminish the impact and reduce the gaps.

What matters, in the definition here, are the inequalities that are: avoidable, so we must address what is causing them; unfair, so we must press for equal opportunities and provide extra help for those who need it more; and systemic, so we must look at our systems for any built-in inequalities in our assessment of need and access to services where these might be inadvertently perpetuating inequalities.

The "inverse care law" described decades ago by Welsh GP, Dr Julian Tudor Hart, applies in this context: "The availability of good medical care tends to vary inversely with the need for it in the population served." A contemporary example of this is digital exclusion. During the Covid19 pandemic more GP and related services have gone on-line or over the telephone, as has access to home delivery of food and shopping, access to education and access to work for many adults. Some of the most in need are those without access to the internet, laptop or mobile phone, either because they cannot afford them or because they never learned to use them.

One of the most frequently used measures of underlying inequality is the "Index of Multiple Deprivation". The components of this index reflect what we know are some of the major causes of inequality in health: income, living environment, housing, crime, employment, education, skills, health and disability. It is notable that the NHS's direct contribution is to the last two, and the others lie chiefly with local and national government.

All these causes overlap, hence the vital importance of tackling them in partnership. Not included in this index, but also important, are factors such as ethnicity and digital exclusion, so we must factor these in locally.

In understanding health inequalities we need to start with these underlying causes and the inequalities we see. Making healthier choices and avoiding unhealthier ones are not equally easy in all parts of the Borough and in some cases there may be little choice at all. Material (financial) inequality is an obvious example, and lack of money or a job impacts severely on life chances. These are not "hard to reach groups" as such because loan sharks and drug dealers find them easy to reach and exacerbate the problems. Through our local networks of neighbourhoods, voluntary organisations and statutory services we need to make sure no one in material deprivation is left behind.

Other types of deprivation include lack of access to green spaces, positive adult role models, hope, aspiration, education, skills, hobbies or the reason to get up in the morning. Then there are the systemic exclusions: digital exclusion, social isolation, stigma, prejudice, bullying and indeterminate immigration status. Although strongly associated with later inequalities in length and quality of life, these are not necessarily directly causal. Some people overcome adversity and lead full and rewarding lives, but many do not and these are of relevance to public health and partnerships.

The causes of ill health start very early – even in the womb – and in the crucial first year or two of life. Evidence is accumulating about the importance of "adverse childhood experiences" (ACEs). ACEs act through "toxic stress". If an infant or child experiences an adverse event such as violence, verbal abuse, sexual abuse or neglect, it provokes a normal stress response. But if that stress is unremitting and inescapable, the stress is constant and the body's response becomes toxic. At this crucial stage of brain and body development, toxic stress and lack of positive inputs, affect the number of nerve connections in the brain and reinforce unhelpful emotional development and behaviours. Brains of children with high ACE scores are physically smaller. The raised level of stress hormones, like cortisol, have an adverse effect on other developing body organs such as heart and lungs, as well as overall growth and height. To add to the problem, a high ACE score also correlates with higher-risk lifestyles like smoking, substance dependency and violence. These risk factors add further damage to the impaired organ development and reveal themselves in higher rates of heart disease, lung disease and cancer.

The prevention of ACEs in the first place involves skilled intervention, especially in the pre-school period with parenting and peer support, but also well into primary school and beyond. It starts with alert and responsive midwifery care in the antennal period. In families where ACEs have occurred, it is still not too late for some mitigation and secondary prevention The solutions lie in three main interventions: removing the source of stress, providing a trusted and supportive adult, and teaching coping mechanisms to re-educate the abnormal brain connections. One area of intervention is dealing with challenging behaviour and offending in school-age children. The starting point for remedial therapy is that the child is not wicked but wounded. Training for supporting such children is available at individual professional or parenting level, or at institutional level or even larger scale. Scotland and Wales have declared themselves "ACE-aware" as have several English boroughs.

Having addressed determinants of ill health, the next objective is to secure fairer access to care services of a high quality. There are many barriers to fair access. For some it is a mistaken belief about disease and treatment, for others it might be a lack of awareness or misinformation such as the anti-vaccination conspiracy theories. For some individuals and cultures there are deep stigmas or taboos relating to certain subjects like mental health or gynaecological conditions.

Distance from services, rurality, impaired mobility and lack of transport are other barriers, or there may not be a service at all in some areas.

The final arbiter of success in tackling the root causes of health inequality is to see if indicators of length and quality of life - the outcomes - are showing a narrowing of the gap. This is shown in the previous chapter.

Another significant area for understanding and tackling inequalities is to look at whether public investment in services is "fair". One way of checking for fairness is to see whether there is anyone not receiving a service who has greater need (ability to benefit) than those who are in receipt of that service. As public bodies, local authorities and NHS need to be efficient not only in the how they commission or deliver services but also in how they allocate resources. The Integrated Care Partnership has taken this on board and is exploring "programme budgeting and marginal analysis" (PBMA) to assess this aspect of fairness. Put simply, PBMA asks where our investment as health and social care partnership goes to in the major programmes, what good it does, how we compare with similar populations elsewhere in England, and how we could invest it better next year. It requires us to look at each step in the journey from prevention through to diagnosis, treatment, continuing care and end of life care, to see whether we have the balance right within each programme and between programmes. Even when there is no new money, we can often redeploy what we have – money, people and buildings, to better effect. And the significance of partnership is that we share our resources as well as our expertise to address shared programme objectives.

Taking on board these considerations, Cheshire East has set up a commission to tackle inequalities. In this it is supported by a North West Regional Inequalities Network which is providing a lot of the evidence and data. Given this report's theme of "partnership" we should explore all opportunities for reducing inequalities through partnership. This includes closer partnership between the residents of the borough and the environments in which they live and work – their green spaces, the urban landscape, the active transport infrastructure, the work and educational environment and the home environment. There is an inter-dependency to be developed here.

In the Integrated Care Partnership being developed for Cheshire, considerations of "place" need as much attention as "people" because there lie the antecedents - and the answers - causes and cures - to health inequalities.

Covid-19: diary of a pandemic

The defining public health challenge of 2020/21 was the Covid-19 pandemic. This chapter summaries the main challenges, successes and lessons learned to date.

Towards the end of 2019 the international medical community and Public Health England, along with the media in general, were increasingly aware and concerned about a new variant of a virus, apparently originating in China, belonging to the coronavirus disease (Covid) group. It was officially labelled Covid-19. Since it had some characteristics of an earlier outbreak of another coronavirus disease, SARS (Severe Adult Respiratory Syndrome), it prompted particularly close scrutiny. It emerged that it was more infectious than SARS but generally caused less severe infection, especially children and young adults, but with significant exceptions in certain vulnerable and susceptible people. In Cheshire East, the initial public health response was to keep councillors and directors briefed, set up an incident room, put emergency planning on standby, and begin looking at clinical and related response capacity.

March 2020

On 23rd, the Prime Minister announced the first lockdown in England ordering people to stay at home, legally enforced from 26 March.

Covid-19 took longer to reach Cheshire East than more heavily populated and crowded areas like London. Our early period was spent setting up support for vulnerable groups and those self-isolating, and securing personal protective equipment for care staff. Not all the national procurement schemes and related logistical schemes were suited to Cheshire East, so local refinement was needed. The NHS largely catered for its needs through its own channels. Our Council area has more older people than the national average. It also has more care homes (92 registered with the Council) and some of those care homes cater for people coming in from other areas. In line with national policy, the NHS needed to increase hospital bed capacity by accelerated discharge of older people to nursing and care homes.

The provision of guidance to individuals, schools, care homes and businesses was a major focus of the initial phase of the local response. The Council set up public-facing information on numbers of cases and practical advice on control measures in different settings. This was the end of the season of winter coughs and colds, so respiratory symptoms were common and the distinguishing characteristics of Covid-19 (like loss of taste) were only just becoming apparent, as was its severity in certain cases. National guidance was often general at this stage as globally health agencies were learning more about the virus and how it was transmitted, and local needs were often more specific. During this time the Council's public health staff were working closely with Public Health England and similar national agencies, receiving and supplying information on a daily basis. Keeping "business as usual" going was a challenge for public health services such as substance misuse and sexual health, but other areas of health promotion had to take lower priority during the peak months.

May 2020

On 10th, the Prime Minister announced a conditional plan for lifting lockdown.

The Council promoted a strong line on not coming in to work unless needed, in its own workforce and with other businesses. This is believed to help to reduce the spread of the virus to other areas of the region.

June 2020

On 1st, schools started a phased reopening, and on 15th, non-essential shops re-opened.

This was a very busy time for our advice teams, often related to children at higher risk and how to meet their educational needs as well as keep them safe from infection. There was limited testing capacity nationally.

July 2020

On 4th, local lockdowns were introduced, starting in Leicestershire. On 18th, Local Authorities in England were given additional powers to enforce social distancing.

Our experience in Cheshire was more of clusters of cases in small specific locations rather than generalised spread. The pattern, as expected, related to movements to and from the conurbations on our borders, such as Manchester to the north and Staffordshire to the south.

August 2020

On 3rd, "Eat out to help out" scheme of subsidised meals was launched, with government subsidies to help the catering and hospitality industry.

September 2020

The "rule of six" was introduced on 14th, limiting social gatherings to no more than six people, and on 22nd, further restrictions began including a return to working from home.

Nationally it was becoming increasingly apparent that this pandemic was worsening pre-existing health inequalities. It was spreading faster in groups already at disadvantage, for example crowded households and those made vulnerable by diabetes, overweight and smoking. Those with limited access to the internet were losing out on education, shopping deliveries, information about the pandemic and access to health care. Regional work by PHE was starting to show an above-trend rise in death rates from heart disease and respiratory disease. It was still the case that more people were dying from non-Covid-19 diseases than Covid-19 itself.

October 2020

On 14th, a new three-tier system of restrictions started in England, based on rates of spread of infection.

Two groups were showing particular strain from restrictions. The older age group were losing fitness and resilience by lack of social contact and lack of outdoor physical activity and contact with nature. Younger people were suffering significantly greater mental health and emotional stress. Social media use was increased during lockdown and this was a double-edged problem – maintaining contact but also raising stress and spreading misinformation. Since many track and trace measures were either voluntary or difficult to enforce, and given some high profile breaches of the regulations, some people were simply bypassing the regulations.

November 2020

On 5th, the second national lockdown began to prevent "a medical and moral disaster" for the NHS. New variants of the virus, from within the UK and abroad, were causing concern.

The peak rate of new cases of Covid-19 was over 500 cases per 100,000 population. In general, our experience was of lower rates than the prevailing national or regional average, and that applied to cases, hospital admissions and deaths.

The NHS was learning rapidly how to manage the unusual features of the illness, and survival rates improved.

With the arrival of lateral flow rapid testing and results, Cheshire East became the first in the country to set up a dual testing site (in Crewe) with testing of asymptomatic people in the morning and then lateral flow testing for symptomatic people in the afternoon.

Reaching all the villages and market towns, often with limited public transport, meant we had to create a local solution to testing. This was the "Covid testing dynamic team" or "Swab squad" which was a mobile, domiciliary testing team, including to schools and businesses.

They could also get a Covid test result within 2 hours where hospital admission was being considered, so that appropriate care was delivered with appropriate isolation. Pharmacies became a great ally in the testing of people without symptoms.

December 2020

On 2nd, the national lockdown was lifted but the three-tier system remained in place. On 21st December a fourth tier was introduced, initially in London and the South-East, in response to particularly rapid spread. Over Christmas, for five days, some travel and gathering restrictions were lifted.

January 2021

On 3rd, in response to a surge in cases, England entered a third national lockdown.

Vaccine started arriving in Cheshire East, and roll-out was swift with a very high uptake (over 96% in the over-70's, and 95% in the over 64's and vulnerable groups).

February 2021

On 15th, compulsory hotel quarantine began for travellers from a list of 33 high risk countries. India was not initially one of them but was added later. On 22nd, the Prime Minister announced a "road map" for lifting restrictions.

March 2021

Schools started re-opening on 8th.

April 2021

As we move into another year affected by Covid-19 Cheshire East will continue to respond to a situation that has been changing rapidly since it began. We will continue to deliver measures that protect public as restrictions are eased or lifted. We will be looking ahead to the winter months to ensure that we help our residents to stay well.

There are many outstanding challenges, and these are just a few:

- Maintaining control measures and encouraging vaccine take-up.
- Helping the local economy get back on its feet.
- Helping those, especially older people, to regain lost fitness and resilience, both physical and mental, to overcome fear, and return to active and engaged living
- Helping the NHS to catch up with the backlog of non-emergency and non-Covid diseases.
- Tackling the widened inequalities in health and wellbeing
- Maintaining vigilance for new variants or other threats to health from pandemic disease
- Helping exhausted staff in all sectors to recover, including especially the strain of "moral injury" from seeing potentially avoidable deaths
- Sharing and learning the lessons from this pandemic so that the "new normal" represents progress towards a fairer, safer and healthier society and environment.

Resources for public health

Every year, central government provides each local authority with a public health grant. This funds the core of the public function: its staff, commissioned services and directly-funded services. The deployment of the public health grant is described briefly below to illustrate the nature and scale of that deployment.

Additional funds come from bidding for specific initiatives.

The true public health resource is much wider, if we adopt the definition that public health is: "The science and art of preventing disease, prolonging life and promoting health through organised efforts of society." That covers the entire resource and workforce of the Council and NHS, and many more besides.

Finances – 2020/21 forecast public health budget

(Note: this does not include the emergency Covid-19 response)

Public health commissioned activity (block contracts)

	Cost £'s
Child health 0-19 service	5,560,664
Sexual health	2,526,888
Substance misuse	2,138,248
Alcohol misuse	952,745
Diet, activity and smoking	896,202
Other (eg water fluoridation, collaboratives)	257,191
Total	**12,331,938**

Public health commissioned activity (activity-based contracts)

	Cost £'s
NHS Health Checks	280,000
Other (eg Pharmacy schemes)	139,590
Total	**419,590**

Contributions to wider Council public health work

	Cost £'s
Mental Health	881,816
Adults	475,621
Children	420,000
Corporate overheads	251,359
Total	**2,028,796**

People – our greatest resource

The list below covers the core team in the Directorate of Public Health. This team has undergone a few arrivals and departures in recent months. Here is the current list of who we are, what we do and how to contact us. Partnership is the theme of this report and at the core of how we work. We would like to hear from you.

In order to e-mail any of the following, use:
firstname.secondname@cheshireeast.gov.uk

Core Public Health Team

Matt Tyrer – Director of Public Health

Susie Roberts – Consultant in Public Health

Guy Kilminster - Corporate Manager Health Improvement

Andrew Turner – Consultant in Public Health

Ann Hart – Personal Assistant to Director of Public Health

Paul Cooke – Business and Governance Officer

Grace Walley – Business Officer

Health Improvement

Sheila Woolstencroft – Health Improvement Manager

Kirsty Reid – Public Health Development Officer

Rachael Nicholls – Project Officer

Public Health Business Intelligence

Sara Deakin – Head of Public Health Intelligence

Rhonwen Ashcroft – Public Health Information Analyst

Andrew Moss – Public Health Information Analyst

Jack Chedotal – Public Health Information Analyst

Christopher Lamb – Public Health Information Analyst

Chinwe Ngadi – Public Health Analyst

Georgia Carsberg – Public Health Analyst

Public Health Protection

Emily Kindred – Health Protection Officer

Naomi Wilkinson – Health Protection Officer

Joel Hammond-Gant – Health Protection Officer

Public Health Business Team

Paul Cooke – Business and Governance Officer

Grace Walley – Business Officer

Ann Hart – Personal Assistant to Director of Public Health

Interim Public Health Support

Rod Thomson - Consultant in Public Health

Peter Brambleby - Consultant in Public Health

Clare Walker - Consultant in Public Health

Irfan Ghani - Consultant in Public Health

Siva Chandrasekaran - Public Health Intelligence Lead

Thomas Inns - Public Health Registrar

Conclusions - preparing for a new normal

These are exciting times for public health, both locally and nationally.

There is a new UK Office for Health Improvement and Disparities that will lead national efforts to improve and level up the health of nation with a special emphasis on tackling obesity, promoting physical activity and improving mental health.

In a parallel development, the new UK Health Security Agency will be responsible for planning, preventing and responding to external health threats, and providing intellectual, scientific and operational leadership at national and local level.

Extracts from the NHS White Paper – Integration and innovation: working together to improve health and social care for all (11 February 2021):

> "Our experience of the pandemic underlines the importance of a population health approach: preventing disease, protecting people from threats to health, and supporting individuals and communities to improve their health and resilience…"

> "The factors which prevent poor health are shaped by many different parts of government, public services and broader health system. So rather than containing health improvement expertise within a single organisation, driving change in the future will mean we need many different organisations to have the capability and responsibility for improving health and preventing ill health…"

> "Taken together, the proposals will strengthen local public health systems, improve joint working on population health through Integrated Care Systems, reinforce the role of local authorities as champions of health in local communities, strengthen the NHS's public health responsibilities, strengthen the role of the Department of Health and Social Care in health improvement, and drive more joint working across government on prevention…"

> "Health and Wellbeing Boards will remain in place and will continue to have an important responsibility at place level to bring local partners together, as well as developing the Joint Strategic Needs Assessment and Joint Health and Wellbeing Strategy."

Contact Us

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