

Integrated Care Partnership

Report title: Respiratory disease: Public Health outcomes and prevention priorities for the system

Date of meeting: 27th September 2023

**Sponsor (ICP member): Stuart Lines, Director of Public Health,
Norfolk County Council**

Reason for the Report

The ICP Chairman has asked Public Health to provide a presentation / report on various health conditions with a particular focus on the prevention aspects so that ICP can work together to improve the health of the population. It has been agreed that these reports will cover four major health conditions at each of its meetings: respiratory disease (June), respiratory (September), Mental Health (November) and Cancer (March 2024).

This is second in the series, on respiratory disease. The PowerPoint presentation complements the main report (and is included in the Appendix below in an accessible format), and there is a web link in the report below to the detailed Public Health information that supports this report.

Report summary

The population of Norfolk and Waveney is increasing, fastest in the older age ranges and at a rate greater than England. This creates a key challenge for our health and care system as risk of respiratory conditions increases with age.

There is inequality across Norfolk and Waveney in life expectancy.

Respiratory deaths made up about 15%-25% of the life expectancy gap prior to COVID19, 2017-2019.

Respiratory conditions account for about 14,000 admissions each year, around 15% of all emergency admissions.

We can make a difference for people and reduce inequalities in outcomes, to start with, by changing health behaviours and by improving clinical care.

There are the secondary prevention interventions (case finding and optimum management) that help prevent and manage respiratory cases. These programmes can have a sizable positive impact on the health outcomes.

ICP Colleagues should work together to ensure a joined-up approach in delivering shared objectives to improve respiratory health of the population.

Recommendations

The ICP is asked to endorse that ICP partners to work together to improve respiratory health, reduce inequalities and reduce emergency admissions and deaths due to respiratory diseases in Norfolk and Waveney.

1. Background

- 1.1 The ICP Chairman has asked Public Health to provide a presentation / report on various health conditions with a particular focus on the prevention aspects so that ICP can work together to improve the health of the population. This is second in the series, on respiratory disease.
- 1.2 The PowerPoint presentation (with its accessible format below in Appendix) and this word document forms the main report. Further information is available on the Norfolk Insight website on: <.....>. The slides will be published to the Joint Strategic Needs Assessment following approval at this ICP meeting on the same web page.

2. Public Health outcomes and prevention priorities for the system

- 2.1 The population of Norfolk and Waveney is growing, growing fastest in the older age ranges and at a rate greater than England. This creates a key challenge for our health and care system as risk of respiratory conditions increases with age.
- 2.2 There is inequality across Norfolk and Waveney in life expectancy. Between the most deprived and least deprived communities it is 9.2 years for men and 7.2 years for women.
- 2.3 Respiratory deaths made up about 15%-25% of the Life expectancy gap between most deprived and least deprived prior to COVID19, 2017-2019, and up about 9%-16% during COVID19, 2020-2021.
- 2.4 There are about 14,000 emergency admissions for respiratory related conditions each year, around 15% of all emergency admissions.
- 2.5 The most deprived population experience 3,900 additional emergency admissions for respiratory conditions compared to the ICB average. In addition to the health outcomes, they also place extra demand on the system. We can identify the Practices and PCNs to plan the interventions to reduce the number of emergency admissions. Addressing inequalities in hospital admissions for respiratory conditions is an opportunity to improve outcomes for those from the most deprived communities and reduce the demand on the urgent and emergency care pathway.
- 2.6 We can make a difference for people and reduce inequalities in outcomes, to start with, by changing health behaviours and by improving clinical care.
- 2.7 There are several risk factors for respiratory disease that we can do something about. Tobacco, high body-mass index, occupational risks and air pollution were the highest contributors to the years of life lived in poor health with respiratory disease. To reduce inequality in life expectancy due to respiratory conditions over the long term, we will have to address the deprivation gradient in health behaviours.
- 2.8 There are the secondary prevention interventions that help prevent and manage respiratory disease.
Annual reviews for these conditions can lead to improvement in care they receive and can have a sizable positive impact on the health outcomes.

Asthma: There are opportunities to improve patient experience and patient care. For patient care, across Norfolk and Waveney there are 57 practices where the proportion of Asthma patients that have had an annual review is lower than the England average. If the England average applied to these practices, then an additional 6,660 Asthma patients would have had an annual review.

COPD: Like Asthma, there are opportunities to improve patient experience and patient care. For patient care, across Norfolk and Waveney there are 56 practices where the proportion of COPD patients that have had an annual review is lower than the England average. If the England average applied to these practices, then an additional 2,300 COPD patients would have had an annual review.

Please see **Appendix 1** below for the accessible version of the PowerPoint slides presented at this meeting.

The **glossary of terms** used in the paper and presentation:

COPD: chronic obstructive pulmonary disease

Covid 19: coronavirus disease

Core 20 population: The most deprived 20% of the national population as identified by the national Index of multiple deprivation (IMD)

ICB: Integrated Care Board

ICP: Integrated Care Partnership

Practices: General (GP) Practices

PCN: Primary Care Network

N&W: Norfolk and Waveney

Officer Contact

If you have any questions about matters contained in this paper, please get in touch with:

Name: Dr Abhijit Bagade, Consultant in Public Health Medicine

Tel: 07825 851227

Email: abhijit.bagade@norfolk.gov.uk / abhijit.bagade@nhs.net

Appendix 1: Accessible version of the PowerPoint slides presented at this meeting

Respiratory disease: Public Health outcomes and prevention priorities for the system. Integrated Care Partnership (ICP) meeting, 27th September 2023.

Norfolk and Waveney Population

The total population of Norfolk and Waveney is increasing and most of the increase is projected to be in those aged 65 years or older.

Between 2020 and 2040:

- The number of people aged 75+ will increase by 56%
- The number of 65–74-year-olds will increase by 20%
- The number of people aged 16-64 will increase by only 4%
- The number of people aged 5-15 will decrease by 4%
- The number of children aged 0-4 will increase by 7%

The communities with a greater proportion of people in later life are generally around the coast with some communities in central Norfolk around Swaffham and Dereham.

Increasing age leads to increased risk of long-term conditions including those linked to respiratory disease.

Inequality across Norfolk and Waveney in life expectancy

A male can expect to live to 83.3 years in Loddon but only 75.1 years in Great Yarmouth. A female can expect to live for 86.4 years in Southwold but only 81 years in King's Lynn.

The market town life expectancy gap is 8.2 years for men and 5.4 years for women, but between the most deprived and least deprived communities it is 9.2 years for men and 7.2 years for women.

Source: Local Public Health Intelligence calculations using NHS Digital Civil Registration Data and Fingertips <https://fingertips.phe.org.uk/profile/local-health/>

Norfolk and Waveney Map of Deprived areas

There are 42 communities across Norfolk and Waveney where some or all the population live in the 20% most deprived areas in England. However, none of these communities are in Broadland or South Norfolk.

Breckland

In Breckland there are six communities where some of, or all the residents in the community live in the 20% most deprived areas. These are:

- Dereham Central & Toftwood
- Swaffham
- Thetford North
- Thetford South
- Watton
- Wayland, Ellingham & Great Hockham

Great Yarmouth

In Great Yarmouth there are nine communities where some of, or all the residents in the community live in the 20% most deprived areas. These are:

- Caister on Sea
- Gorleston North

- Gorleston South & Beach
- Gorleston West
- Hemsby & Ormesby
- Southtown & Cobholm
- Yarmouth Central & Northgate
- Yarmouth North
- Yarmouth Parade

King's Lynn and West Norfolk

In King's Lynn and West Norfolk there are seven communities where some of, or all the residents in the community live in the 20% most deprived areas. These are:

- Fairstead & Springwood
- Gaywood Chase & Old Gaywood
- Hunstanton
- North Lynn
- Terrington & Clenchwarton
- Town, South Lynn & West Lynn
- Upwell, Delph & Emneth

North Norfolk

In North Norfolk there are two communities where some of, or all the residents in the community live in the 20% most deprived areas. These are:

- Cromer
- North Walsham

Norwich

In Norwich there are twelve communities where some of, or all the residents in the community live in the 20% most deprived areas. These are:

- Bowthorpe & West Earlham
- Catton Grove & Airport
- City Centre East
- City Centre West
- Earlham
- Heartsease & Pilling Park
- Lakenham & Tuckswood
- Mile Cross
- New Catton & Mousehold North
- Thorpe Hamlet & Mousehold South
- Town Close
- University & Avenues

Former district of Waveney

In the former district of Waveney there are six communities where some of, or all the residents in the community live in the 20% most deprived areas. These are:

- Beccles
- Gunton West
- Lowestoft Central
- Lowestoft Harbour & Kirkley
- Normanston & Oulton Broad East
- Pakefield North

What is driving the inequality gap?

Respiratory deaths made up about 15%-25% of the Life expectancy gap between most deprived and least deprived prior to COVID19, 2017-2019.

Respiratory deaths (excluding COVID19) made up about 9%-16% of the Life expectancy gap between most deprived and least deprived during COVID19, 2020-2021.

Early deaths from respiratory diseases

Across Norfolk and Waveney there are more than 1,500 respiratory deaths per year.

Although early deaths from respiratory disease are lower than England average, there is an inequality gradient across deprivation deciles for deaths from respiratory conditions.

Each year in the most deprived Core20 communities there are 50 extra early deaths than expected.

Significantly high mortality rates

There are 11 communities across Norfolk and Waveney where the mortality rate is significantly higher than expected. These are in the urban areas of Great Yarmouth, King's Lynn and Lowestoft. Nine of the 11 communities with significantly high rates are in the Core 20 areas.

Emergency admissions for respiratory conditions

Emergency admissions for respiratory conditions account for about 14,000 admissions each year, around 15% of all emergency admissions.

In Norfolk and Waveney, the annual number of emergency admissions for respiratory conditions are broken down as follows:

- Pneumonia: 3,955
- Other acute lower respiratory infections: 2,780
- COPD: 2,185
- Acute upper respiratory infections: 2,010
- Other respiratory conditions: 1,805
- Asthma: 890
- Influenza: 535

Additional unplanned hospital admissions

- the core 20 population (most deprived 20%) experience 3,900 more admissions annually for respiratory conditions compared to the ICB average.
- This also places extra demand on the system

Addressing inequalities is an opportunity to improve outcomes for those from the most deprived areas and reduce the demand on the urgent and emergency care pathway.

Asthma: trends in emergency hospital admissions and GP practice variation

Respiratory related emergency admissions for patients in Norfolk and Waveney as a whole are generally in line with, or better than England. Emergency admissions for asthma for children and young people have been gradually declining over the last few years whereas for adults they have remained relatively static (apart from 2020/21).

There is a clear gradient in admissions across deprivation deciles with the core20 most deprived experiencing about 80 additional admissions per year compared to what is expected. There are several practices across Norfolk and Waveney where admissions are higher than expected. These are all opportunities to improve outcomes.

COPD: trends in emergency hospital admissions and GP practice variation

Emergency admission rates for COPD have been reasonably consistent over the last few years and lower than England, like other emergency admission rates COPD admission rates declined in 2020/21.

There is a clear gradient in admissions across deprivation deciles with the core20 most deprived experiencing about 300 additional admissions per year compared to what is expected. There are

several practices across Norfolk and Waveney where admissions are higher than expected. These are all opportunities to improve outcomes.

Highlighting variation in COPD outcomes (admissions) indicates that there might be almost 500 avoidable admissions per year across Norfolk and Waveney, with the highest opportunities in King's Lynn, Lowestoft and Great Yarmouth.

Pneumonia: trends in emergency hospital admissions and GP practice variation

Emergency admission rates and deaths for pneumonia are also below the England average and reduced in 2020/21 similar to other respiratory conditions correlating with increases in COVID19 admissions. Pneumonia admissions are highest in more deprived areas of Norfolk & Waveney especially in King's Lynn, Great Yarmouth and Lowestoft.

There is a clear gradient in admissions across deprivation deciles with the core20 most deprived experiencing about 270 additional admissions per year compared to what is expected.

Jigsaw of total health

We can start to make a difference for people and reduce inequalities in outcomes by changing health behaviours and by improving clinical care.

We can make a difference and help reduce the need for urgent and emergency care in the core 20 (most deprived 20%) populations by:

- Working with people to change health behaviours (smoking, diet, exercise, alcohol, screening) – everybody's business, led by the Health Improvement Transformation Group.
- Ensuring better access to care:
 - Accessible financially and physically in the core 20 areas
 - Poverty proof services by considering transport costs and timing of appointments to negate the need for time off work etc.
- Focusing on even better quality of care (and improving patient engagement) both in primary care and in hospital.

Risk factors for respiratory disease

Some risk factors for respiratory disease can be reduced by changing health behaviours and some can be reduced through clinical care and secondary prevention.

Global Burden of Disease information highlights that tobacco, occupational risks and air pollution contribute to deaths due respiratory disease.

Tobacco, high body-mass index, occupational risks and air pollution were the highest contributors to the years of life lived in poor health with respiratory disease (source: <https://www.healthdata.org/gbd/2019>).

Deprivation and Health Behaviours

As deprivation increases the proportion of people with risky health behaviour also increases. Therefore, opportunities are likely to be greater in the core 20 most deprived communities.

To reduce inequality in life expectancy due to respiratory conditions over the long term, we will have to address the deprivation gradient in health behaviours (mainly smoking, but also physical activity, obesity, and diet).

Smoking rates

Smoking rates in general and smoking in pregnancy are higher than England. Smoking prevalence is highest in Great Yarmouth and King's Lynn, especially in more deprived areas.

Source: Office for Health Improvement & Disparities. Public Health Profiles.

<https://fingertips.phe.org.uk>

Clinical care opportunities

Asthma: There are opportunities to improve patient experience and patient care. For patient care, across Norfolk and Waveney there are 57 practices where the proportion of Asthma patients that have had an annual review is lower than the England average. If the England average applied to these practices, then an additional 6,660 Asthma patients would have had an annual review.

COPD: Like Asthma, there are opportunities to improve patient experience and patient care. For patient experience the recent survey from Asthma + Lung UK indicates that quality of care has declined for people with COPD with levels of routine care falling lower than the previous survey. For patient care, across Norfolk and Waveney there are 56 practices where the proportion of COPD patients that have had an annual review is lower than the England average. If the England average applied to these practices, then an additional 2,300 COPD patients would have had an annual review.

Clinical care: Flu vaccinations

Flu vaccination rates for those in at-risk groups and people aged 65+ is higher than the England average, and within the top 25% in the country when comparing local authorities.

How would ICP partners work together to improve respiratory health?

... for discussion at the meeting and then continued

Recommendation: The ICP is asked to endorse:

ICP partners to work together to improve respiratory health, reduce inequalities and reduce emergency admissions and deaths due to respiratory diseases in Norfolk and Waveney.

Contacts:

Abhijit Bagade: abhijit.bagade@norfolk.gov.uk, abhijit.bagade@nhs.net

Suzanne Meredith: suzanne.meredith@norfolk.gov.uk, suzanne.meredith@nhs.net

Tim Winters: tim.winters@nhs.net

Josh Robotham: joshua.robatham@norfolk.gov.uk



If you need this report in large print, audio, Braille, alternative format or in a different language please contact 0344 800 8020 or 0344 800 8011 (textphone) and we will do our best to help.