Hertfordshire and West Essex Integrated Care System

NHS Hertfordshire and West Essex Integrated Care Board

Primary Care Networks
Overview Pack

EPPING FOREST NORTH PCN

Pack produced - February 2023 - NHS Hertfordshire & West Essex ICB

Produced by Hertfordshire & West Essex ICB's - Population Health Management & Public Health Teams

Working together
for a healthier future

Population Health Management

NHS Hertfordshire and West Essex Integrated Care Board

Population Health Management (PHM) is a partnership approach across the NHS and other public services including councils, the public, schools, fire service, voluntary sector, housing associations, social services and police. All have a role to play in addressing the interdependent issues that affect people's health and wellbeing.

The coronavirus (COVID-19) pandemic has further highlighted the known link between poorer health outcomes, ethnicity and deprivation. Integrated care systems, working with the local authority and the voluntary sector, have used PHM to identify people who need more support and those with the most complex needs within their localities, so that efforts can be targeted to protect certain populations through personalised care models, public health advice, testing and vaccination programmes.

For the public, it should mean that health and care services are more proactive in helping people to manage their health and wellbeing, provide more personalised care when it's needed and that local services are working together to offer a wider range of support closer to people's homes.

For doctors, nurses, social care, therapists and other frontline staff, this should mean greater support and insight from integrated care systems to enable care and support to be designed and proactively delivered to meet individual needs – it should mean less duplication and a reduction in workload pressures as it ensures the right care is given at the right time by the right person.

For local councils, health care managers and clinicians who commission services – greater understanding of the local population will ensure they can better predict what residents need. PCNs are key to this, as health and care providers work together and take collective responsibility for the care and support offered to improve outcomes, they can use their resources to keep people healthier.

Source: HWE PHM Team, Cerner, England.nhs.uk

Key Messages

NHS Hertfordshire and West Essex Integrated Care Board

Epping Forest North PCN population profile differs compared to England across most age categories - lower in age categories 15-44 and higher in age categories 0-4 and 50-90+. About 50% of people live within the 5 most deprived deciles (1-5).

30.7% population have at least 1 Long Term Condition. 6.8% have more than 5 LTCs compared to 5.6% for the ICB. The population pyramid profile differs to England for those living with LTCs except the age categories 0-19 and 50-54.

Wider determinants analysis from Public Health Evidence and Intelligence shows Epping Forest North is one of the most deprived PCNs within the ICB across most indicators, except Older People in Poverty to some degree.

The spread of patients for Epping Forest North PCN indicates 17.99% of the population are not located within the Hertfordshire & West Essex boundaries; this means that this population may be accessing services outside of the ICB and the impact of coterminous alignment with neighbouring ICBs must be taken into account for this population by the PCN.

Expected population growth for Epping Forest district by the Local Authority, forecasts continued increase between 2023 through to 2034 which will bring additional demands for healthcare. Projections show an expected increase in the number of people over 65 from ~27k to ~32k.

As no data via Optum is available to analysis Epping Forest North's major conditions prevalence per 1000 registered patients, a graph as an indicator was downloaded from https://apps.model.nhs.uk/report/PaPi for the financial period 2020/21.

Urgent & Emergency Care in 2022/23 for Epping Forest North PCN A&E Attendance rates per 1,000 population, is above West Essex place.

When comparing the Ambulatory Care Sensitive rates per 1,000 population between places, then West Essex place has a slightly lower rate than the ICB. Within West Essex place, Epping Forest North has a higher rate per 1,000 population, than the average.

When looking at the ACS conditions for Epping Forest North the highest volume and cost is within Decile 5 in the over 65 age group followed by Decile 8, 3 and 4 for the same age group.

Ambulatory Care Sensitive conditions of note for people aged over 65 within the End of Life, Frailty & Dementia is highlighted as Heart Failure followed by AF and Flutter and COPD is the ACS with the highest volume and cost.

For Epping Forest North the data shows higher AF and COPD rates.

Source: HWE PHM Team

Demographics, Conditions & Segment Overview

National Tool View and Population Demographics and Projections

The following slides represent screen shots from the Nationally Available Tools provided via NHSE.

The information within these tools are used by NHSE to measure and monitor progress. There is some valuable information available within these tools, however the value of these tools is realised when the information within them is triangulated with local data and intelligence.

Public Health Wider Determinants

These provide context for understanding the wider population need, so as Integrated Neighbourhood Teams develop you have a shared understanding of the health and care needs of your population to inform the development of interventions for different patient groups.

PCN Demographics - NHS England

NHS Hertfordshire and West Essex Integrated Care Board

Total Population
EPPING FOREST NORTH PCN

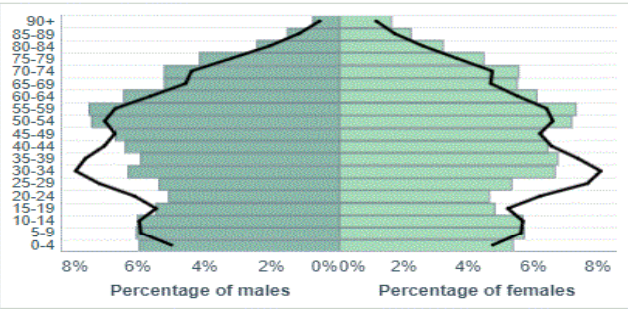
Snapshot as at: 30/06/2021

Registered population		Demographics				Prevalence		Acute utilisation		Covid	
% of total	100.0%	% White	77.3%	% IMD top	0.6%	% with 1+ conditions	30.7%	% of annual activity (total 183,366)	100.0%	% one or more at risk conditions	18.8%
% of annual change	0.7%	% BAME	8.2%	% IMD bottom	9.4%	% with 5+ conditions	4.0%	% of annual cost (total £37M)	100.0%	% two or more at risk conditions	7.9%

Population demographics - Snapshot as at: 30/06/2021

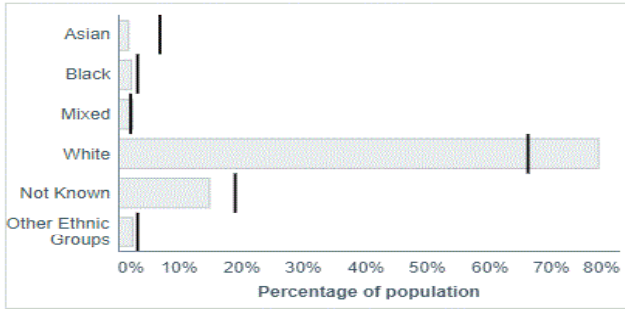
Choose benchmark: England

Population pyramid



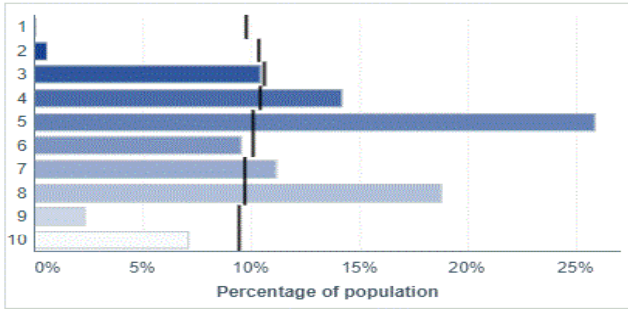
Black line represents the **England** average

Population proportion by ethnic category



Black line represents the **England** average

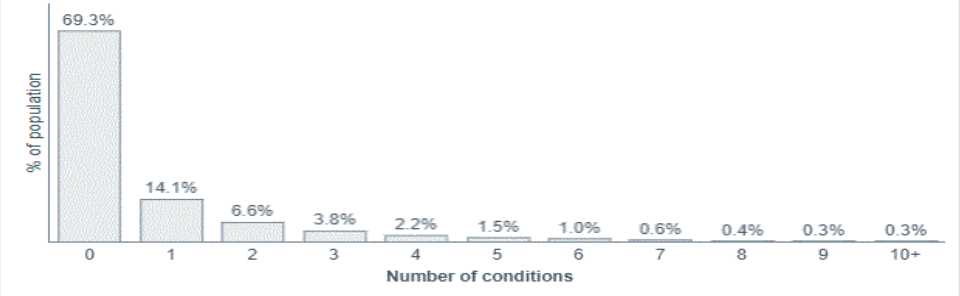
Population proportion by IM Deprivation decile



1 = most deprived 10%, 10 = least deprived 10%

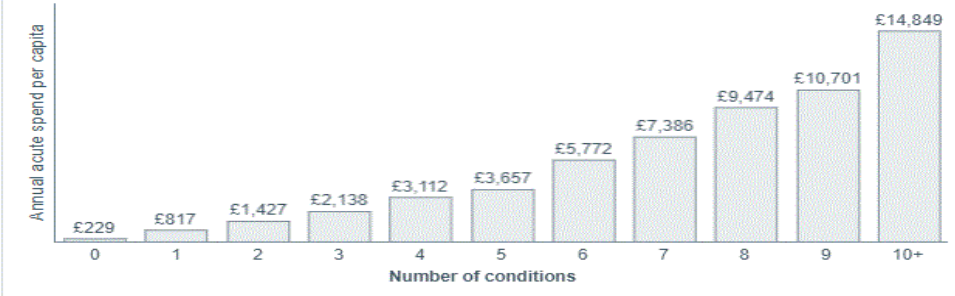
Prevalence - Snapshot as at: 30/06/2021

Population proportion by number of conditions



Annual spend per capita by number of conditions

Financial Year: 2020/21



The Population & Person Insights dashboard has provided good overall summary metrics on the PCN's total population, here we have benchmarked views on standardised demographics, such as deprivation deciles, and proportion of the PCN population by number of conditions.

Epping Forest North PCN population profile differs compared to England across most age categories - lower in age categories 15-44 and higher in age categories 0-4 and 50-90+. About 50% of people live within the 5 most deprived deciles (1-5).

Source: NHS Digital (2022) https://apps.model.nhs.uk/report/PaPi

PCN Demographics - NHS England

NHS Hertfordshire and West Essex Integrated Care Board

LTC
EPPING FOREST NORTH PCN

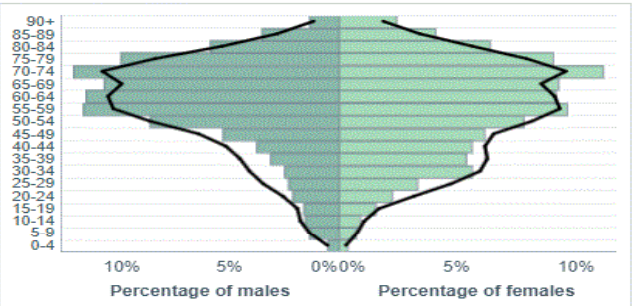
Snapshot as at: 30/06/2021

Registered population		Demographics				Prevalence		Acute utilisation		Covid	
% of total	26.2%	% White	89.0%	% IMD top	0.6%	% with 1+ conditions	100.0%	% of annual activity (total 87,597)	47.8%	% one or more at risk conditions	53.1%
% of annual change	4.4%	% BAME	7.0%	% IMD bottom	9.1%	% with 5+ conditions	6.8%	% of annual cost (total £17M)	45.8%	% two or more at risk conditions	18.3%

Population demographics - Snapshot as at: 30/06/2021

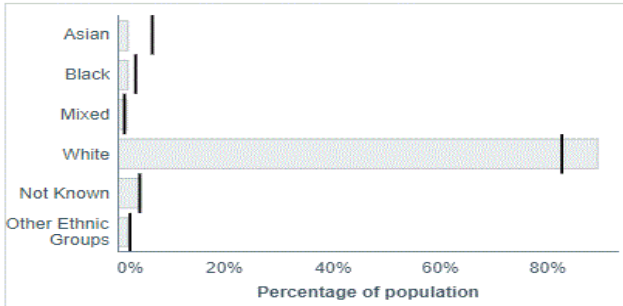
Choose benchmark: England

Population pyramid



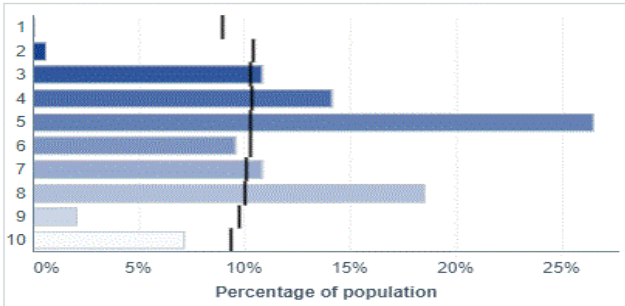
Black line represents the **England** average

Population proportion by ethnic category



Black line represents the **England** average

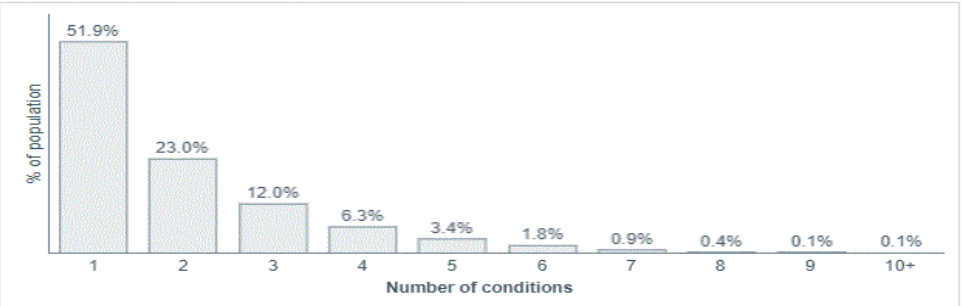
Population proportion by IM Deprivation decile



1 = most deprived 10%, 10 = least deprived 10%

Prevalence - Snapshot as at: 30/06/2021

Population proportion by number of conditions



Annual spend per capita by number of conditions

Financial Year: 2020/21

When compared with the overall PCN demographics on the previous page, those in the PCN whom have an LTC as defined by NHS England, are benchmarked against the English averages, the view for the PCN shows us that 30.7% population have at least 1 Long Term Condition. 6.8% have more than 5 LTCs compared to 5.6% for the ICB.

The population pyramid profile differs to England for those living with LTCs except the age categories 0-19 and 50-54.

Source: NHS Digital (2022) https://apps.model.nhs.uk/report/PaPi

Practice Indicators - Triggers and Levels

NHS Hertfordshire and West Essex Integrated Care Board

Practice Indicators for EPPING FOREST NORTH PCN		ABRIDGE SURGERY			HIGH STREET SURGERY, EPPING			MARKET SQUARE SURGERY			MAYNARD COURT SURGERY			ONGAR HEALTH CENTRE			THE LIMES MEDICAL CENTRE		
Clinical Domain	Indicator Name	Latest Score	Time Period	Trigger Level	Latest Score	Time Period	Trigger Level	Latest Score	Time Period	Trigger Level	Latest Score	Time Period	Trigger Level	Latest Score	Time Period	Trigger Level	Latest Score	Time Period	Trigger Level
Clinical Diagnosis	Detection rate Cancer	0.519	2020/21	No Trigger	0.484	2020/21	No Trigger	0.529	2020/21	No Trigger	0.444	2020/21	No Trigger	0.5	2020/21	No Trigger	0.455	2020/21	No Trigger
Coronary heart disease	% AF anticoagulation therapy CHADS2-VASc score >1	89.5	2020/21	Positive	96.9	2020/21	Positive	93.8	2020/21	Positive	93.1	2020/21	Positive	94.8	2020/21	Positive	90.7	2020/21	Positive
	% CHD aged <=79 BP reading 140/90mmHg or less	52.4	2020/21	Level 1	68.4	2020/21	Level 1	82.2	2020/21	No Trigger	68.6	2020/21	Level 1	58.3	2020/21	Level 1	53.6	2020/21	Level 1
	% CHD cholesterol 5 mmol/l or less	54.5	2021/22	No Trigger	60.7	2021/22	No Trigger	76.6	2021/22	No Trigger	63.9	2021/22	No Trigger	72.7	2021/22	No Trigger	51.8	2021/22	No Trigger
	% hypertension aged <=79 BP reading 140/90mmHg or less	44.9	2020/21	Level 1	67.9	2020/21	Level 1	69.6	2020/21	Level 1	58.9	2020/21	Level 1	61.5	2020/21	Level 1	45.5	2020/21	Level 1
Diabetes	% Diabetes aged >=40 years no CVD history without moderate or severe frailty treated with statin	77.2	2020/21	Level 1	80.5	2020/21	Level 1	90.6	2020/21	No Trigger	81.5	2020/21	Level 1	70.4	2020/21	Level 1	59.4	2020/21	Level 2
	% Diabetes without moderate or severe frailty BP 140/80 mmHg or less	46.5	2020/21	Level 1	50.2	2020/21	Level 1	70.4	2020/21	Level 1	56.5	2020/21	Level 1	44.2	2020/21	Level 1	34.8	2020/21	Level 2
	% diabetes without moderate or severe frailty IFCC-HbA1c is 58 mmol/mol or less	51.5	2020/21	Level 1	52.6	2020/21	Level 1	60.2	2020/21	Level 1	55	2020/21	Level 1	52.1	2020/21	Level 1	42.4	2020/21	Level 2
Exception Rating	Overall Personalised Care Adjustment Rate	0.042	2020/21	No Trigger	0.042	2020/21	No Trigger	0.044	2020/21	No Trigger	0.046	2020/21	No Trigger	0.032	2020/21	No Trigger	0.056	2020/21	No Trigger
Medicines Management	% antibiotics Co-amoxiclav, Cephalosporins, Quinolones	7.7	2021/22 Q4	No Trigger	4.8	2021/22 Q4	Positive	5.3	2021/22 Q4	Positive	8.8	2021/22 Q4	No Trigger	10	2021/22 Q4	Level 1	7.7	2021/22 Q4	No Trigger
	% Naproxen and Ibuprofen	78.6	2021/22 Q4	No Trigger	82.6	2021/22 Q4	No Trigger	86.4	2021/22 Q4	No Trigger	82.1	2021/22 Q4	No Trigger	77.6	2021/22 Q4	No Trigger	76.3	2021/22 Q4	No Trigger
	Antibacterial Items/Star Pu	0.845	2021/22 Q4	Positive	0.795	2021/22 Q4	Positive	0.865	2021/22 Q4	Positive	0.912	2021/22 Q4	Positive	1.047	2021/22 Q4	Positive	0.849	2021/22 Q4	Positive
	Hypnotics ADQ/Star Pu	0.442	2021/22 Q4	No Trigger	0.635	2021/22 Q4	No Trigger	0.185	2021/22 Q4	Positive	0.543	2021/22 Q4	No Trigger	0.308	2021/22 Q4	No Trigger	0.405	2021/22 Q4	No Trigger
	Oral NSAIDS ADQs/STAR-PU	2.469	2021/22 Q4	No Trigger	1.78	2021/22 Q4	Positive	3.513	2021/22 Q4	No Trigger	3.369	2021/22 Q4	No Trigger	1.67	2021/22 Q4	Positive	1.888	2021/22 Q4	No Trigger
Mental Health	% first choice generic SSRIs	73.3	2021/22 Q4	No Trigger	74.6	2021/22 Q4	No Trigger	69.2	2021/22 Q4	No Trigger	70	2021/22 Q4	No Trigger	74.7	2021/22 Q4	No Trigger	66.6	2021/22 Q4	No Trigger
	% MH comprehensive care plan	84.4	2020/21	Level 1	56.7	2020/21	Level 1	91.1	2020/21	No Trigger	49.2	2020/21	Level 1	12.1	2020/21	Level 1	78.8	2020/21	Level 1
	% SMI alcohol record	41.9	2019/20	Level 2	37	2019/20	Level 2	73.8	2020/21	Level 1	66.1	2020/21	Level 1	30.4	2020/21	Level 2	68.2	2020/21	Level 1
	% SMI BP record	83.9	2020/21	Level 1	81.3	2020/21	Level 1	91	2020/21	No Trigger	89.1	2020/21	Level 1	59.7	2020/21	Level 1	83.3	2020/21	Level 1
	Dementia Face to Face review	76.7	2020/21	No Trigger	40.8	2020/21	Level 1	73.4	2020/21	No Trigger	31	2020/21	Level 1	16.4	2020/21	Level 1	53.6	2020/21	Level 1
	Select antidepressants ADQs/STARPU	1.13	2021/22 Q4	No Trigger	1.404	2021/22 Q4	No Trigger	1.62	2021/22 Q4	No Trigger	1.596	2021/22 Q4	No Trigger	1.613	2021/22 Q4	No Trigger	1.473	2021/22 Q4	No Trigger
Patient Experience	Confidence and trust in healthcare professional	97.3	2020/21	No Trigger	97.6	2020/21	No Trigger	96	2020/21	No Trigger	96.5	2020/21	No Trigger	97.9	2020/21	No Trigger	92.3	2020/21	No Trigger
	Frequency seeing preferred GP	60.3	2020/21	No Trigger	61.2	2020/21	No Trigger	45.7	2020/21	No Trigger	54.7	2020/21	No Trigger	26.3	2020/21	No Trigger	12.3	2020/21	Level 1
	Healthcare professional treating with care and concern	89.1	2020/21	No Trigger	88.6	2020/21	No Trigger	86.5	2020/21	No Trigger	88.5	2020/21	No Trigger	96	2020/21	No Trigger	78.4	2020/21	No Trigger
	Overall experience of your GP practice	88.4	2020/21	No Trigger	76.1	2020/21	No Trigger	91.9	2020/21	No Trigger	80.7	2020/21	No Trigger	79.7	2020/21	No Trigger	63.4	2020/21	Level 1
	Satisfaction with appointment times	75.4	2020/21	No Trigger	45.8	2020/21	Level 1	75.3	2020/21	No Trigger	76.2	2020/21	No Trigger	51.8	2020/21	No Trigger	46.4	2020/21	Level 1
Public Health	% Child Imms DTaP/IPV/Hib/HepB (age 1 year)	92.9	2020/21	Level 1	94.8	2020/21	Level 1	88.1	2020/21	Level 1	91.3	2020/21	Level 1	95.8	2020/21	No Trigger	94.4	2020/21	Level 1
	% Child Imms Hib/MenC booster	97.5	2020/21	No Trigger	94.7	2020/21	Level 1	89.7	2020/21	Level 1	88.7	2020/21	Level 1	90.3	2020/21	Level 1	90	2020/21	Level 1
	% Child Imms MMR (Age 2 yrs)	92.5	2020/21	Level 1	92.6	2020/21	Level 1	90.9	2020/21	Level 1	88.7	2020/21	Level 1	90.3	2020/21	Level 1	89.6	2020/21	Level 1
	% Child Imms PCV Booster	97.5	2020/21	No Trigger	94.7	2020/21	Level 1	89.7	2020/21	Level 1	88.7	2020/21	Level 1	90.3	2020/21	Level 1	90	2020/21	Level 1
	Cervical Screening	78.3	2021/22 Q4	Level 1	77.1	2021/22 Q4	Level 1	78.1	2021/22 Q4	Level 1	75.9	2021/22 Q4	Level 1	76.9	2021/22 Q4	Level 1	74.5	2021/22 Q4	Level 1
Respiratory	% Asthma review in last 6 mths	73.5	2020/21	No Trigger	69.4	2020/21	Level 1	71.6	2020/21	No Trigger	98.5	2020/21	No Trigger	8.7	2020/21	Level 1	16.2	2020/21	Level 1
	% Asthma spirometry and one other objective test	100	2020/21	No Trigger	0	2020/21	Level 2	100	2020/21	No Trigger	0	2020/21	Level 2	0	2020/21	Level 2	0	2020/21	Level 2
	% COPD with review in last 12 mths	90.6	2020/21	No Trigger	93	2020/21	No Trigger	90.9	2020/21	No Trigger	76.4	2020/21	Level 1	20.4	2020/21	Level 1	20.7	2020/21	Level 1
	% LTC patients who smoke	11.9	2020/21	No Trigger	10.9	2020/21	No Trigger	16	2020/21	No Trigger	18.8	2020/21	No Trigger	9.6	2020/21	No Trigger	11.4	2020/21	No Trigger
	% LTC Smoker offer support	96.7	2020/21	No Trigger	70.2	2020/21	Level 1	96.4	2020/21	No Trigger	74.3	2020/21	Level 1	87	2020/21	Level 1	97.6	2020/21	No Trigger
	% Smoking patients over 15 recorded	70.2	2021/22	No Trigger	75.5	2021/22	No Trigger	75.6	2021/22	No Trigger	67.2	2021/22	No Trigger	73.4	2021/22	No Trigger	67.3	2021/22	No Trigger
	% Smoking status recorded	94.5	2020/21	No Trigger	92.5	2020/21	No Trigger	91.3	2020/21	No Trigger	92.2	2020/21	No Trigger	89.7	2020/21	Level 1	89.4	2020/21	Level 1
	% w. MRC dyspnoea score >=3 w. offer of referral to pulm. rehab. Clinic	100	2020/21	No Trigger	93.8	2020/21	No Trigger	100	2020/21	No Trigger	85.3	2020/21	Level 1	23.1	2020/21	Level 1	76.2	2020/21	Level 1

Primary Care clinical domain indicators as provided by NHS England as highlighted here with Trigger Levels against each, and represents a consolidation of data sets, designed to reduce the burden on GPs following these outlier identification. This indicator set is to support quality assurance and improvement of GP services; here, the higher the Level indicated, the more indicative of risk that has been found for that indicator.

The Practices have opportunities for every Level 1 indicated metric; however, any Level 2 indicator must be reviewed; guidance on this data set can be found in the below link, and for more up-to-date data, please log into your Ardens Manager (https://app.ardensmanager.com/).

Source: NHSE&I - https://www.primarycareindicators.nhs.uk/ https://www.primarycareindicators.nhs.uk/wp-content/uploads/2022/02/GPI-Tech-Guidance-v5.pdf

Public Health - PCN Wider Determinants

NHS Hertfordshire and West Essex Integrated Care Board

Wider Determinants

Where 1 is the most deprived in HWE ICB and 35 the least

In Epping Forest North PCN an estimated:

- 13.2% of children live in poverty.
- 12.2% of older people live in poverty.
- 11.8% of households live in fuel poverty.
- 5.8% of households are overcrowded.
- 30.6% of people aged 65 and over live alone.
- 0.3% of people cannot speak English well.
- 4.1% of working age people are claiming out of work benefits.
- 20.8% of children aged 4-5 and 30.1% of children aged 10-11 are overweight.

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Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

The above provides a summary of the wider determinants of health for Epping Forest North.

Wider determinants analysis from Public Health Evidence and Intelligence shows Epping Forest North is one of the most deprived PCNs within the ICB across most indicators, except Older People in Poverty to some degree.

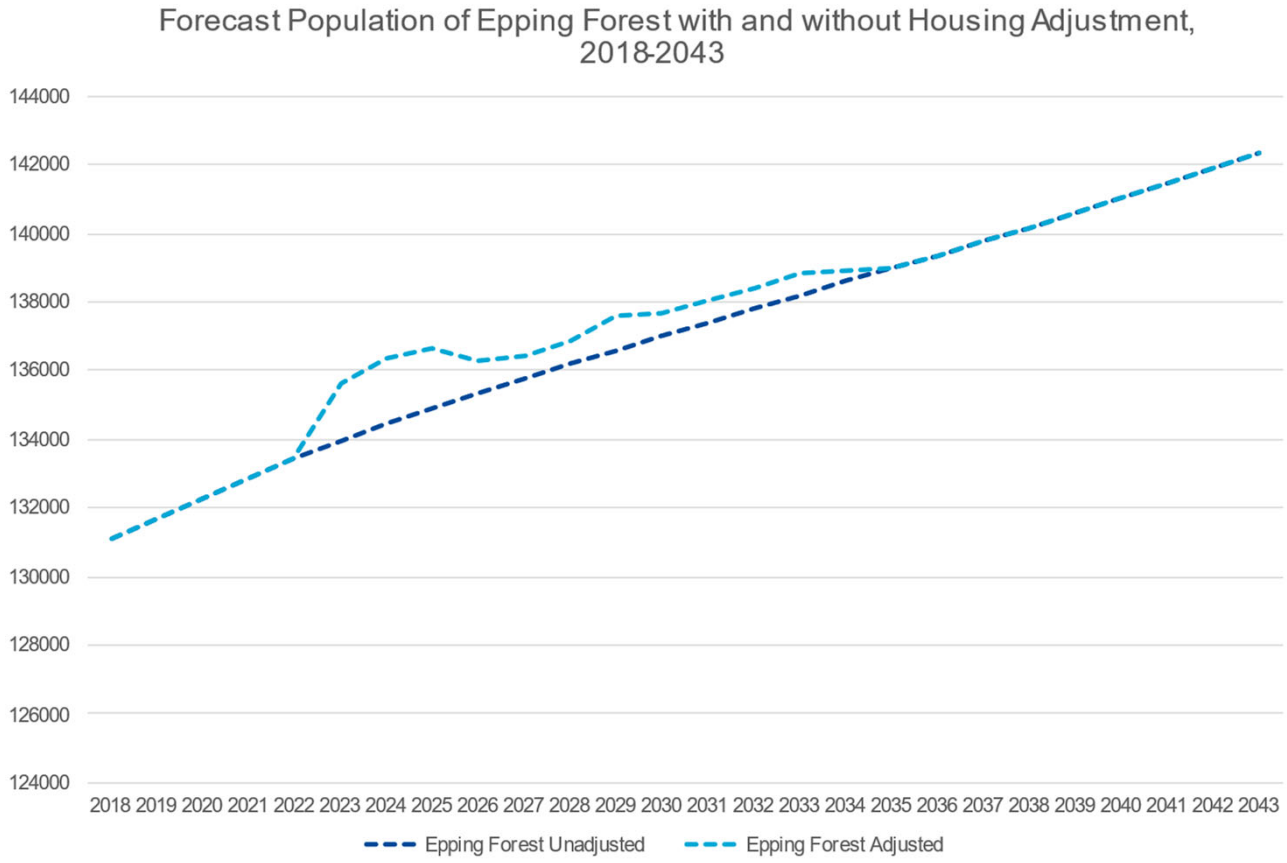
Source: Public Health Team

Population Adjustments

NHS Hertfordshire and West Essex Integrated Care Board

EPPING FOREST POPULATION ADJUSTMENTS

EPPING FOREST IS LIKELY TO SEE A SIGNIFICANT INCREASE IN POPULATION BETWEEN 2022-2025, BEFORE STEADYING AND INCREASING MORE MODESTLY



Year	Epping Forest Unadjusted	Epping Forest Adjusted	Epping Forest Net Difference
2018	131,137	131,137	0
2019	131,721	131,721	0
2020	132,284	132,284	0
2021	132,873	132,873	0
2022	133,451	133,451	0
2023	133,970	135,641	1,671
2024	134,450	136,350	1,900
2025	134,898	136,678	1,780
2026	135,331	136,285	955
2027	135,766	136,447	681
2028	136,187	136,899	712
2029	136,604	137,599	996
2030	137,022	137,690	669
2031	137,407	138,043	636
2032	137,797	138,419	622
2033	138,204	138,828	624
2034	138,599	138,908	308
2035	138,983	138,983	0
2036	139,365	139,365	0
2037	139,757	139,757	0
2038	140,183	140,183	0
2039	140,609	140,609	0
2040	141,036	141,036	0
2041	141,470	141,470	0
2042	141,904	141,904	0
2043	142,346	142,346	0

Note: Unadjusted forecast refers to ONS local authority forecasts whilst adjusted refers to the ONS LA forecasts after they've been adjusted by ECC to account for housing developments listed in local plans

The above shows the expected population growth for Epping Forest District adjusted for the Local Authority forecasts taking into account of building.

It shows continued increase between 2023 through to 2034 with the greastet increases forecast between 2023/25, which will bring additional demands for healthcare.

Source: Essex County Council PHM Team, NHS Digital (2022)

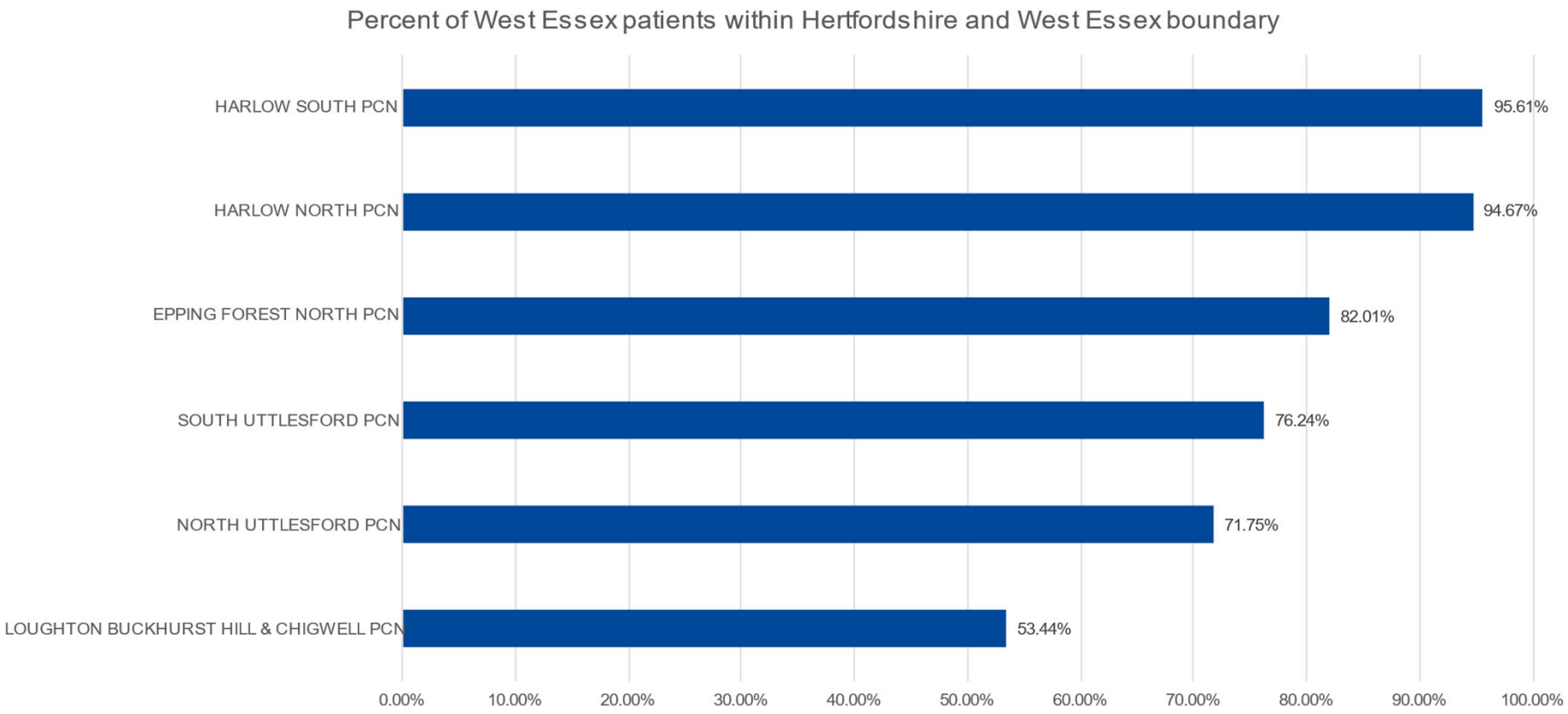
Spread of Patients

Hertfordshire and West Essex Integrated Care Board

Correct as of July 2022

Source: NHS Digital (2022)

SPREAD OF PATIENTS ACROSS ENGLAND CONT.



This chart shows the proportion of the registered population living within the ICB geographical boundary.

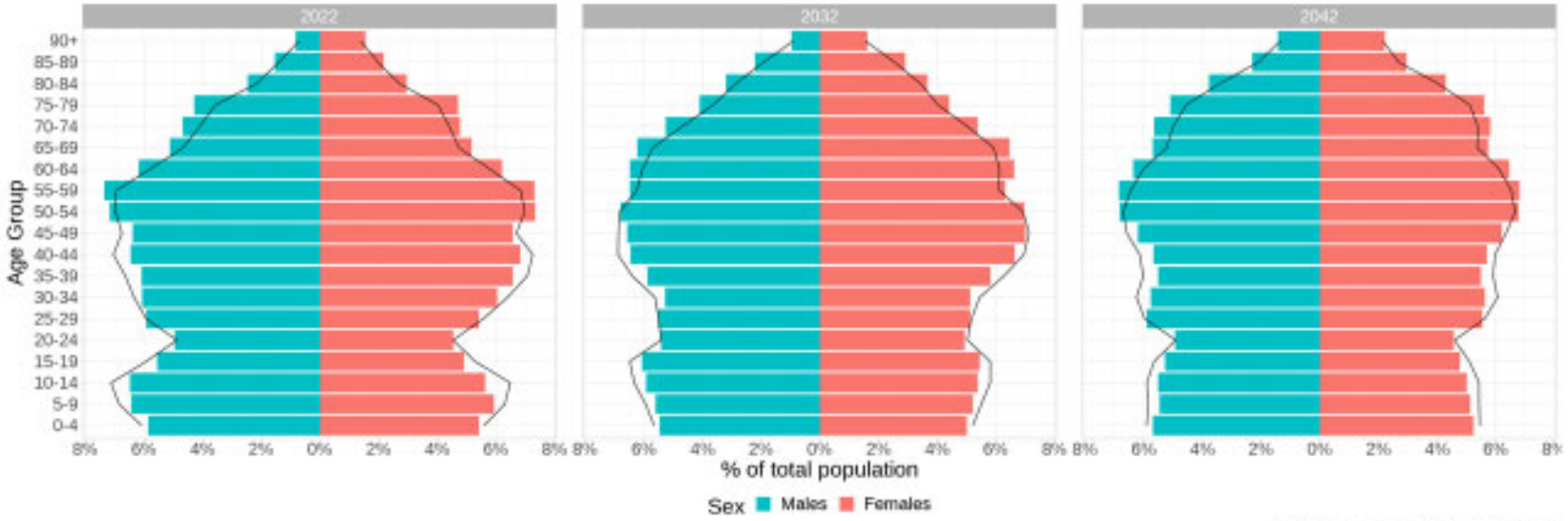
The spread of patients for Epping Forest North PCN indicates 17.99% of the population are not located within the Hertfordshire & West Essex boundaries; this means that this population may be accessing services outside of the ICB and the impact of coterminous alignment with neighbouring ICBs must be taken into account for this population by the PCN.

Source: Essex County Council PHM Team, NHS Digital (2022)

Public Health - Population Projections

NHS Hertfordshire and West Essex Integrated Care Board

Projection Pyramids



Black line indicates HWE ICS values.
Population pyramids and table shown for Epping Forest district.
District shown is based on the largest majority of the PCN's registered population.

Age Band	2022 Projection	2032 Projection	2042 Projection
Under 5	7,516	7,213	7,749
Under 24	37,154	37,482	36,581
24-64	69,400	68,295	69,342
65+	26,897	32,020	35,981
85+	4,080	5,331	6,363

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Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

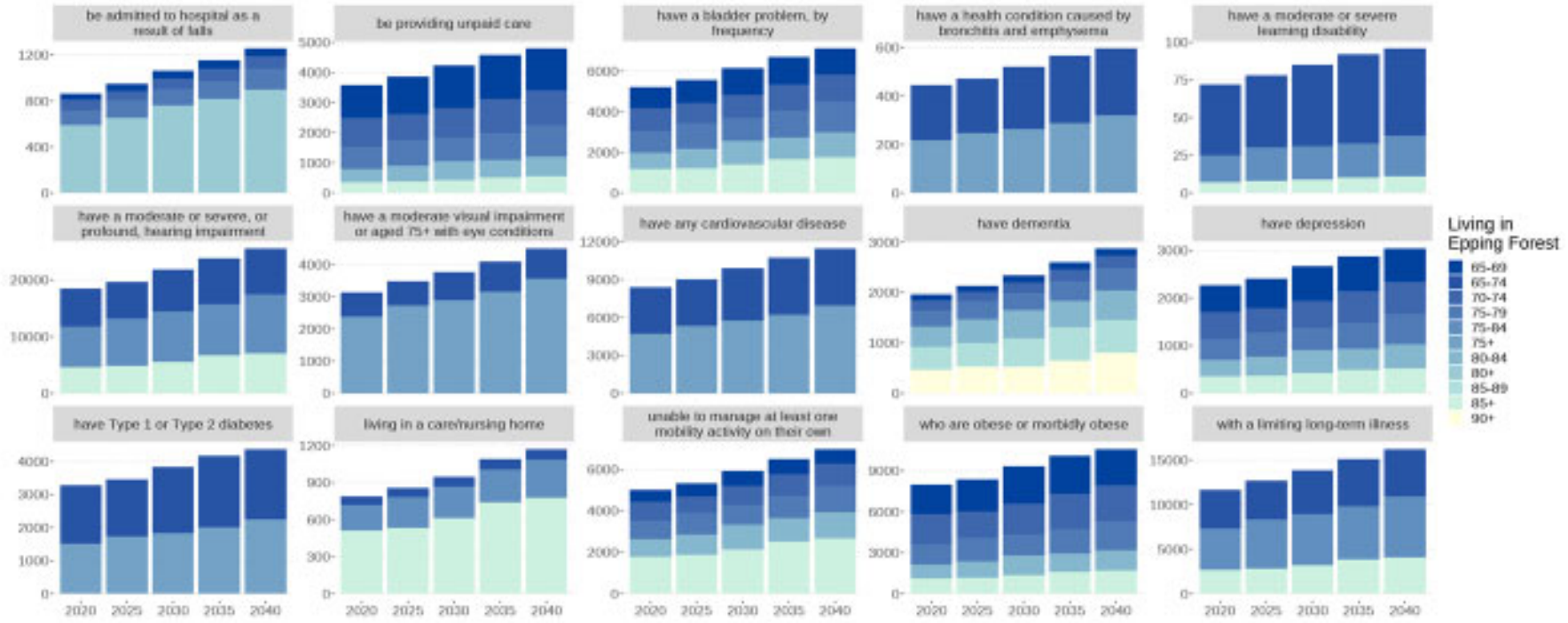
The above projection pyramids show the growth in population expected for Epping Forest District. Expected population growth for Epping Forest district by the Local Authority, forecasts continued increase between 2023 through to 2034 which will bring additional demands for healthcare. Projections show an expected increase in the number of people over 65 from ~27k to ~32k.

Source: Public Health Team

Public Health - Projections on Conditions

NHS Hertfordshire and West Essex Integrated Care Board

People aged 65+ projected to...



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Hertfordshire

The above shows the impact on health due to the expected increase in the number of people over 65.

Source: Public Health Team

Segmentation within the ICB

Optum

HWE

Segment & Outcomes
Framework Documentation

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PHM Segment Model - Overview

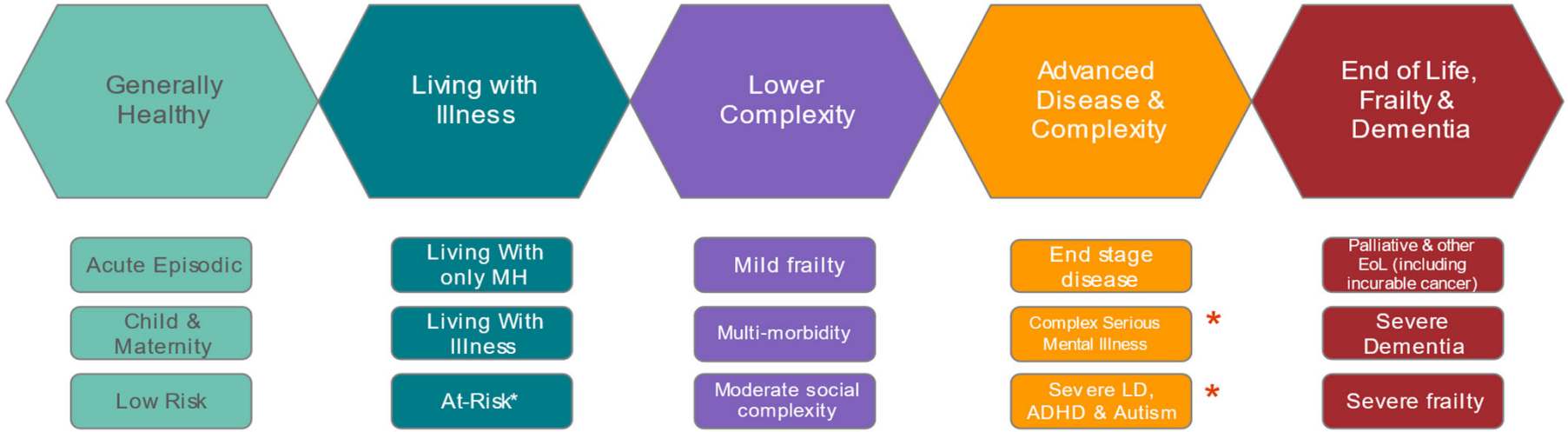
NHS Hertfordshire and West Essex Integrated Care Board

The ICB has worked in partnership with Optum to develop a Health Segmentation model using linked data covering 1.2m of our ICS population. As part of the process representation from different care settings and internal ICB teams were engaged.

Our core PHM and Population Segmentation model combines primary and acute care data with wider determinants and community, mental health and social care data where available. The model has been built with a view to include additional data sets as they become available. The segmentation model provides the foundations for advanced population health management analytics that goes beyond patient level risk stratification.

The below demonstrates the 5 high level segments and the sub segments beneath within the model.

Segmentation model – third iteration



Based on 5 SME sessions, plus two with the MH team, we have designed the HWE ICS Segmentation Model. This model provides greater alignment to ways of working across services within the HWE.

It follows a MECE model, assigned in orderfrom right to left in segment, and top to bottom in subsegment.

* awaiting finalisation of methodology

Optum

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2

Source: Optum & HWE PHM Team - 14th Oct 2022

PHM Segment Model - Overview

NHS Hertfordshire and West Essex Integrated Care Board

The logic behind the ICB Health Segmentation model has been developed to allow the ICB to consider its whole population and the different interventions required to improve the outcomes of different groups of people with similar characteristics.

Alongside the segmentation logic an outcomes framework was developed.

Whole Population Outcomes

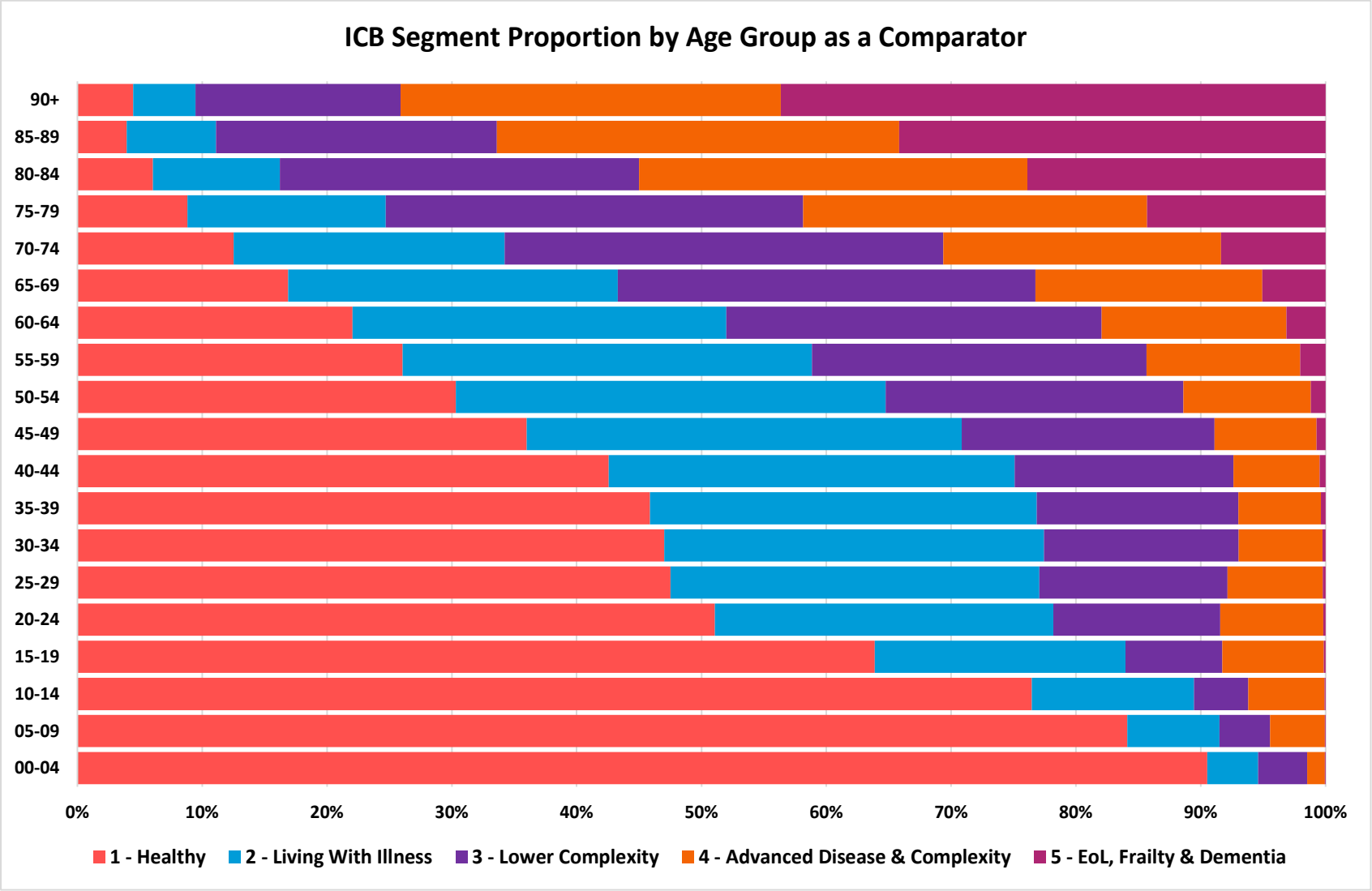
- INCREASE life expectancy / INCREASE average age at death in adults.
- REDUCE gap in age at death between most and least deprived deciles.
- INCREASE disease-free life expectancy
- REDUCE rates of suicide
- REDUCE proportion of population who are digitally excluded either by lack of equipment, connectivity, skills, cost, or confidence to be able to access clinical services.

"Generally healthy"	Living with Illness	Lower Complexity	Advanced Disease & Complexity	End of Life, Frailty & Dementia
Who is in this group? • Children and adults in the general population who are not otherwise captured in other segments. • Most likely receive episodic care due to accidents and injuries or linked to maternity and CYP routine services. • No diagnosed conditions.	**Who is in this group?** • Includes people with single illnesses (including MH), that are currently controlled or able to self-manage and will receive most of their care in a planned way through primary care. • Includes people with social or behavioural risk factors for more advanced disease.	**Who is in this group?** • Includes people with moderate levels of morbidity and complexity. This is either as a result of: Multi-morbidity (2-4 long term conditions), Mild frailty and/or Social complexity.	**Who is in this group?** • Advanced disease and complexity represents a cohort of people with one or more significant illnesses that impact on their day to do functioning as well as people with significant risk from social complexity	**Who is in this group?** • End of Life, frailty and dementia is the first segment in the logic and is the first set of criteria on which people are assessed. The segment includes: people who are identified as being in their last year of life, or on the palliative disease register as well as people with incurable cancer. This segment also includes those with severe frailty and/or severe dementia.
Social & Clinical Outcomes • INCREASE screening. • IMPROVE experience of Maternity services. • REDUCE rates of childhood obesity in reception and year 6. • REDUCE rate of infant mortality. • REDUCTION in proportion of people diagnosed with low mood and/or depression.	**Social & Clinical Outcomes** • INCREASE proportion of patients who feel able to self-manage their condition. • REDUCE prevalence of behavioural risk factors for more advanced diseases, including: obesity, smoking status and drug abuse. • REDUCE episodes of ill -health requiring emergency admissions for long term condition. • INCREASE percentage of people with mental health problems in employment. • INCREASE proportion of people who are able to maintain life routines considered important to the individual, e.g work, .. • REDUCE emergency attendances due to alcohol -related harm.	**Social & Clinical Outcomes** • INCREASE proportion of patients who feel able to self-manage their condition. • REDUCE rate of emergency admissions for people with lower complexity. • INCREASE proportion of patients offered personalised care and support planning. • REDUCE prevalence of behavioural risk factors for more advanced diseases, including: obesity, smoking status and drug abuse.	**Social & Clinical Outcomes** • INCREASE five year survival from cancer. • REDUCE rate of emergency admissions in people with advanced disease or complexity. • REDUCE the difference in average age of death between people with learning disability/SMI compared to general population. • REDUCE proportion of whole population who are living with advanced disease and/or complexity.	**Social & Clinical Outcomes** • REDUCE dependency for emergency care services e.g A&E attendances and emergency admissions. • INCREASE proportion of people who die in their preferred place of death. • INCREASE identification of frail and complex patients, including those with dementia or at end of life. • REDUCE proportion of days disrupted by emergency care in last year of life. • INCREASE number of days spent at home in last year of life. • INCREASE proportion of people supported at home instead of in residential care.

Source: Optum & HWE PHM Team - 14th Oct 2022

Demographic Breakdowns - Segment & Deprivation Quintiles

NHS Hertfordshire and West Essex Integrated Care Board



The ICB Health Segments here are broken down by total population and 5 year age groups; as expected with age the proportion of people within the healthy segment decreases.

The illustration above shows the ICB breakdown. There is no available data for Epping Forest North PCN.

Source: HWE PHM Team, Combined population data re-extract via Optum

Major Conditions Comparison - Per 1,000 Registered

NHS Hertfordshire and West Essex Integrated Care Board

PCN NAME	COPD	Obesity	Asthma	Diabetes	Dementia	Cancer	Learning Disabilities	Hypertension	Stroke	Chronic Kidney Disease	Heart Disease	Heart Failure	AtrialFib	Chronic Cardiac Disease	Depression	MH	Anxiety	Serious Mental Illness	Alzheimers
ABBEY HEALTH	16.94	91.79	134.57	138.01	16.06	35.32	15.82	119.23	33.72	10.05	35.88	10.65	11.77	57.71	121.19	171.41	86.11	25.15	10.73
ALBAN HEALTHCARE	16.78	79.37	154.97	90.13	16.99	53.76	14.22	149.53	34.73	24.16	39.98	10.97	17.65	50.69	127.50	205.23	111.71	23.36	13.08
ALLIANCE	19.90	114.36	123.67	105.84	15.86	29.28	17.82	155.51	31.61	9.04	39.00	10.29	9.50	62.66	114.55	160.93	87.83	25.81	10.21
ALPHA	16.29	121.01	139.73	97.63	14.00	55.48	10.91	161.78	34.67	18.36	42.29	11.02	21.77	53.43	153.71	233.41	120.24	17.12	9.22
ATTENBOROUGH	18.14	113.20	126.85	105.43	15.54	36.21	11.81	130.54	33.07	15.51	42.51	11.91	11.43	50.85	118.02	176.61	95.74	19.13	8.70
BROXBOURNE ALLIANCE	20.30	160.08	122.01	81.19	7.50	61.16	6.46	171.90	29.87	23.09	49.05	11.84	19.50	68.57	135.43	191.17	116.76	7.91	4.09
CENTRAL WATFORD	17.17	97.89	108.55	152.70	20.12	25.21	13.25	123.19	30.90	8.01	34.88	10.09	16.32	46.23	98.31	132.67	62.41	20.54	8.28
DACORUM BETA	24.98	156.71	132.83	158.17	30.23	40.07	18.80	156.86	44.28	19.23	50.10	16.42	26.50	78.15	176.09	245.43	132.71	31.47	14.12
DANAIS	22.41	131.50	138.52	116.70	19.56	36.00	19.66	181.38	45.29	7.84	44.34	12.86	11.35	57.63	137.60	185.74	82.50	28.26	11.88
DELTA	16.90	150.87	135.59	125.22	17.35	45.07	13.06	152.28	34.37	21.60	42.61	10.85	19.87	55.43	142.21	222.46	128.07	22.98	10.97
HALO	18.22	93.22	137.55	112.78	20.85	47.83	20.12	137.28	37.23	16.03	41.35	11.68	16.94	85.83	149.64	217.88	111.29	29.96	14.75
HARLOW NORTH	32.17	113.01	160.55	104.04	9.63	65.83	5.80	185.36	41.56	27.03	59.02	17.64	18.36	73.07	152.95	249.04	129.75	8.61	4.78
HARLOW SOUTH	30.09	197.29	169.79	120.15	9.20	57.49	8.17	162.96	38.98	37.02	62.04	19.34	19.54	83.34	174.03	246.72	118.60	11.48	4.96
HARPENDEN HEALTH	21.78	81.60	149.03	107.08	23.86	69.52	12.79	172.72	49.21	21.85	55.34	17.04	25.35	73.71	145.13	230.18	127.83	21.83	14.49
HATFIELD	16.88	58.23	77.11	65.91	7.71	28.28	6.46	107.06	21.36	5.41	34.69	8.47	14.84	42.95	91.34	131.15	87.53	7.83	2.94
HERTFORD AND RURALS	16.86	116.98	126.99	67.48	7.52	54.51	5.99	147.29	25.97	13.35	42.51	10.83	20.25	52.05	138.84	203.98	117.47	7.46	3.97
HERTS FIVE	18.05	119.79	133.62	149.84	32.47	49.57	15.73	175.39	37.47	28.64	46.04	11.72	28.70	67.86	143.18	211.93	115.95	24.53	12.18
HITCHIN AND WHITWELL	21.11	126.63	141.53	80.38	10.25	64.91	5.36	160.97	32.99	22.56	48.88	11.81	23.23	63.10	146.25	217.69	134.47	9.83	6.42
HODDESDON & BROXBOURNE	22.63	163.45	129.18	88.31	9.82	69.33	6.52	182.13	32.80	23.48	54.65	14.88	26.00	65.08	128.92	211.87	124.10	7.19	5.53
ICKNIELD	20.58	132.39	147.83	85.32	11.91	60.97	6.57	164.18	31.52	35.00	51.59	12.61	22.87	68.86	140.93	220.11	121.08	8.97	7.19
LEA VALLEY HEALTH	23.93	166.87	126.46	86.47	6.11	51.75	9.26	172.10	28.22	18.66	48.18	13.17	18.01	57.90	154.32	231.01	165.70	10.89	5.53
LOUGHTON BUCKHURST HILL & CHIGWELL	15.51	82.36	108.00	75.16	9.75	48.63	3.25	126.39	27.64	12.08	48.45	12.73	24.57	58.16	115.48	166.39	109.95	7.20	4.74
MVPS	20.48	132.18	129.05	118.23	17.10	37.36	15.43	141.83	33.00	29.68	40.10	11.91	12.32	50.34	135.02	189.04	100.76	22.35	10.35
NORTH UTTLESFORD	15.67	23.10	103.62	50.30	8.89	35.46	3.02	82.42	26.01	0.19	40.66	8.29	27.47	50.49	94.73	129.90	109.54	4.31	4.09
NORTH WATFORD	21.96	115.98	140.15	136.45	18.26	39.04	14.64	168.63	39.54	20.47	47.73	15.48	20.13	64.24	142.44	194.02	96.65	24.51	9.80
POTTERS BAR	22.98	140.98	142.22	136.58	24.74	53.46	12.70	148.52	37.34	84.75	44.43	12.35	20.80	65.37	132.36	187.18	88.62	20.73	11.56
RICKMANSWORTH & CHORLEYWOOD	17.43	111.90	132.75	112.05	18.36	44.50	13.90	188.27	41.26	6.88	45.98	15.23	20.02	59.08	127.24	185.97	93.22	19.48	8.82
SOUTH UTTLESFORD	15.28	43.19	113.74	57.46	8.33	38.05	2.34	96.24	24.00	4.96	39.00	9.02	20.59	48.74	99.33	142.19	108.67	4.65	3.60
STEVENAGE NORTH	24.27	273.76	124.18	170.45	10.46	46.58	8.92	155.20	29.48	9.51	46.26	11.84	14.55	64.91	136.82	194.88	111.38	8.02	6.11
STEVENAGE SOUTH	23.31	128.57	101.25	75.88	9.99	44.87	6.69	144.52	30.88	15.08	46.63	12.90	13.69	62.56	105.37	151.85	76.49	7.45	6.03
STORT VALLEY & VILLAGES	17.85	122.87	132.49	65.60	7.18	53.86	6.92	144.16	26.39	19.45	44.05	13.41	19.82	60.97	120.51	203.15	127.69	6.34	3.43
THE GRAND UNION	17.43	143.73	135.30	134.24	19.14	42.21	12.89	149.94	36.78	28.86	46.99	12.45	19.10	62.75	138.79	195.84	95.98	20.23	9.53
WARE AND RURALS	18.09	163.30	165.40	77.77	7.63	58.28	5.79	154.35	27.24	22.49	47.89	12.74	20.82	60.01	132.46	198.85	108.67	6.62	4.13
WELWYN GARDEN CITY A	19.05	104.74	104.65	68.93	6.62	41.07	6.99	132.35	23.08	10.49	38.53	10.24	17.72	48.93	117.64	178.45	109.12	7.12	3.14

The data from the ICB model has been collated and the above provides a rate per 1,000 population with a recording of each condition. The darker the blue the higher the presence of the condition within the PCN's population.

Further information and tools that monitor identification and management of people with conditions are available in Ardens Manager rolled out to support the ICB's ECF. Searches available via Ardens can support with case finding and identifying people with management indicators that are due.

No data is available for Epping Forest North via Optum but further down is a graph as an indicator from [Population and Person Insight (model.nhs.uk)] for the financial period 2020/21.

Source: HWE PHM Team, Combined population data re-extract via Optum

Continued

NHS Hertfordshire and West Essex Integrated Care Board

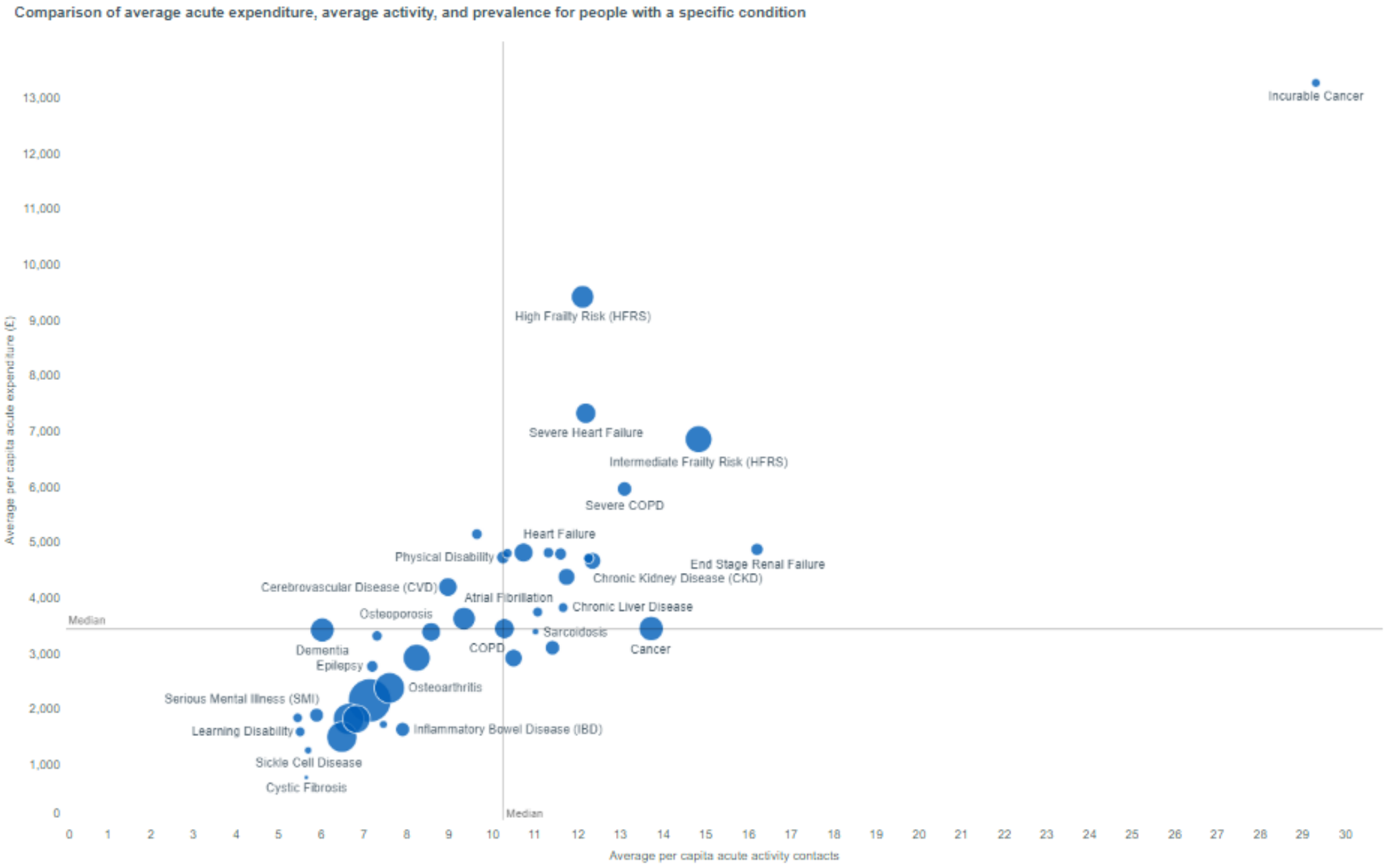
PCN NAME	ASD	Cerebral Palsy	Chronic Respiratory Disea	Cystic Fibrosis	Huntingtons Disease	Inflammatory Bowel Dise	Kidney Transplant	Metastatic Cancer	Multiple Sclerosis	Muscular Dystrophy	Myasthenia Gravis	Osteoporosis	Other Neurological Condit	Parkinsons Disease	Rheumatoid Arthritis	Lupus (SLE)	Sickle Cell Disease	Solid Organ Transplant	High BP
ABBEY HEALTH	14.98	1.20	20.95	0.40	0.04	9.37	2.04	2.48	1.56	0.52	0.28	14.46	1.20	2.08	7.53	0.92	0.44	1.48	25.51
ALBAN HEALTHCARE	13.61	1.20	22.10	0.77	0.23	11.13	2.30	3.02	1.73	0.30	0.33	24.28	1.10	2.77	8.39	1.43	0.28	1.34	31.80
ALLIANCE	17.30	1.66	25.28	1.73	0.04	10.85	2.45	3.01	1.13	0.19	0.15	10.55	1.06	2.60	9.01	1.24	1.70	1.09	30.03
ALPHA	11.10	0.64	21.64	0.66	0.13	10.97	2.67	2.41	2.46	0.36	0.30	20.86	1.30	3.14	9.41	1.22	0.17	1.39	35.30
ATTENBOROUGH	11.11	0.96	22.70	1.41	0.13	10.43	2.57	2.70	1.80	0.42	0.29	17.75	1.12	1.99	7.64	1.25	0.55	1.44	42.89
BROXBOURNE ALLIANCE	8.71	1.08	27.27	0.55	0.02	13.59	2.21	3.15	2.09	0.32	0.34	24.44	1.56	1.95	9.86	1.43	0.78	1.45	87.88
CENTRAL WATFORD	10.69	1.11	20.87	0.87	0.15	7.62	2.32	2.65	1.20	0.27	0.21	11.29	1.30	2.44	7.53	1.17	0.54	1.14	29.37
DACORUM BETA	17.95	1.28	29.89	1.09	0.15	11.68	2.62	4.19	2.11	0.53	0.10	17.54	1.16	3.61	9.52	1.33	0.75	1.60	36.87
DANAIS	16.34	1.18	26.91	0.79	0.26	10.93	2.13	3.22	1.77	0.39	0.30	8.73	1.31	2.92	10.14	1.21	0.89	1.71	39.02
DELTA	13.39	1.02	21.36	0.96	0.27	11.99	2.31	3.60	2.28	0.42	0.24	18.70	0.96	2.97	8.99	1.14	0.51	1.20	37.04
HALO	20.38	1.52	23.45	0.73	0.18	11.68	2.31	3.56	1.90	0.23	0.20	20.47	1.40	3.88	8.70	1.34	0.41	0.99	31.92
HARLOW NORTH	7.53	1.38	42.10	1.26	0.06	13.93	3.47	3.41	2.51	0.30	0.36	29.48	2.45	2.39	13.51	1.49	0.60	2.21	69.06
HARLOW SOUTH	11.58	2.48	42.29	0.93	0.10	13.55	2.38	4.24	1.65	0.52	0.52	40.02	2.27	2.38	13.55	2.48	0.31	1.86	95.65
HARPENDEN HEALTH	12.54	1.06	28.25	0.66	0.12	10.84	2.47	5.89	2.22	0.39	0.48	29.04	1.89	4.68	9.54	1.18	0.39	1.41	28.50
HATFIELD	6.55	0.76	21.97	0.47	0.06	10.21	2.74	1.89	0.90	0.32	0.23	19.79	1.43	1.51	6.72	1.25	0.84	1.54	71.96
HERTFORD AND RURALS	8.19	0.81	24.68	0.69	0.12	15.00	2.38	2.24	2.26	0.44	0.30	27.37	1.37	2.38	7.72	0.89	0.10	1.53	90.91
HERTS FIVE	13.79	1.39	23.04	0.77	0.13	12.86	2.98	2.86	2.45	0.25	0.36	22.67	1.69	3.63	17.88	1.26	0.62	1.66	34.03
HITCHIN AND WHITWELL	9.93	1.49	30.11	0.50	0.00	15.61	2.87	3.41	2.41	0.32	0.32	34.83	1.42	2.52	8.34	1.63	0.14	1.60	92.26
HODDESDON & BROXBOURNE	9.14	0.96	31.53	0.58	0.27	14.77	2.84	3.29	2.38	0.43	0.23	33.55	1.73	2.33	9.37	1.35	0.22	1.73	96.87
ICKNIELD	10.67	1.08	29.47	0.62	0.08	16.17	2.69	2.91	3.58	0.43	0.32	27.18	1.29	2.67	8.51	1.27	0.05	2.02	82.47
LEA VALLEY HEALTH	10.05	1.27	31.63	0.59	0.10	12.74	2.37	2.80	1.53	0.36	0.46	22.43	1.89	1.72	10.47	1.63	1.11	1.98	97.79
LOUGHTON BUCKHURST HILL & CHIGWELL	4.13	0.84	22.95	0.79	0.14	14.26	2.42	3.62	1.77	0.46	0.33	38.42	1.90	2.04	8.87	1.53	0.19	1.35	65.68
MVPS	14.28	1.17	34.30	10.11	0.07	11.35	2.43	3.60	2.06	0.30	0.15	15.86	1.17	2.47	8.53	1.69	0.59	1.30	32.96
NORTH UTTLESFORD	2.34	0.78	21.65	0.73	0.05	11.09	1.18	2.48	1.13	0.48	0.11	23.32	1.16	1.27	10.04	1.29	0.03	1.72	26.93
NORTH WATFORD	12.70	1.07	27.72	2.17	0.11	12.20	2.44	3.36	2.40	0.42	0.31	16.47	1.53	2.63	9.42	1.45	0.34	0.92	37.13
POTTERS BAR	12.98	0.76	27.06	0.62	0.17	8.31	1.90	2.70	2.01	0.38	0.48	21.07	1.49	3.25	7.96	1.07	0.42	1.28	33.70
RICKMANSWORTH & CHORLEYWOOD	11.74	1.12	23.30	2.02	0.25	9.40	2.45	3.20	1.33	0.54	0.18	15.52	0.97	2.88	7.38	0.97	0.11	1.51	32.44
SOUTH UTTLESFORD	3.05	1.02	21.93	0.53	0.02	10.61	1.97	2.44	1.89	0.28	0.22	29.23	1.34	1.71	10.30	1.48	0.08	2.01	24.13
STEVENAGE NORTH	12.22	1.43	32.98	0.27	0.05	16.52	3.40	2.92	2.23	0.64	0.27	15.67	1.81	2.71	7.06	1.27	0.48	1.54	94.81
STEVENAGE SOUTH	10.81	1.57	31.16	0.88	0.06	13.08	2.69	4.03	2.09	0.27	0.33	14.90	1.57	2.09	5.81	1.12	0.39	1.73	75.58
STORT VALLEY & VILLAGES	10.22	1.05	25.19	0.51	0.00	12.73	1.89	3.26	1.95	0.41	0.36	41.69	1.69	2.08	9.13	1.63	0.13	1.39	76.18
THE GRAND UNION	13.30	1.32	22.90	1.36	0.18	11.75	2.22	3.19	2.19	0.25	0.25	26.69	1.27	2.29	9.07	1.53	0.53	1.68	74.02
WARE AND RURALS	7.25	1.01	25.52	0.77	0.09	14.85	2.67	2.64	1.81	0.18	0.27	26.11	1.63	2.58	7.58	1.22	0.03	1.75	86.12
WELWYN GARDEN CITY A	9.18	0.77	25.87	0.71	0.05	13.17	2.65	2.13	1.92	0.46	0.20	20.42	1.30	1.37	7.02	1.11	0.38	1.55	89.89

No data is available for Epping Forest North via Optum but further below is a graph as an indicator from [Population and Person Insight (model.nhs.uk)] for the financial period 2020/21.

Source: HWE PHM Team, Combined population data re-extract via Optum

PaPi = Prevalence, Utilisation & Expenditure

NHS Hertfordshire and West Essex Integrated Care Board



Source: NHS Digital (2022) https://apps.model.nhs.uk/report/PaPi

Urgent and Emergency Care

NHS Hertfordshire and West Essex Integrated Care Board

As part of the ICB Urgent and Emergency Care Programme a needs analysis was undertaken.

Overall aim

* To understand what and where the need is for access to urgent and emergency care in Hertfordshire and West Essex

Objectives

* To build a comprehensive picture of **who** needs to access UEC in HWE and who could be better cared for in alternative settings.
* To understand the root causes of **why** people are accessing UEC when there could have been more appropriate alternative pathways
* To build consensus among stakeholders around what the key issues in UEC are
* To draw conclusions based on public health intelligence and triangulation of data to inform a successful and achievable UEC strategy

Some of the initial outputs from this work have been included within the next few pages, providing the PCN benchmarking.

UEC Overview

Hertfordshire & West Essex ICB – West Essex

A&E Summary – Who are attending and why?

Children 0 -18
Adults 19 -64
Older People 65+

111,881 A&E Attendances in 2021/22

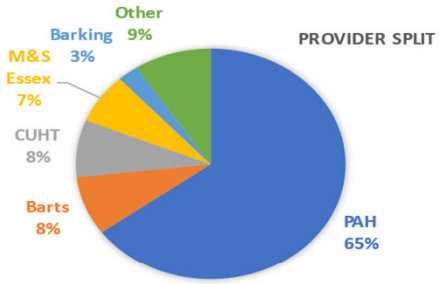
Children = 29,930 (26.8%)
Adults = 57,019 (51.0%)
Older People = 24,932 (22.3%)

69,360 people attended A&E in 2021/22

Children 18,773 = (27.1%)
Adults = 36,252 (52.3%)
Older People = 14,461 (20.8%)

29,408 (26.3%) of attendances resulted in no investigation and no treatment (includes Uncoded Activity)

Children = 9,684 (32.4%)
Adults = 16,142 (28.3%)
Older People = (14.4%)



This translates to 1 in 4 people registered with West Essex attending A&E

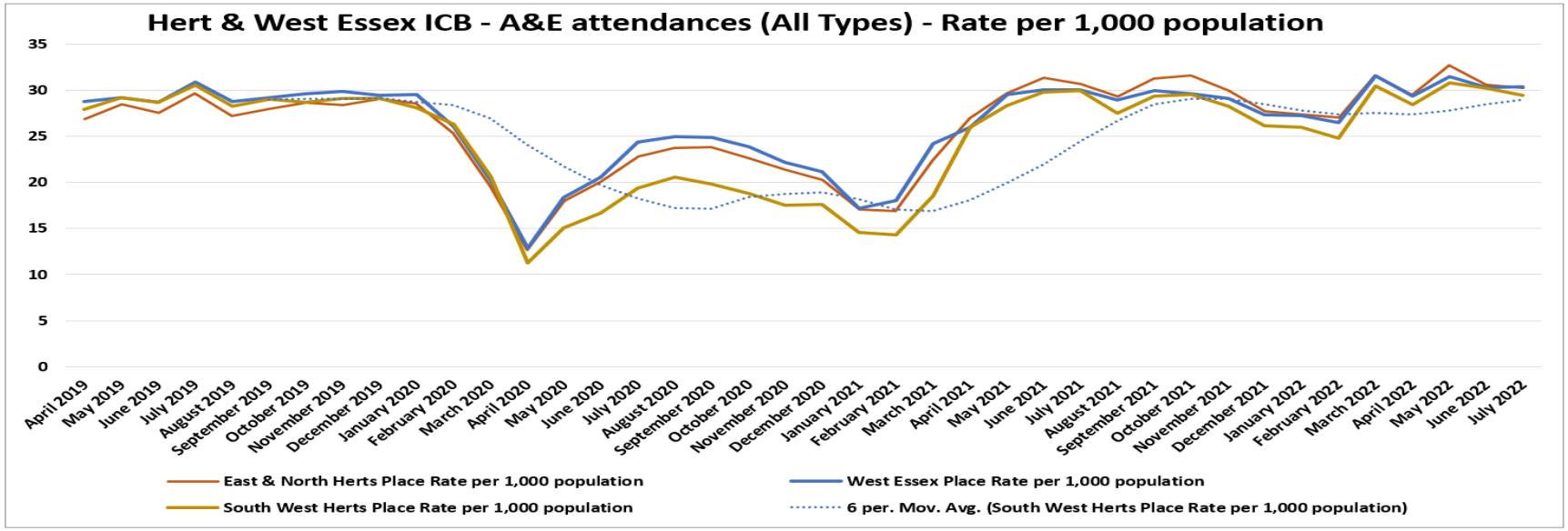
Children = 1 in 4 children
Adults = 1 in 5 adults
Older People = 1 in 4 older people

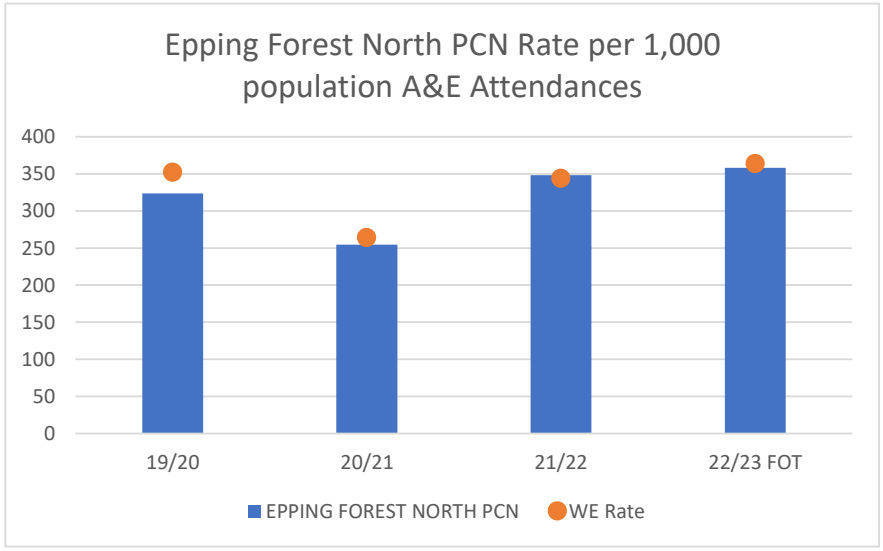
Hertfordshire and West Essex Integrated Care System

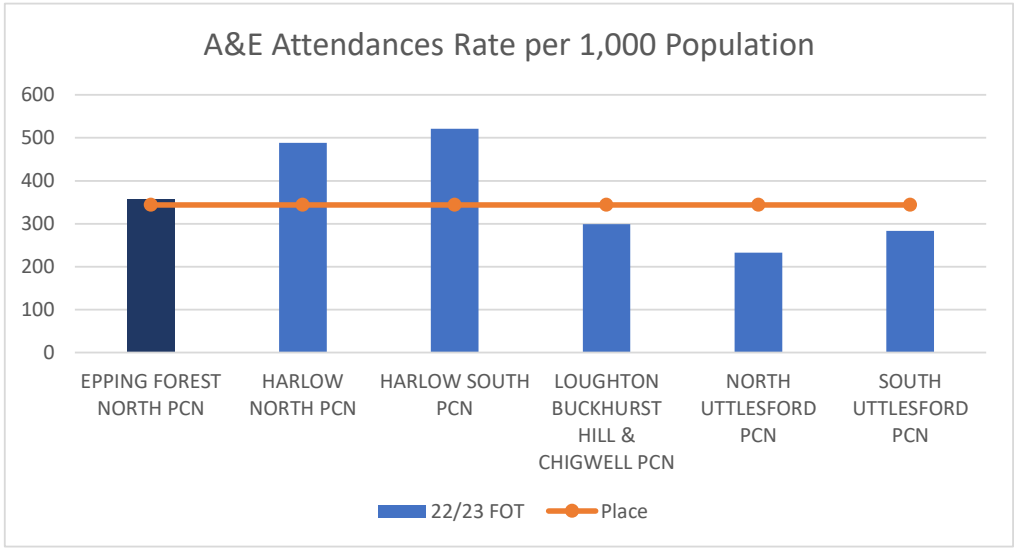
Source: SUS

Source: HWE PHm Team, SUS Data Sets

UEC







Rates of A&E attendances across the ICB have returned to pre covid levels and above.

The impact of covid can clearly be seen in the top left chart.

Urgent & Emergency Care in 2022/23 for Epping Forest North PCN A&E Attendance rates per 1,000 population, is above West Essex place.

Source: HWE PHM Team modelled data, phm.optum.co.uk - Calendar Year 2021

Unplanned Hospitalisation for Chronic Ambulatory Care Sensitive Conditions

Hertfordshire and West Essex Integrated Care Board

This analysis looks at Unplanned hospitalisation for chronic ambulatory care sensitive conditions
NHS Outcomes Framework Methodology.

Between April 2021 and September 2022 there have been 11,953 people admitted 15,563 times for chronic ambulatory care sensitive conditions across the ICB.

Costed at tariff the value was approximately £42 million.

The table here shows the breakdown for Epping Forest North PCN.

*** Average cost for Mental and Behavioural is not representative as non-PbR**

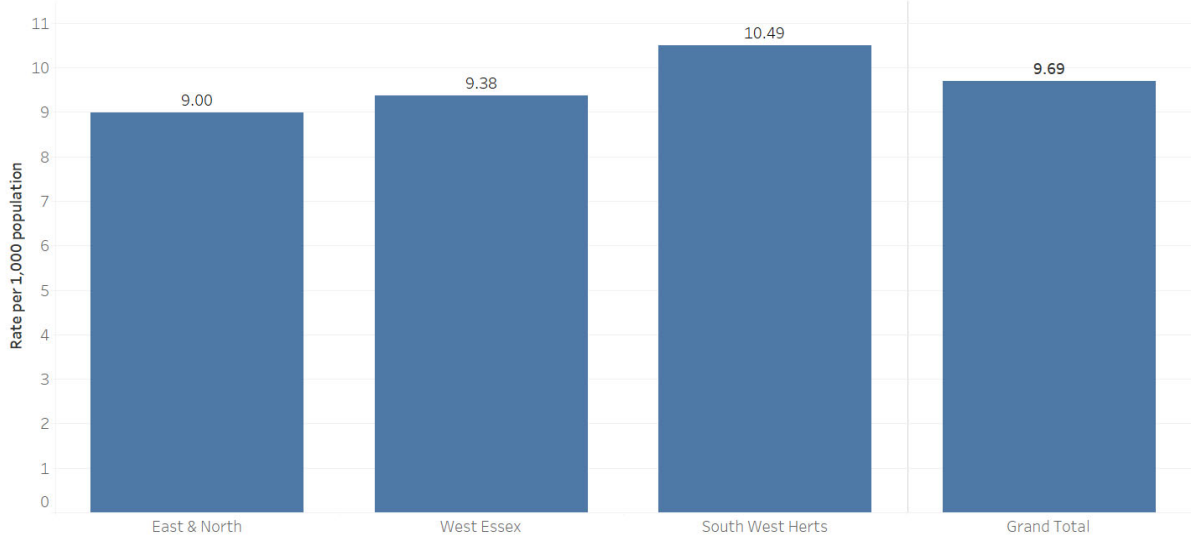
Chronic ACS admissions
April 2021 - September 2022
Herts & West Essex ICB

Chronic ACS	Admissions	People	Average cost of admission	Tariff Total Payment National
CVD: AF and Flutter	132	115	£2,111	£278,710
CVD: Angina	28	26	£1,562	£43,746
CVD: Congestive Heart Failure	141	126	£4,353	£613,834
CVD: Hypertension	41	39	£695	£28,489
Diseases of the blood	54	53	£1,900	£102,589
Mental and Behavioural Disorders	14	13		
Neurological Disorders	40	31	£3,662	£146,484
Nutritional, endocrine and metabolic	53	48	£2,959	£156,850
Respiratory: Asthma	36	31	£1,613	£58,080
Respiratory: COPD	137	98	£2,754	£377,292
Grand Total	**676**	**562**	**£2,672**	**£1,806,074**

Source: HWE PHM Team, SUS UEC data-sets

ACS Admission Rates per 1,000 Population by Place

Chronic Ambulatory Care Sensitive Conditions by Place
Rate per 1,000 Population
(Total Population)

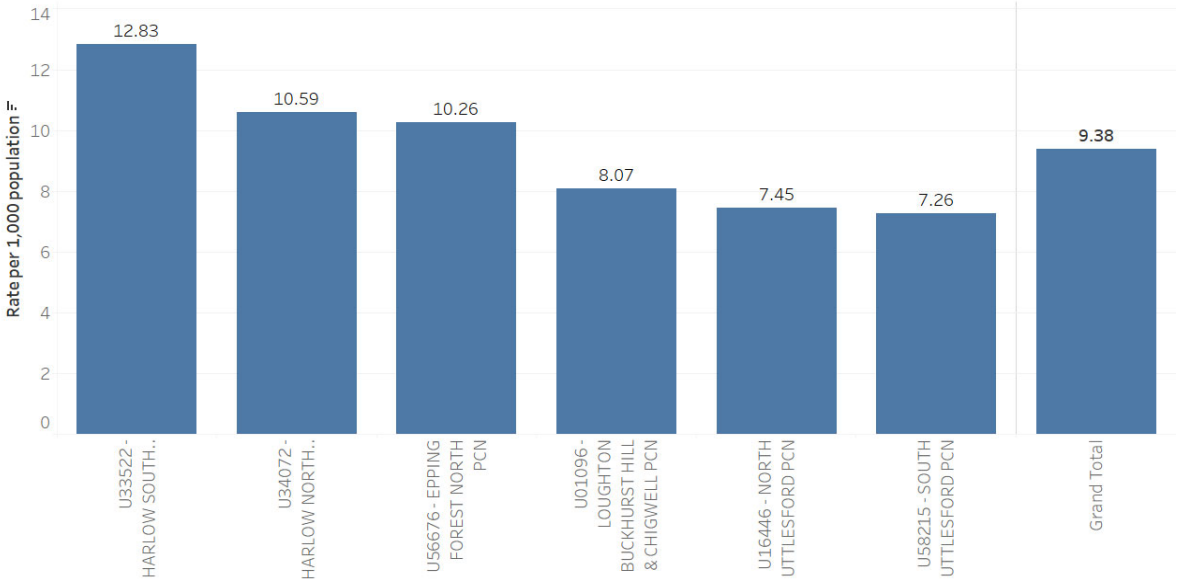


When comparing the Ambulatory Care Sensitive rates per 1,000 population between places, then West Essex place has a slightly lower rate than the ICB.

Within West Essex place, Epping Forest North has a higher rate per 1,000 population, than the average.

The following slides look at how this is broken down by the different ACSs and how the patients fall within the different segments.

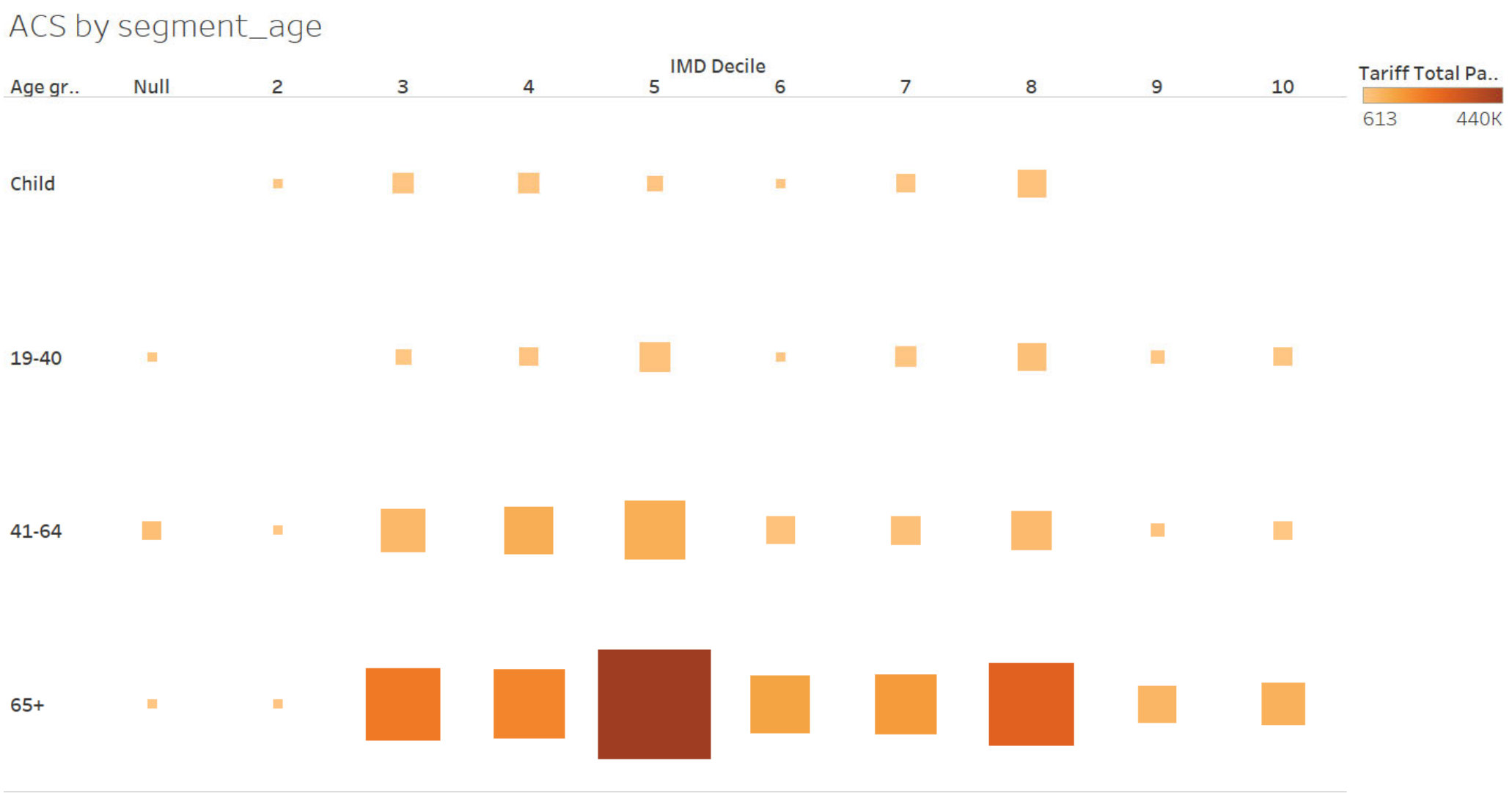
Chronic Ambulatory Care Sensitive Conditions by Place
Rate per 1,000 Population
(Total Population)



Source: HWE PHM Team, SUS UEC data-sets

Chronic ACS by IMD Decile

Hertfordshire and West Essex Integrated Care Board

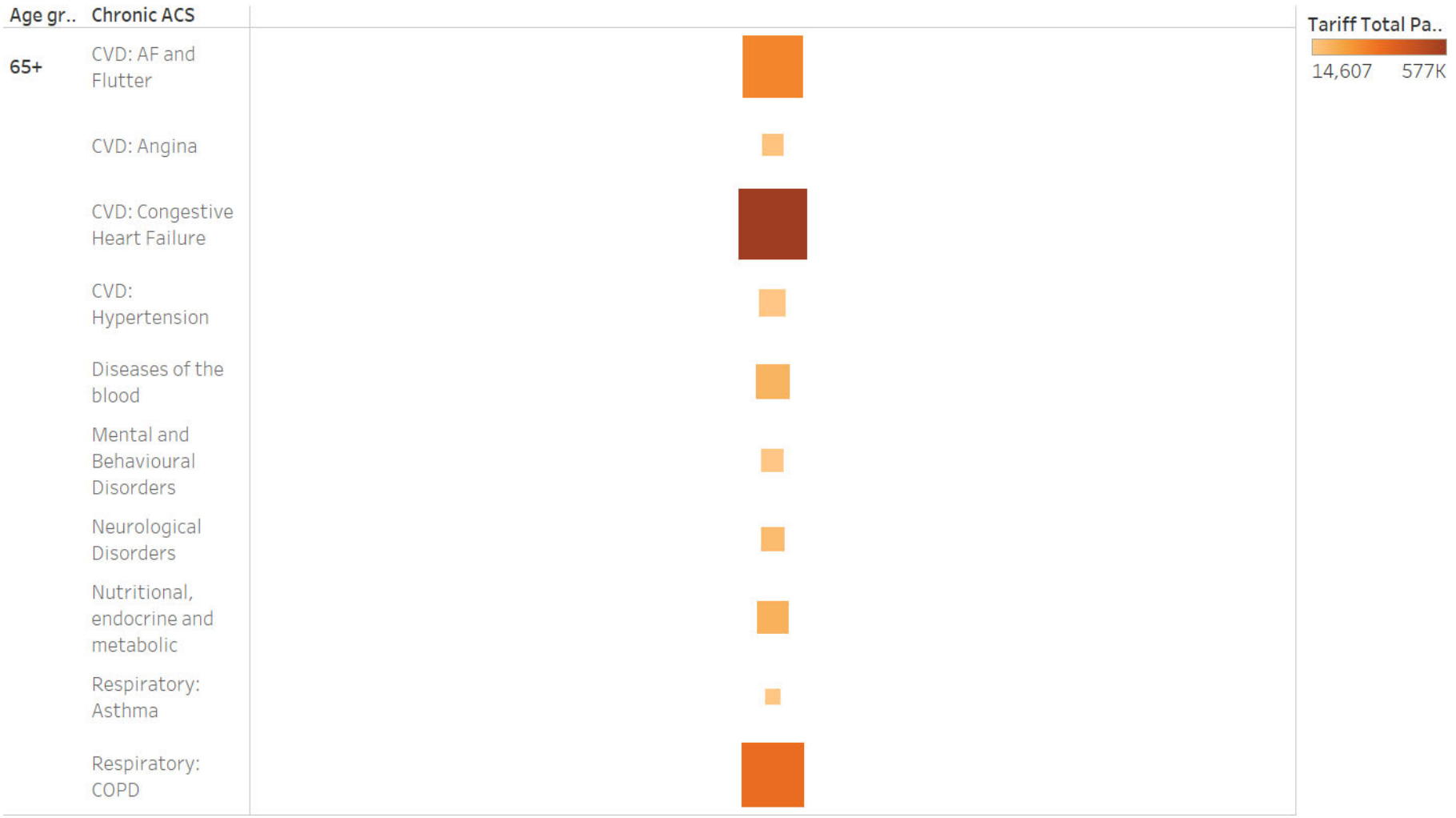


The above chart looks at the ACS admissions by age and IMD Decile. The size reflects volume and the depth of colour reflects cost.

When looking at the ACS conditions for Epping Forest North the highest volume and cost is within Decile 5 in the over 65 age group followed by Decile 8, 3 and 4 for the same age group.

Source: HWE PHM Team, SUS UEC data-sets

UEC by Advanced Disease & Complexity, and EOL, Frailty & Dementia



Ambulatory Care Sensitive conditions of note for people aged over 65 within the End of Life, Frailty & Dementia is highlighted as Heart Failure followed by AF and Flutter and COPD is the ACS with the highest volume and cost.

Source: HWE PHM Team, SUS UEC data-sets

Public Health - Nationally Reported Admissions

NHS Hertfordshire and West Essex Integrated Care Board

Hospital Admissions

	Period	HERTFORDSHIRE AND WEST ESSEX	EPPING FOREST NORTH PCN
Emergency admissions injuries due to falls in those aged 65+	2020/21	2026	2091.4
Emergency asthma, diabetes and epilepsy admissions (aged 0-18)	2020/21	130.8	88.3
Emergency admissions for children with lower respiratory tract infections (age 0-18)	2020/21	40.5	
Emergency admissions for chronic ambulatory care sensitive conditions	2020/21	505.9	609.9
Mental health admissions (all ages)	2020/21	177.2	248.2
Emergency Cancer Admissions	2020/21	494.9	508.6
Emergency admissions for acute conditions shouldn't require admissions	2020/21	611.6	754.4

Similar Significantly Worse Significantly Better

PH.Intelligence@hertfordshire.gov.uk

Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

The above table produced by the Hertfordshire Public Health Evidence and Intelligence team shows the emergency admissions data within fingertips.

Epping Forest North PCN rates vary from Similar to Significantly Worse rate of admissions to the ICB, dependent on Admission categories.

Source: Public Health Team

Applying Machine Learning factors without our data platform

NHS Hertfordshire and West Essex Integrated Care Board

Why Machine Learning?

With limited capacity available across the ICB available to review lists of patients it is important that the data available is used to its maximum to refine our process and target our resources where they will have the most impact.

The aim is to build the features identified from the machine learning in to system searches for EMIS and SystmOne.

Approach

- Trained several machine learning models on ~1 million linked patient records across ~200 features from the ICS segmentation dataset, for binary A&E risk prediction (will this patient use A&E within the next year?).

- Selected a final twin ensemble model with a binary classification accuracy of 81.3%.

- Extracted output probabilities for each class to estimate a risk score for each patient, and generated risk scores for all of the patients in the segmentation data. We can think of the risk score as the model's confidence in a patient requiring A&E.

- Partitioned the patient population into 3 distinct grades, Low, Medium and High risk, based on the machine learning predictions:

Risk grade	Range of predicted risk scores	Number of patients in grade	% of population in grade
High	0.8 to 1.0	22603	1.8
Medium	0.6 to 0.8	100446	8.1
Low	0.0 to 0.6	1115544	90.1

Creating search logic from significant features

- Features input to the predictive model include demographic features, diagnosis codes, prescribed medication, waitlist information and environmental factors such as housing and proximity to healthcare.
- Used feature rankings learned by the model to reduce the set of ~200 features to the 30 most significant features that best explain the variance in the predicted class (requiring A&E or not).
- Trained secondary machine learning models, 5-split decision trees, to classify patients into each of the three risk grades based on these 30 significant features.
- Extracted decision tree logic to create search filters for patients by risk grade. 5 splits → 2^5 = 32 unique rules. These rules have been merged and prioritised (by considering individual accuracies and sample sizes) to maximise precision and recall in the final search filters.

Feature	Relative significance (%)
Age	15.03
Drug: Pain Management	10.22
Substance Abuse	4.19
Med3 Not Fit For Work	3.41
Stroke	3.03
eFI: Falls	2.23
Air Rank Quality	2.01
Waiting List Count All	1.83
...	...

Risk Grade: High	**Age < 3** AND **Drug: Salbutamol** AND **eFI: Dyspnoea**
	Med3 Not Fit For Work (last six months) AND **Substance Abuse** AND ONE OF:- • **Drug: Pain Management** AND **eFI: Peptic Ulcer** • **Chronic Cardiac Disease**
	Drug: Pain Management AND **eFI: Falls** AND ONE OF:- • **Stroke** AND **eFI: Memory and Cognitive Problems** • **Stroke** AND **Substance Abuse** • **End Stage Disease**
Risk Grade: Medium	**Age < 3** AND ONE OF:- • **Drug: Salbutamol** AND NO **eFI: Dyspnoea** • **On any waiting list**
	Med3 Not Fit For Work (last six months) AND **Substance Abuse** AND NO **Chronic Cardiac Disease**
	Age < 45 AND **Med3 Not Fit For Work (last six months)** AND **Drug: Pain Management**
	Drug: Pain Management AND **Substance Abuse** AND **ONE OF:** • **Drug: Opioids** • **eFI: Falls** AND NO **Stroke** AND NO **End Stage Disease**
Risk Grade: Low	All others

Source: HWE PHM Team

Quality & Outcomes Framework

NHS Hertfordshire and West Essex Integrated Care Board

Contents:

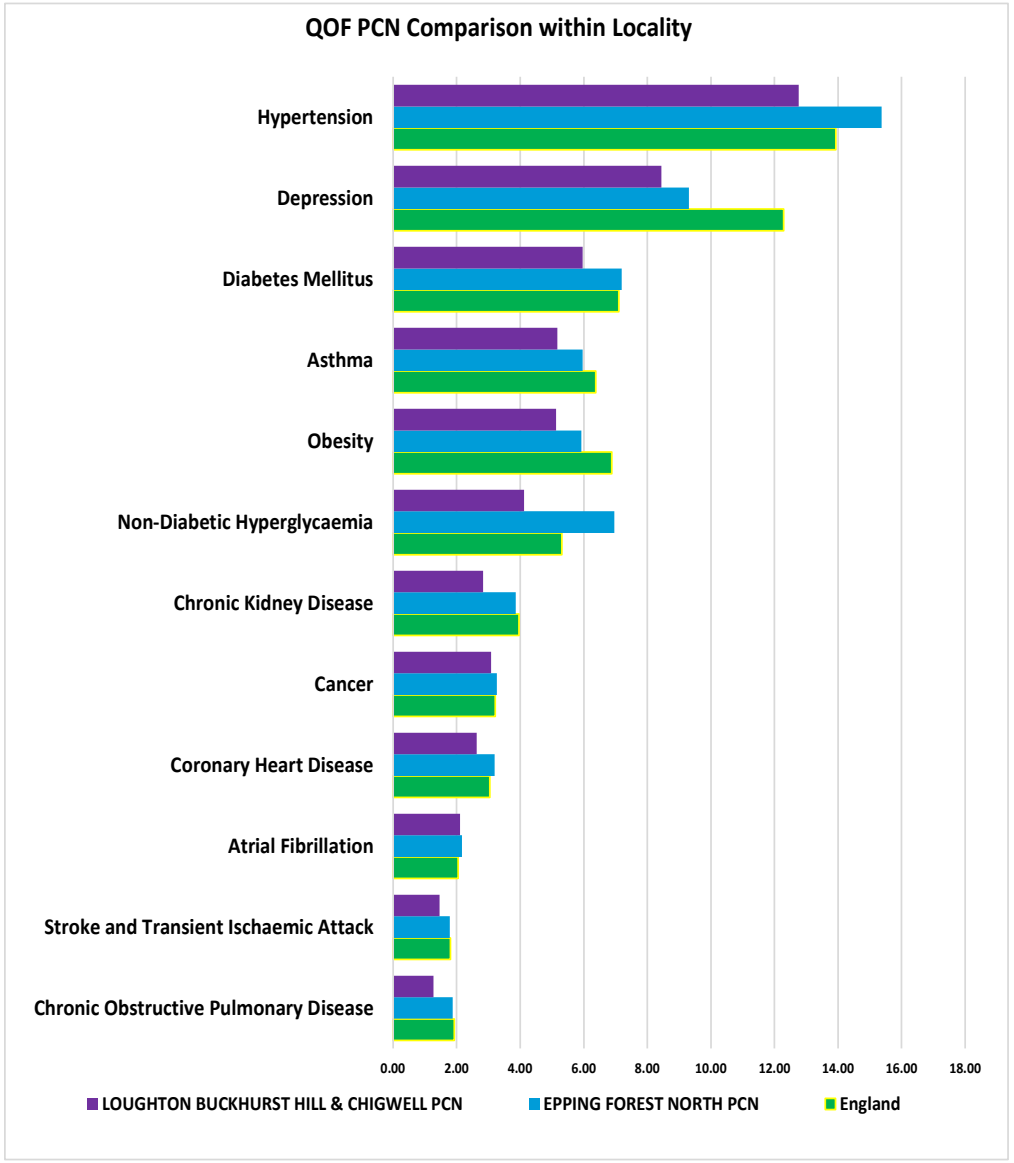
- **QOF Local, Regional, & National Comparison**

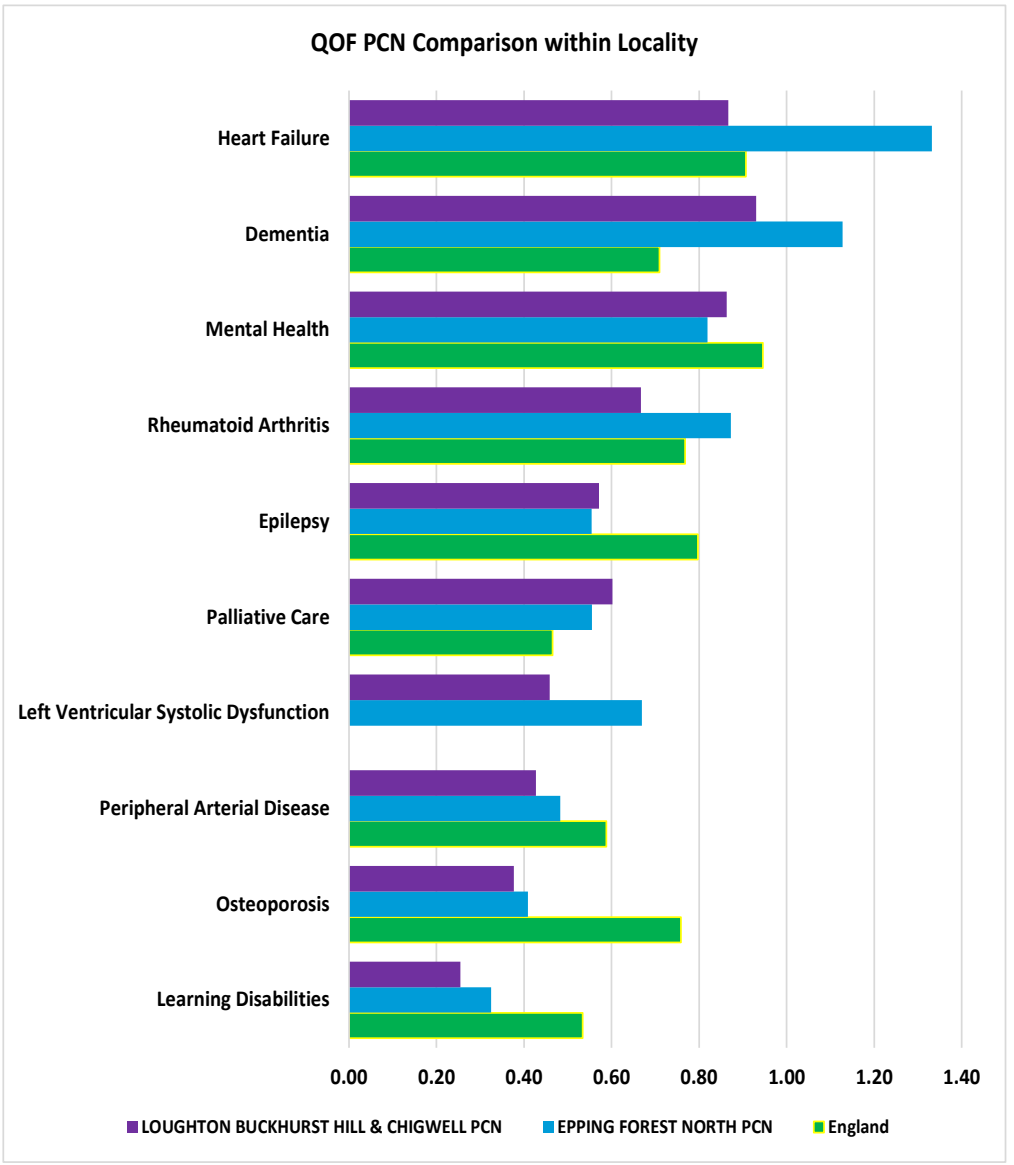
- **QOF Locality & PCN Comparison**

- **QOF Missed Diagnoses & Admission Rates**

- **Admission Rates Benchmarking against ICB/Place**

QOF - Locality & PCN Comparison



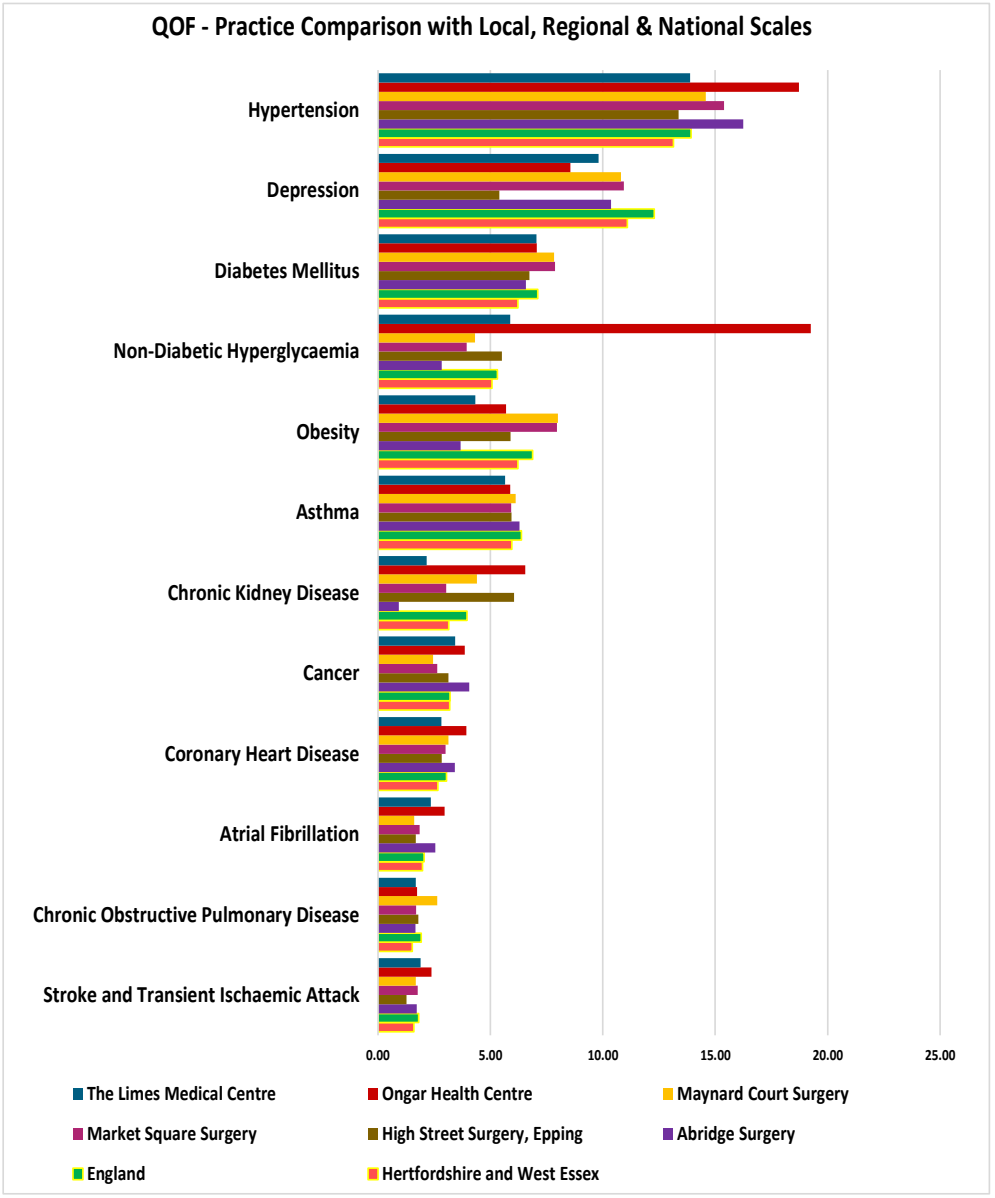


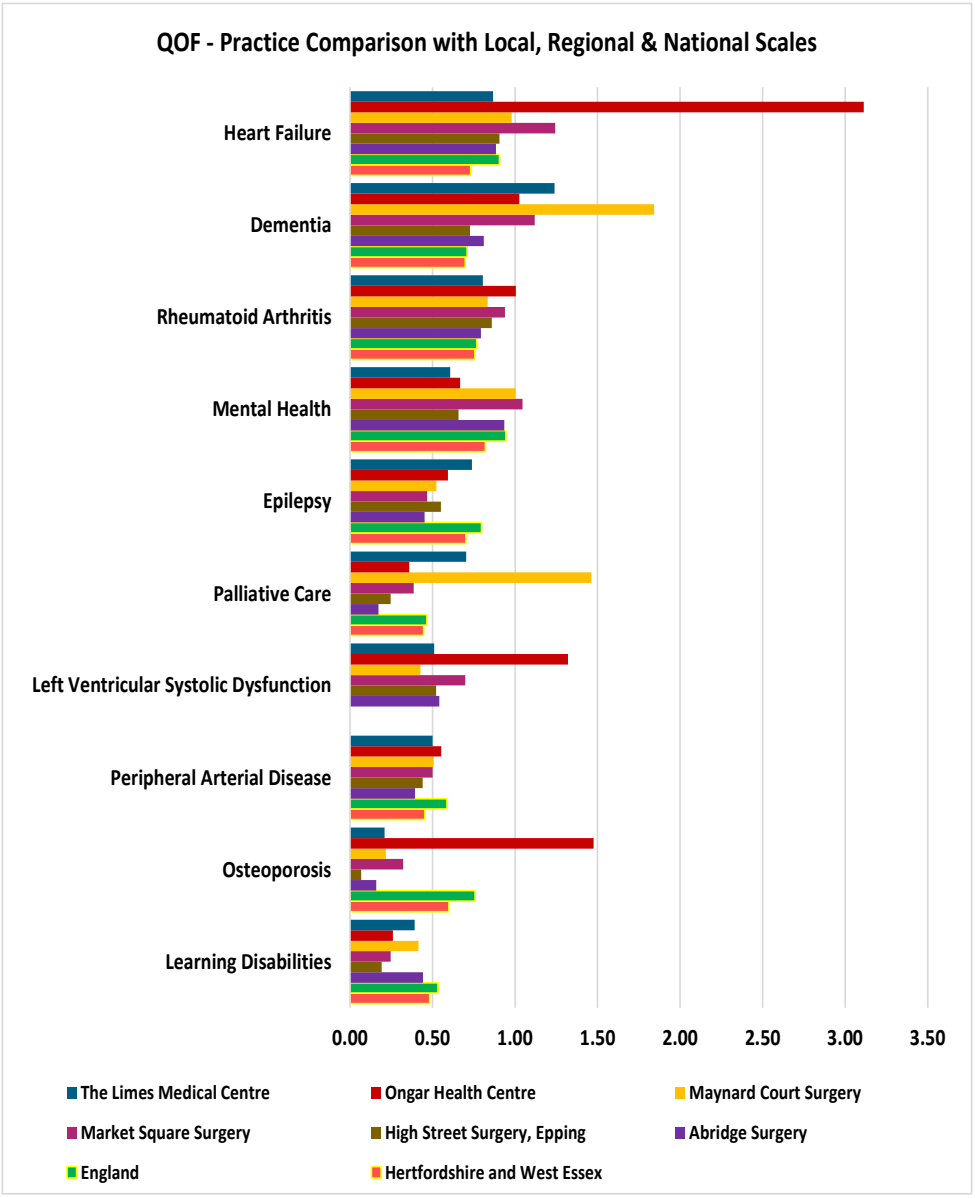
The Quality and Outcome Framework incorporates important benchmarking and scoring for all Practices across the county; we have combined a number of local, regional, and national data sets to highlight the areas that the PCN will need to consider.

In this graph we have shown all your neighbouring PCNs within the Locality, and benchmarked against England's average.

Source: QOF National Figures, HWE PHM Team

QOF - Local, Regional, & National Comparison





The charts here are similar to the previous slide but provides the comparison between practices within the PCN.

Source: QOF National Figures, HWE PHM Team

QOF - Missed Diagnoses & Admission Rates

NHS Hertfordshire and West Essex Integrated Care Board

Disease	QOF List size 21-22	QOF Register 21-22	QOF Prevalence 21/22	Place prevalence	ICB prevalence	Modelled prevalence	New diagnoses to meet Place average	new diagnoses to meet ICB average	New diagnoses to meet estimated prevalence
Asthma	61255	3754	6.13%	6.33%	6.17%		123	24	
COPD	65708	1192	1.81%	1.61%	1.49%	2.60%	-135	-216	520
Diabetes	52977	3936	7.43%	6.84%	6.39%	8.13%	-313	-552	372
Non-diabetic hyperglyaemia	52250	4341	8.31%	6.49%	5.87%	11.59%	-952	-1274	1714
Hypertension	65708	10170	15.48%	14.27%	13.21%		-796	-1488	
Atrial Fibrillation	65708	1531	2.33%	2.12%	2.02%	2.93%	-141	-203	396
Stroke and TIA	65708	1239	1.89%	1.60%	1.61%		-188	-182	
Coronary Heart Disease	65708	2074	3.16%	2.81%	2.65%		-226	-331	
Heart failure	65708	938	1.43%	0.97%	0.75%	1.57%	-300	-442	92
Left Ventricular Systolic Dysfunction	65708	487	0.74%	0.51%	0.30%		-151	-290	
Chronic Kidney Disease	52250	2077	3.98%	3.40%	3.21%		-303	-401	
Peripheral Arterial Disease	65708	323	0.49%	0.47%	0.44%		-16	-32	
Cancer	65708	2232	3.40%	3.30%	3.35%		-64	-33	
Palliative care	65708	368	0.56%	0.49%	0.43%		-49	-87	

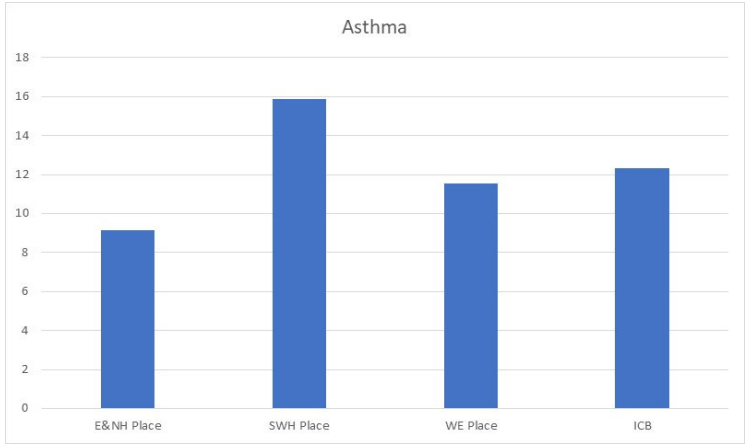
The table above shows the latest prevalence (2021/22 published August 20222) for the PCN alongside the place prevalence, ICB prevalence and the modelled prevalence for the PCN.

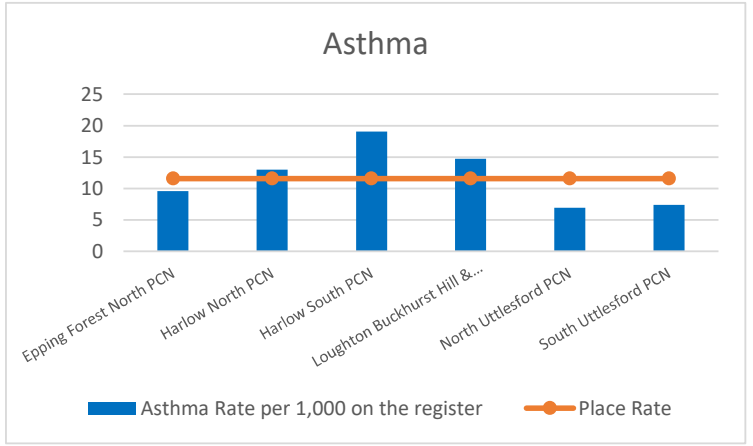
This table shows opportunities for further identification. It outlines the diagnoses to meet the place, ICB and estimated prevalence.

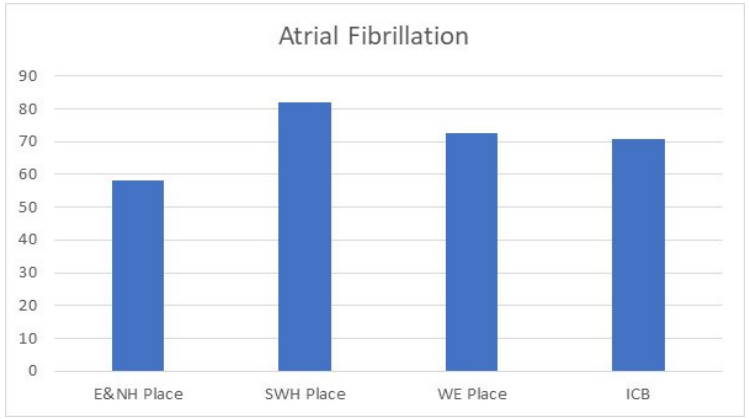
Within Ardens Manager there are case finding searches that can support PCN with identification.

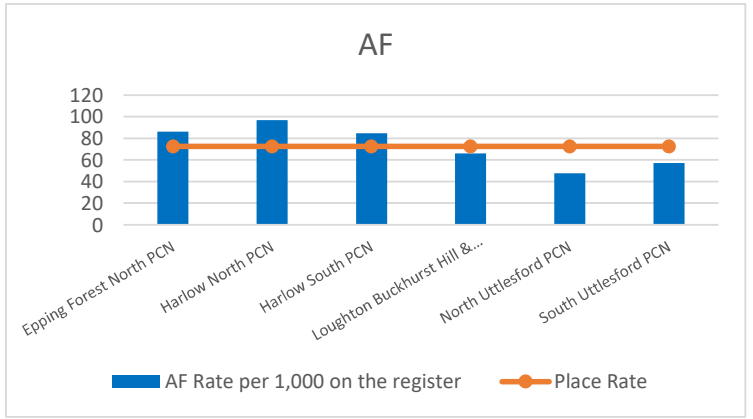
Source: QOF National Figures, HWE PHM Team

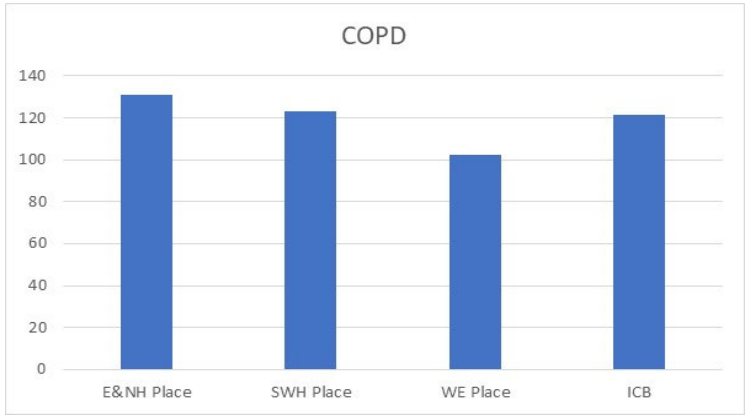
Emergency Admission Rates per 1,000 population on the Disease Register

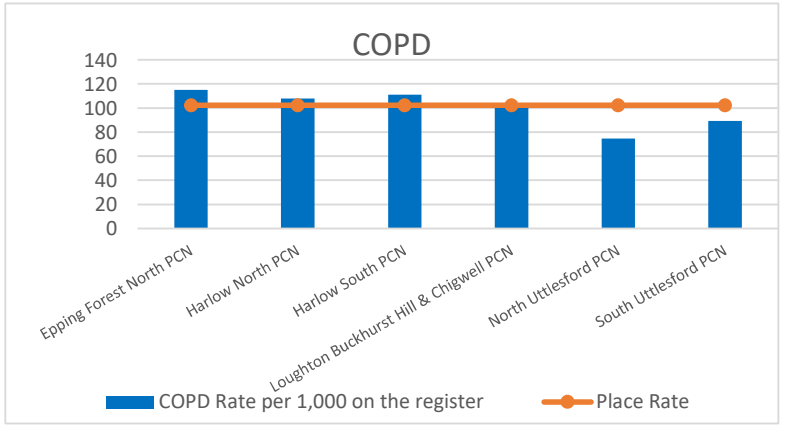












The charts on the left shows the Emergency Admissions Rates per 1,000 population on the disease register.

It shows the places compared with the ICB on the left and on the right it show the PCNs within a Place.

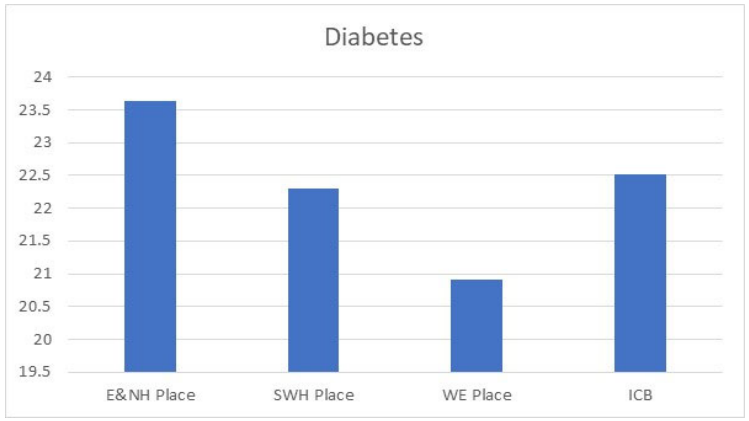
These are continued on the following place.

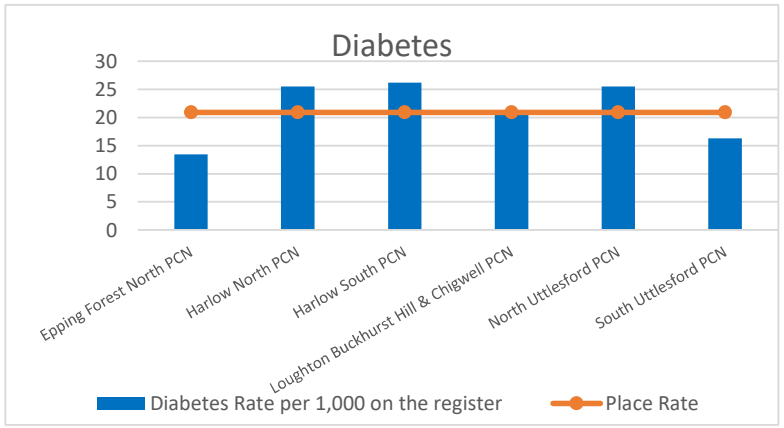
Rates may be high due to a number of factors which may include low identification.

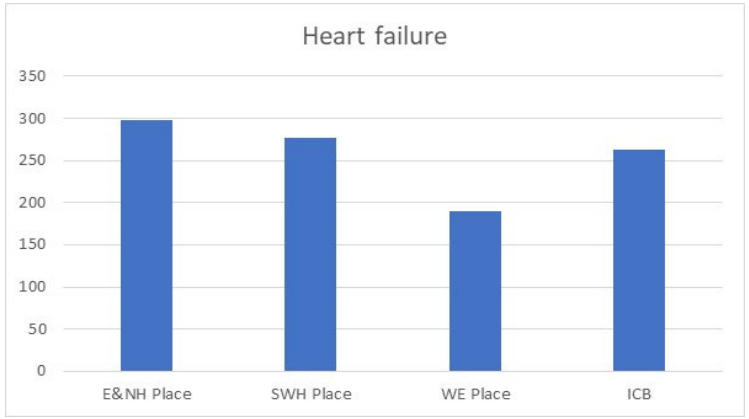
For Epping Forest North the data shows higher AF and COPD rates.

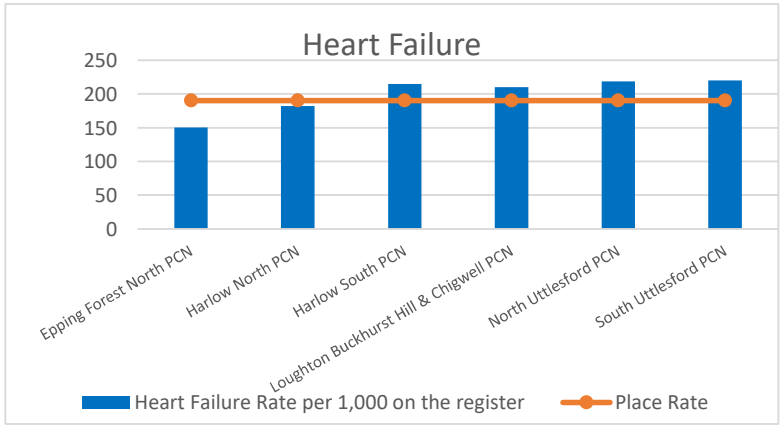
Source: HWE PHM Team, SUS data

Emergency Admission Rates per 1,000 population on the Disease Register









Source: HWE PHM Team, SUS data

Appendices

The following pages provide additional information breakdowns relating to the segmentation and population data

Contents:

- Public Health Cancer Screening

- Public Health Mortality

- Public Health Life Expectancy

Public Health - Cancer Screening

NHS Hertfordshire and West Essex Integrated Care Board

Cancer Screening

	Period	HERTFORDSHIRE AND WEST ESSEX	EPPING FOREST NORTH PCN	THE LIMES MEDICAL CENTRE	ONGAR HEALTH CENTRE	HIGH STREET SURGERY, EPPING	ABRIDGE SURGERY	MAYNARD COURT SURGERY	MARKET SQUARE SURGERY
Women, aged 25-49, with a record of cervical screening in the last 3.5 yrs (denominator includes PCAs)	2020/21	73.3	76.4	74.1	75.2	79.7	81.5	70.6	80.5
Women, aged 50-64, with a record of cervical screening in the last 5.5 yrs (denominator includes PCAs)	2020/21	78.2	78.2	75.7	76.8	81.1	80.9	81	79.6
Persons, 25-49, attending cervical screening within target period (3.5 year coverage, %)	2020/21	73	76.4	74.7	76.6	79.1	80.3	70.6	79.6
Persons, 50-64, attending cervical screening within target period (5.5 year coverage, %)	2020/21	77	77.5	76.3	76.6	78.4	76.3	79.2	79.1
Persons, 50-70, screened for breast cancer in last 36 months (3 year coverage, %)	2020/21	63.9	74	74.7	76	76.4	75.2	71.2	70.5
Persons, 50-70, screened for breast cancer within 6 months of invitation (Uptake, %)	2020/21	61.3	59	60	45.9	66.7	63.6	62.3	62.3
Persons, 60-74, screened for bowel cancer within 6 months of invitation (Uptake, %)	2020/21	72.1	71.1	72	74	75.4	71.7	66.5	66.2
Persons, 60-74, screened for bowel cancer in last 30 months (2.5 year coverage, %)	2020/21	68.8	66.4	67.6	69.7	69.6	66.6	60.3	62.3

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Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

Source: Public Health Team

Hertfordshire and West Essex Integrated Care Board

Mortality

	Period	WEST ESSEX CCG	EPPING FOREST NORTH PCN
Percentage of deaths that occur at home (All age)	2021	26.4	
PYLL - Neoplasms	2021	471.2	580.2
PYLL - Diseases of the circulatory system	2021	802.8	798.3
PYLL - All Cause	2021	1447.9	1641.7
Premature Mortality - Respiratory Disease	2021	10	
Premature Mortality - Liver Disease	2021	12	
Premature Mortality - Cardiovasular Disease	2021	57.2	54.2
Premature Mortality - Cancer	2021	93.5	110.5
Premature Mortality - All Cause	2021	270.1	291.6

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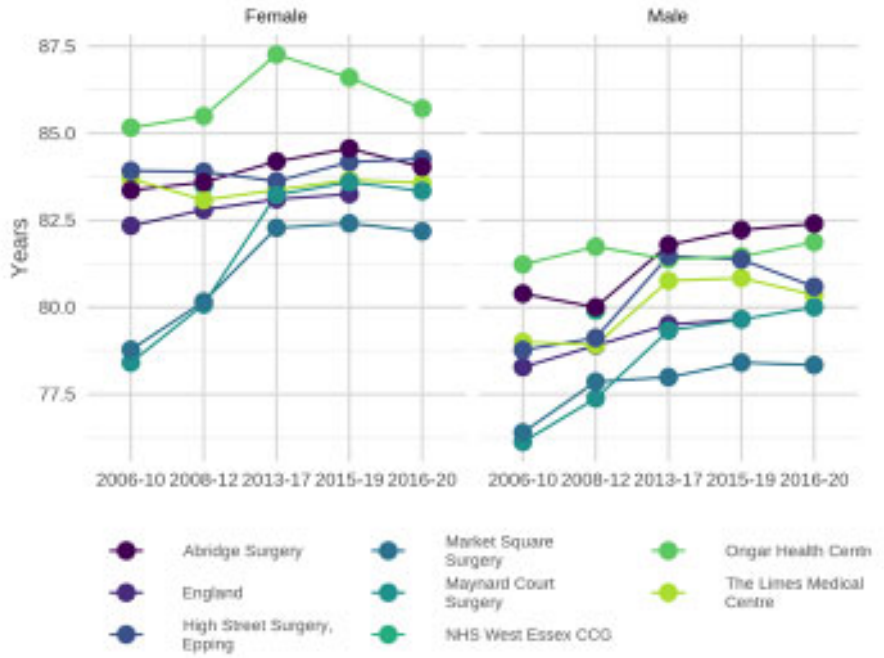
Source: Public Health Team

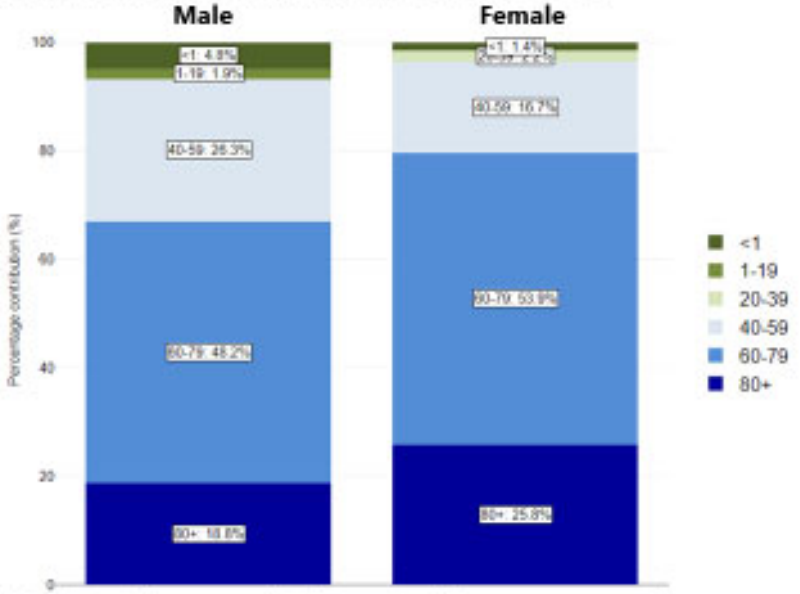
Public Health - Life Expectancy

Hertfordshire and West Essex Integrated Care Board

Life Expectancy



Contribution of different age bands between the most and least deprived areas within Epping Forest



Labels inside bar indicate contribution to the life expectancy gap in years for each age group. This can be used to target interventions at age groups with the biggest inequality in life expectancy. The gap in the life expectancy at birth for females is 4.4 years and for 5.2 males is years.

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Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

Source: Public Health Team

Hertfordshire and
West Essex Integrated
Care System

NHS
Hertfordshire and
West Essex
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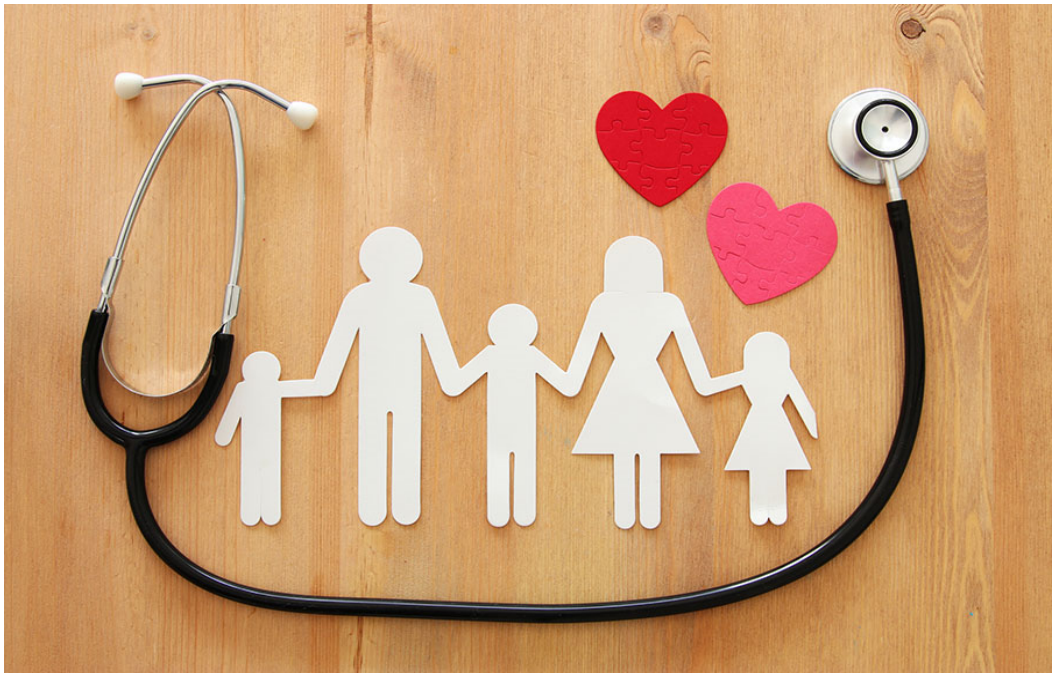

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