Hertfordshire and West Essex Integrated Care System

NHS Hertfordshire and West Essex Integrated Care Board

Primary Care Networks
Overview Pack

STEVENAGE SOUTH PCN

Pack produced - January 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

Stevenage South PCN has a similar population profile compared to England expect in the age categories 0-14 and 30-44 which is slightly higher. Over 50% of people live within the 5 most deprived deciles (1-5). 28.4% population have at least 1 Long Term Condition. 5% have more than 5 LTCs compared to 5.6% for the ICB. The population pyramid shows a similar profile to England for those living with LTCs .

Wider determinants analysis from Public Health Evidence and Intelligence shows Stevenage South is one of the most deprived PCNs within the ICB across all indicators, except Environment and Housing and Services, which has a medium to good ranking.

The spread of patients for Stevenage South PCN indicates 17.18% 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 Stevenage 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 ~14k to ~17k.

When analysing the underlying Segmentation Model data the conditions with highest per 1,000 registered prevalence that are highlighted for Stevenage South PCN are COPD and Obesity.

Urgent & Emergency Care in 2022/23 for Stevenage South PCN A&E Attendance rates per 1,000 population, is higher than the place rate.

When comparing the Ambulatory Care Sensitive rates per 1,000 population between places, the East & North place has the lowest rate in the ICB. Within East & North place, Stevenage South has a higher rate per 1,000 population, than the average.

When looking at the ACS conditions for Stevenage South the highest volume and cost is within the End of Life, Frailty and Dementia in the over 65 age group and the next highest volume and cost is for the over 65 age group in the Advanced Disease and Complexity segment as well. It is to be noted that under End of Life, Frailty and Dementia and Advanced Disease and Complexity segments, there is a notable spread across 41-64 age group for volume and cost.

Ambulatory Care Sensitive conditions of note for people aged over 65 within the Advanced Disease and Complexity, is highlighted as Heart Failure and COPD, with the highest volume and cost. For those people aged over 65 within the End of Life, Frailty & Dementia segment, Heart Failure and COPD, is highlighted with the highest volume and cost.

14.8% of the general population in HWE ICB live within the 4 most deprived deciles, whilst 16.1% of the population in the EoL, severe frailty and severe dementia segment live within the 4 most deprived deciles.

In Stevenage South 38.5% of the population in the EoL, severe frailty and severe dementia segment live within the 4 most deprived deciles.

As we would expect the average number of acute and chronic conditions is significantly higher within this segment that the general population as are all activity measures. The average number of Chronic Conditions for people within Stevenage South PCN is lower than the ICB, and the data shows lower usage of GP services.

Within this segment we can see the presence of Obesity, Chronic Cardiac Disease, Heart Disease, Diabetes and Chronic Respiratory Disease being highlighted which chimes with the reason for admission within previous analysis for ACS conditions. It is to be noted that Hypertension is high across all deciles and just lower than the ICB.

For Stevenage South the data shows higher Asthma, COPD, Diabetes and Heart Failure rates which was identified as a theme within the ACS analysis.

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

STEVENAGE SOUTH PCN

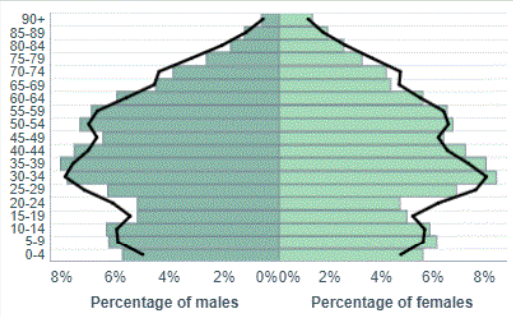
Snapshot as at: 30/06/2021

Registered population		Demographics				Prevalence		Acute utilisation		Covid	
% of total	100.0%	% White	72.6%	% IMD top	4.2%	% with 1+ conditions	28.4%	% of annual activity (total 86,670)	100.0%	% one or more at risk conditions	17.2%
% of annual change	13.7%	% BAME	11.9%	% IMD bottom	19.1%	% with 5+ conditions	2.9%	% of annual cost (total £26M)	100.0%	% two or more at risk conditions	6.6%

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

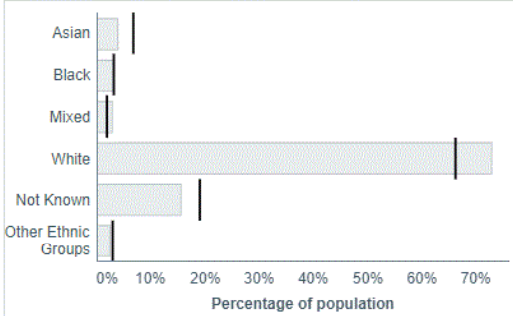
Choose benchmark: England

Population pyramid



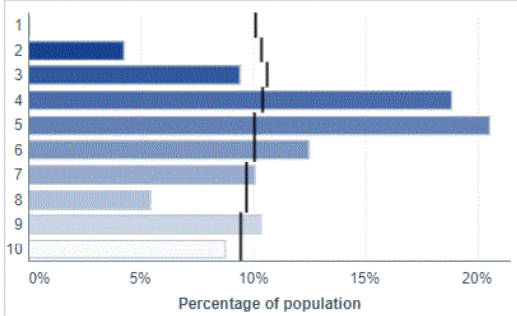
Black line represents the **England** average

Population proportion by ethnic category



Black line represents the **England** average

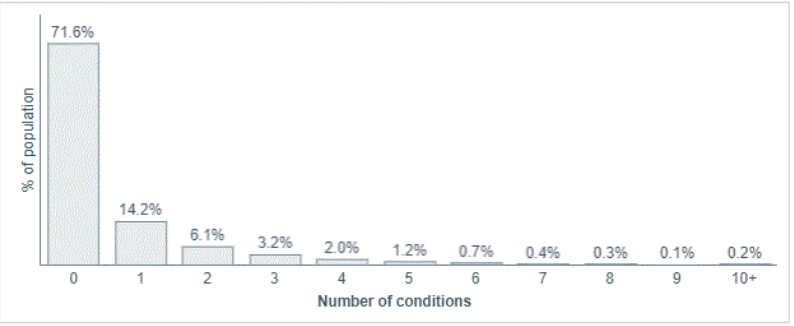
Population proportion by IM Deprivation decile



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

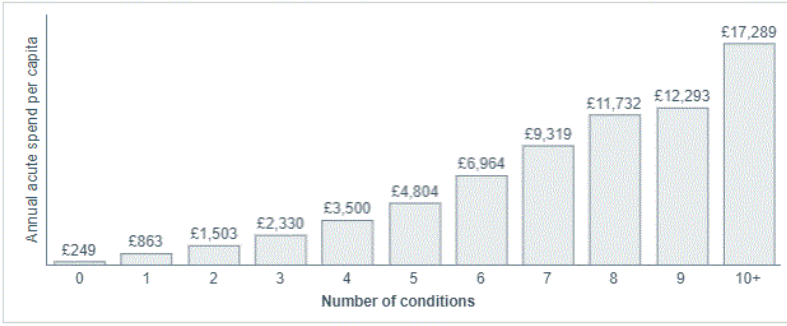
Prevalence - Snapshot as at: 30/06/2021

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.

Stevenage South PCN has a similar population profile compared to England expect in the age categories 0-14 and 30-44 which is slightly higher. Over 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
STEVENAGE SOUTH PCN

Snapshot as at: 30/06/2021

Registered population		Demographics				Prevalence		Acute utilisation		Covid	
% of total	24.6%	% White	86.6%	% IMD top	3.9%	% with 1+ conditions	100.0%	% of annual activity (total 43,035)	49.7%	% one or more at risk conditions	52.9%
% of annual change	15.8%	% BAME	10.1%	% IMD bottom	18.7%	% with 5+ conditions	5.0%	% of annual cost (total £11M)	42.5%	% two or more at risk conditions	16.6%

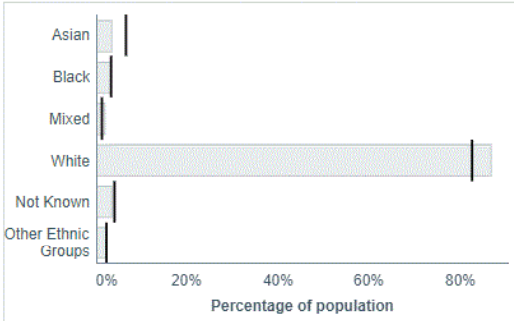
Population demographics - Snapshot as at: 30/06/2021

Choose benchmark: England

Population pyramid

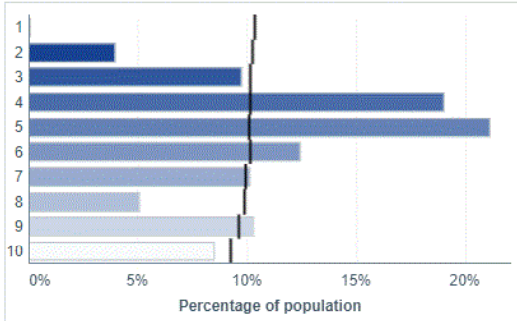
Black line represents the **England** average

Population proportion by ethnic category



Black line represents the **England** average

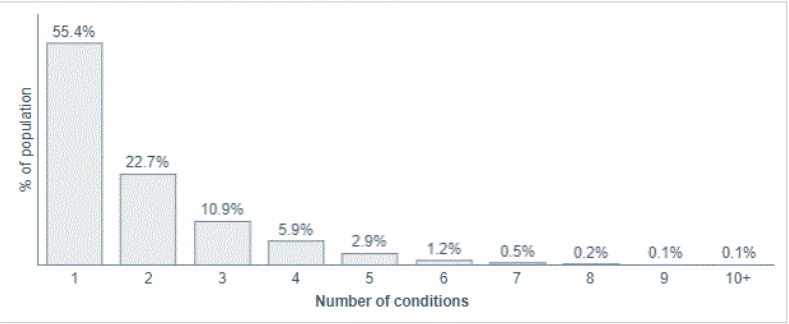
Population proportion by IM Deprivation decile



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

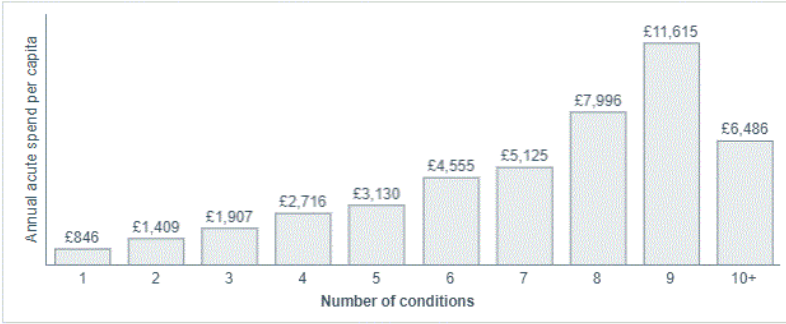
Prevalence - Snapshot as at: 30/06/2021

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 28.4% population have at least 1 Long Term Condition. 5% have more than 5 LTCs compared to 5.6% for the ICB.

The population pyramid shows a similar profile to England for those living with LTCs.

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 STEVENAGE SOUTH PCN		BEDWELL MEDICAL CENTRE			KING GEORGE & MANOR HOUSE SURGERIES			KNEBWORTH & MARYMEAD MEDICAL PRACTICE			SHEPHALL HEALTH 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
Clinical Diagnosis	Detection rate Cancer	0.63	2020/21	No Trigger	0.464	2020/21	No Trigger	0.615	2020/21	No Trigger	0.607	2020/21	No Trigger
Coronary heart disease	% AF anticoagulation therapy CHADS2-VASc score >1	91.2	2020/21	Positive	94.8	2020/21	Positive	90.9	2020/21	Positive	94	2020/21	Positive
	% CHD aged <=79 BP reading 140/90mmHg or less	45.9	2020/21	Level 1	77.9	2020/21	No Trigger	51.2	2020/21	Level 1	51.3	2020/21	Level 1
	% CHD cholesterol 5 mmol/l or less	82.3	2021/22	Positive	67.6	2021/22	No Trigger	51.8	2021/22	No Trigger	0	2020/21	No Data Available
	% hypertension aged <=79 BP reading 140/90mmHg or less	45.1	2020/21	Level 1	60.1	2020/21	Level 1	44.8	2020/21	Level 1	49.1	2020/21	Level 1
Diabetes	% Diabetes aged >=40 years no CVD history without moderate or severe frailty treated with statin	91.2	2020/21	No Trigger	75.9	2020/21	Level 1	79.5	2020/21	Level 1	79.7	2020/21	Level 1
	% Diabetes without moderate or severe frailty BP 140/80 mmHg or less	48.1	2020/21	Level 1	49	2020/21	Level 1	54	2020/21	Level 1	39.8	2020/21	Level 1
	% diabetes without moderate or severe frailty IFCC-HbA1c is 58 mmol/mol or less	48.9	2020/21	Level 2	52.3	2020/21	Level 1	55.2	2020/21	Level 1	46.9	2020/21	Level 2
Exception Rating	Overall Personalised Care Adjustment Rate	0.04	2020/21	No Trigger	0.062	2020/21	No Trigger	0.036	2020/21	No Trigger	0.035	2020/21	No Trigger
Medicines Management	% antibiotics Co-amoxiclav, Cephalosporins, Quinolones	4.8	2021/22 Q4	Positive	10.1	2021/22 Q4	Level 1	6.6	2021/22 Q4	No Trigger	7.5	2021/22 Q4	No Trigger
	% Naproxen and Ibuprofen	71.5	2021/22 Q4	No Trigger	74.7	2021/22 Q4	No Trigger	74.8	2021/22 Q4	No Trigger	69.5	2021/22 Q4	No Trigger
	Antibacterial Items/Star Pu	0.818	2021/22 Q4	Positive	0.799	2021/22 Q4	Positive	0.903	2021/22 Q4	Positive	0.918	2021/22 Q4	Positive
	Hypnotics ADQ/Star Pu	0.497	2021/22 Q4	No Trigger	0.487	2021/22 Q4	No Trigger	0.361	2021/22 Q4	No Trigger	0.405	2021/22 Q4	No Trigger
	Oral NSAIDS ADQs/STAR-PU	1.96	2021/22 Q4	No Trigger	3.691	2021/22 Q4	No Trigger	3.671	2021/22 Q4	No Trigger	6.64	2021/22 Q4	No Trigger
Mental Health	% first choice generic SSRIs	68.5	2021/22 Q4	No Trigger	71.6	2021/22 Q4	No Trigger	70.7	2021/22 Q4	No Trigger	73.4	2021/22 Q4	No Trigger
	% MH comprehensive care plan	37.5	2020/21	Level 1	95.4	2020/21	No Trigger	52.1	2020/21	Level 1	31.7	2020/21	Level 1
	% SMI alcohol record	40.5	2020/21	Level 1	37.2	2020/21	Level 2	95.7	2018/19	No Trigger	80.3	2018/19	Level 1
	% SMI BP record	55.4	2020/21	Level 1	94.4	2020/21	No Trigger	60.4	2020/21	Level 1	49.2	2020/21	Level 1
	Dementia Face to Face review	35.4	2020/21	Level 1	71.8	2020/21	No Trigger	83.6	2020/21	No Trigger	27.9	2020/21	Level 1
	Select antidepressants ADQs/STARPU	2.016	2021/22 Q4	No Trigger	1.639	2021/22 Q4	No Trigger	1.912	2021/22 Q4	No Trigger	1.56	2021/22 Q4	No Trigger
Patient Experience	Confidence and trust in healthcare professional	97.3	2020/21	No Trigger	97.4	2020/21	No Trigger	93.5	2020/21	No Trigger	97	2020/21	No Trigger
	Frequency seeing preferred GP	26.6	2020/21	No Trigger	27.4	2020/21	No Trigger	31.5	2020/21	No Trigger	53.4	2020/21	No Trigger
	Healthcare professional treating with care and concern	86.7	2020/21	No Trigger	90.2	2020/21	No Trigger	82.2	2020/21	No Trigger	90	2020/21	No Trigger
	Overall experience of your GP practice	83.3	2020/21	No Trigger	75.3	2020/21	No Trigger	77.2	2020/21	No Trigger	93.4	2020/21	No Trigger
	Satisfaction with appointment times	64.7	2020/21	No Trigger	59.3	2020/21	No Trigger	56.1	2020/21	No Trigger	76.5	2020/21	No Trigger
Public Health	% Child Imms DTaP/IPV/Hib/HepB (age 1 year)	93.4	2020/21	Level 1	98.5	2020/21	No Trigger	95.8	2020/21	No Trigger	99.1	2020/21	No Trigger
	% Child Imms Hib/MenC booster	90	2020/21	Level 1	96.7	2020/21	No Trigger	96.3	2020/21	No Trigger	94.7	2020/21	Level 1
	% Child Imms MMR (Age 2 yrs)	90.5	2020/21	Level 1	96.7	2020/21	No Trigger	95.8	2020/21	No Trigger	92.7	2020/21	Level 1
	% Child Imms PCV Booster	90	2020/21	Level 1	96.7	2020/21	No Trigger	95.3	2020/21	No Trigger	94.7	2020/21	Level 1
	Cervical Screening	76.5	2021/22 Q4	Level 1	69.3	2021/22 Q4	Level 1	79.5	2021/22 Q4	Level 1	76.6	2021/22 Q4	Level 1
Respiratory	% Asthma review in last 6 mths	37.9	2020/21	Level 1	74.6	2020/21	No Trigger	66.2	2020/21	Level 1	82.9	2020/21	No Trigger
	% Asthma spirometry and one other objective test	0	2020/21	Level 2	0	2020/21	Level 2	0	2020/21	Level 1	100	2020/21	No Trigger
	% COPD with review in last 12 mths	76.7	2020/21	Level 1	89.1	2020/21	Level 1	86.1	2020/21	Level 1	91.8	2020/21	No Trigger
	% LTC patients who smoke	16.9	2020/21	No Trigger	12.3	2020/21	No Trigger	12.6	2020/21	No Trigger	15.4	2020/21	No Trigger
	% LTC Smoker offer support	68.3	2020/21	Level 1	94.2	2020/21	Level 1	99.7	2020/21	No Trigger	99.3	2020/21	No Trigger
	% Smoking patients over 15 recorded	73.3	2021/22	No Trigger	75.8	2021/22	No Trigger	75.8	2021/22	No Trigger	0	2015/16	No Data Available
	% Smoking status recorded	92.7	2020/21	No Trigger	94.3	2020/21	No Trigger	94.2	2020/21	No Trigger	98.8	2020/21	Positive
	% w. MRC dyspnoea score >=3 w. offer of referral to pulm. rehab. Clinic	65.6	2020/21	Level 1	97.1	2020/21	No Trigger	61.5	2020/21	Level 1	100	2020/21	No Trigger

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 Stevenage South PCN an estimated:

- 15.9% of children live in poverty.
- 12.7% of older people live in poverty.
- 12.6% of households live in fuel poverty.
- 7.2% of households are overcrowded.
- 33.7% of people aged 65 and over live alone.
- 0.8% of people cannot speak English well.
- 4.4% of working age people are claiming out of work benefits.
- 21.1% of children aged 4-5 and 34.7% of children aged 10-11 are overweight.

PH.Intelligence@hertfordshire.gov.uk

Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

The above provides a summary of the wider determinants of health for Stevenage South'

Wider determinants analysis from Public Health Evidence and Intelligence shows Stevenage South is one of the most deprived PCNs within the ICB across all indicators, except Environment and Housing and Services, which has a medium to good ranking.

Source: Public Health Team

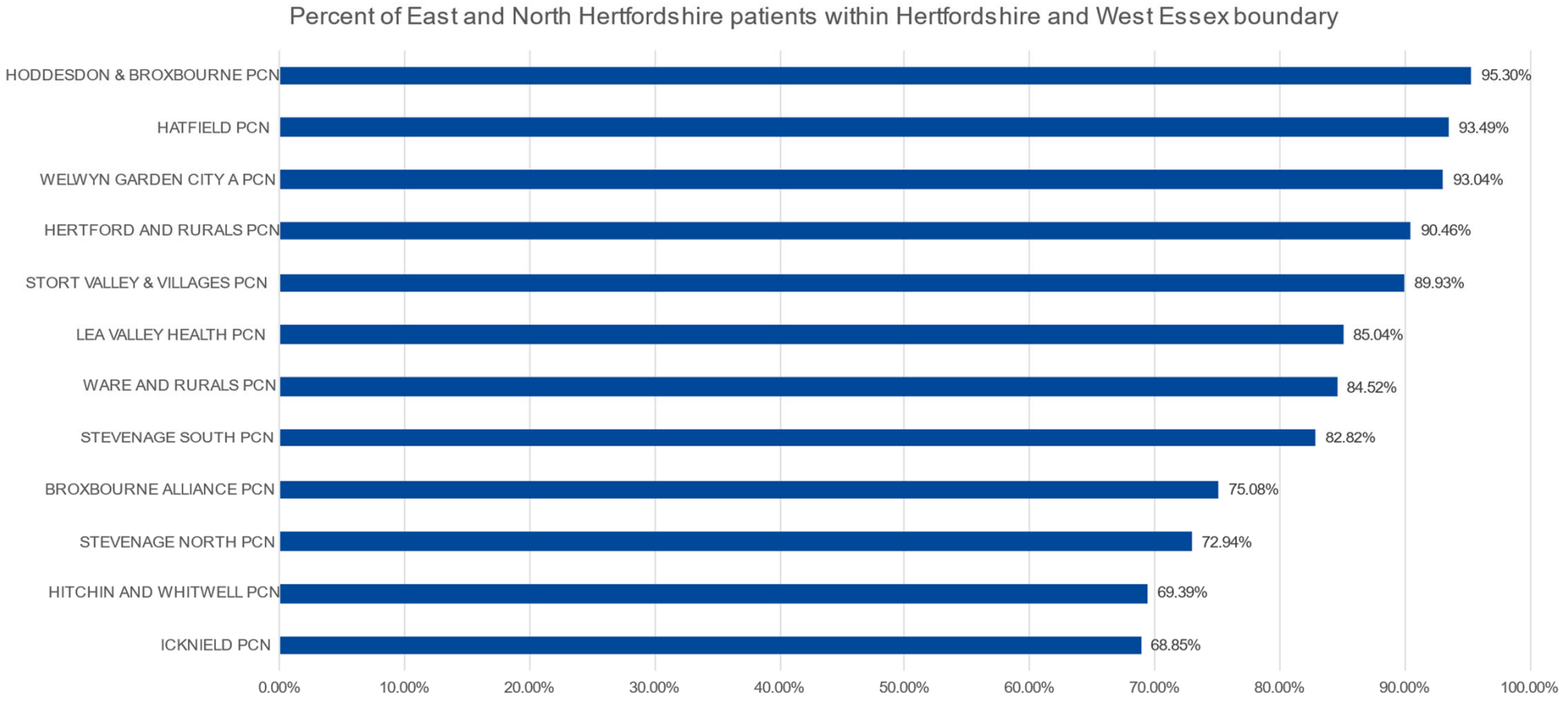
Spread of Patients

NHS 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.

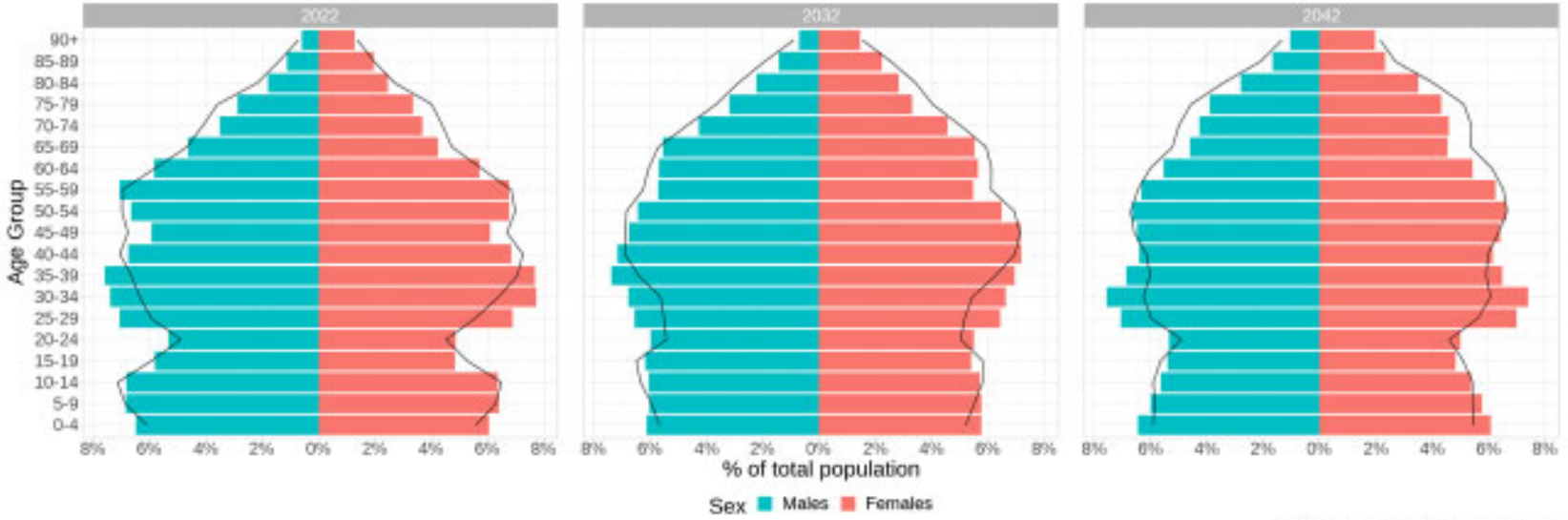
The spread of patients for Stevenage South PCN indicates 17.18% of the population are not located within the Hertfordshire & West Essex boundaries; this means that this population may be accessing services outside of the ICB and the impact of coterminous alignment with neighbouring ICBs must be taken 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 Stevenage 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	5,552	5,318	5,740
Under 24	26,471	26,196	25,579
24-64	48,176	46,797	47,931
65+	13,964	16,736	18,148
85+	2,205	2,635	3,219

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Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

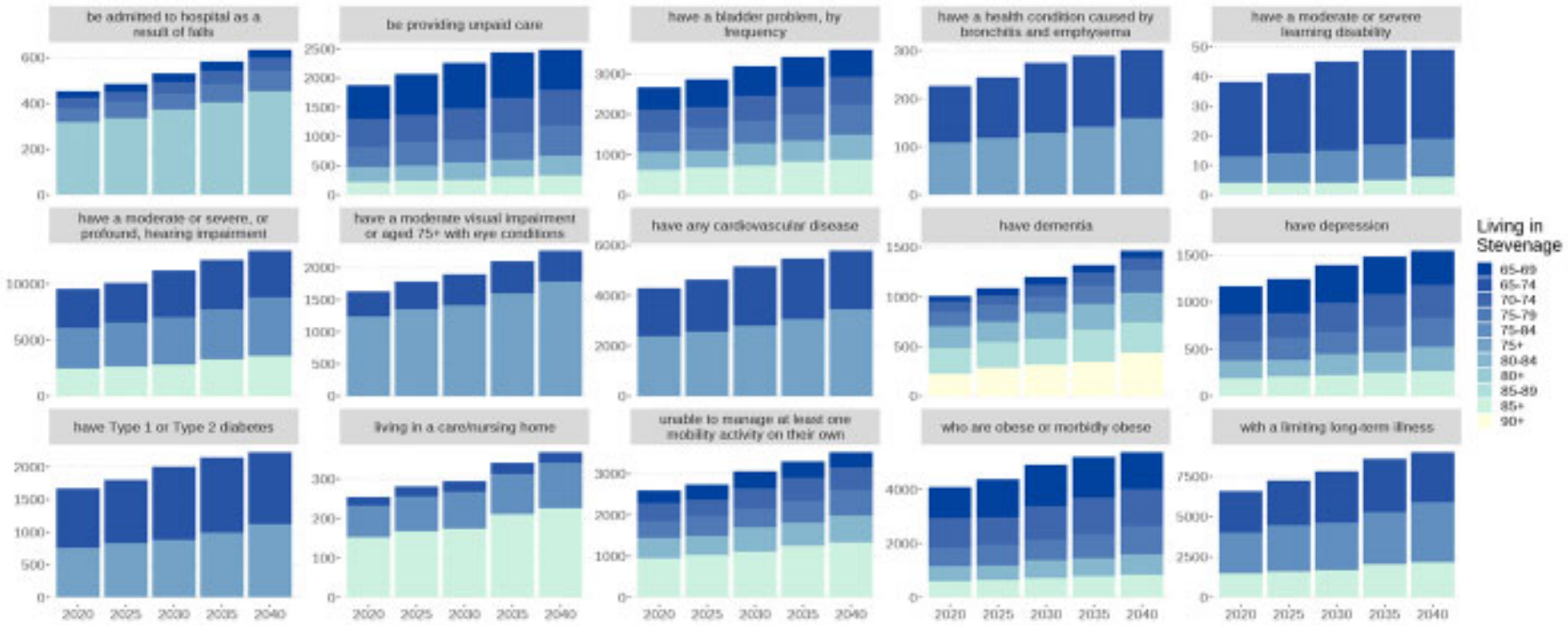
Expected population growth for Stevenage district by the Local Authority, forecasts continued increase between 2023 through to 2034 which will bring additional demands for healthcare. Projections show an expected increase in the number of people over 65 from ~14k to ~17k.

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 Public Health Evidence & Intelligence Epidemiology

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

NHS Hertfordshire and West Essex Integrated Care Board

Optum

HWE

Segment & Outcomes Framework Documentation

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PHM Segment Model - Overview

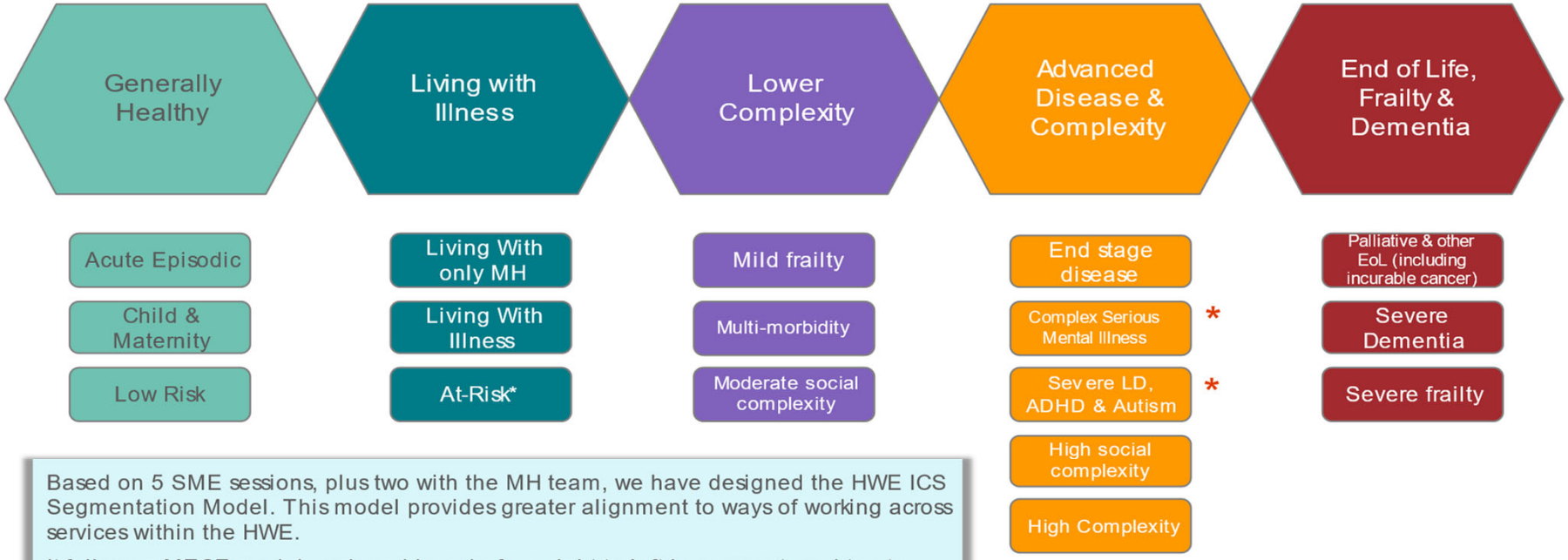
Hertfordshire and West Essex Integrated Care Board

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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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.

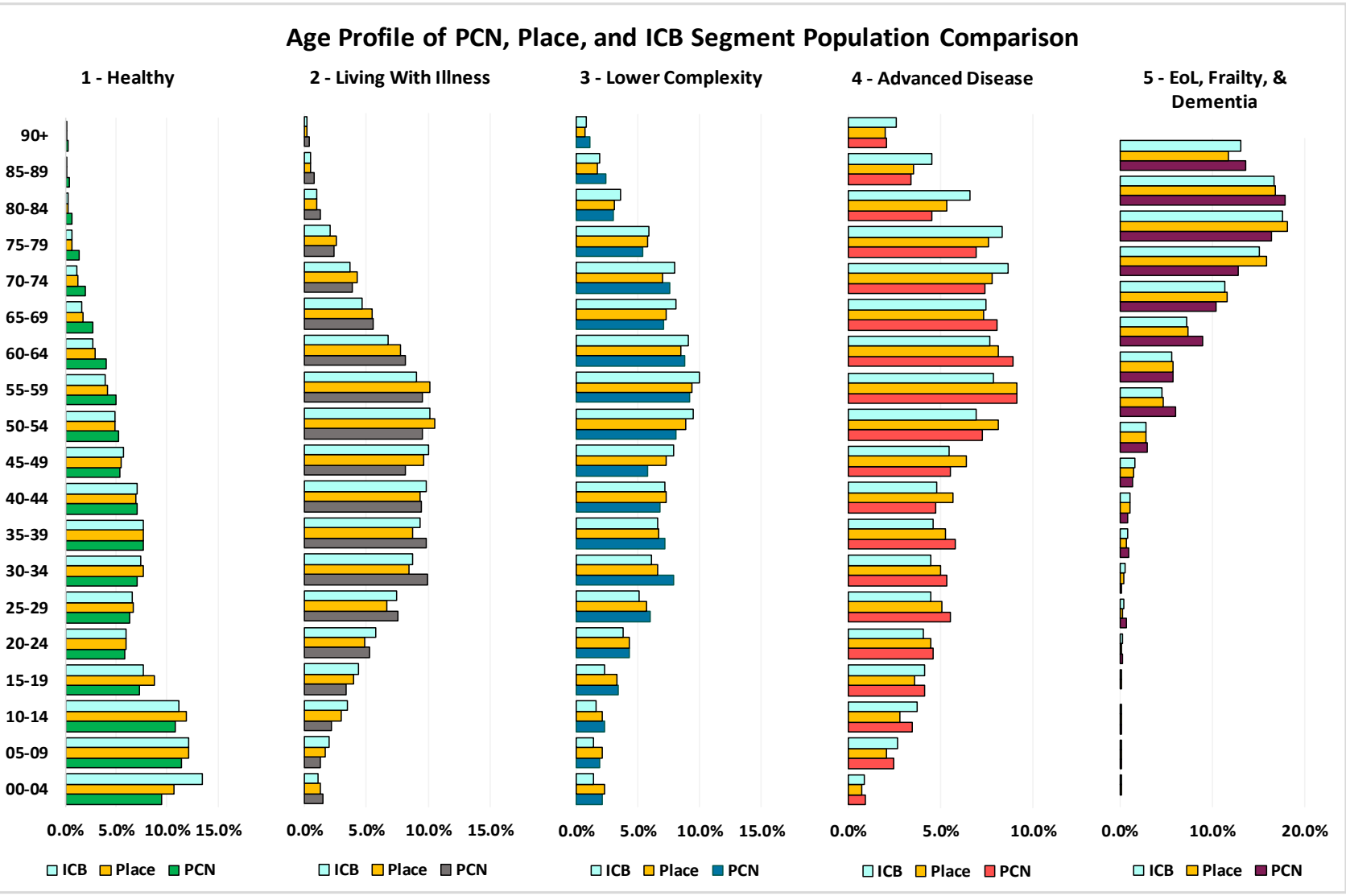
Whole Population Outcomes

- 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

Age Profile and Health Segment



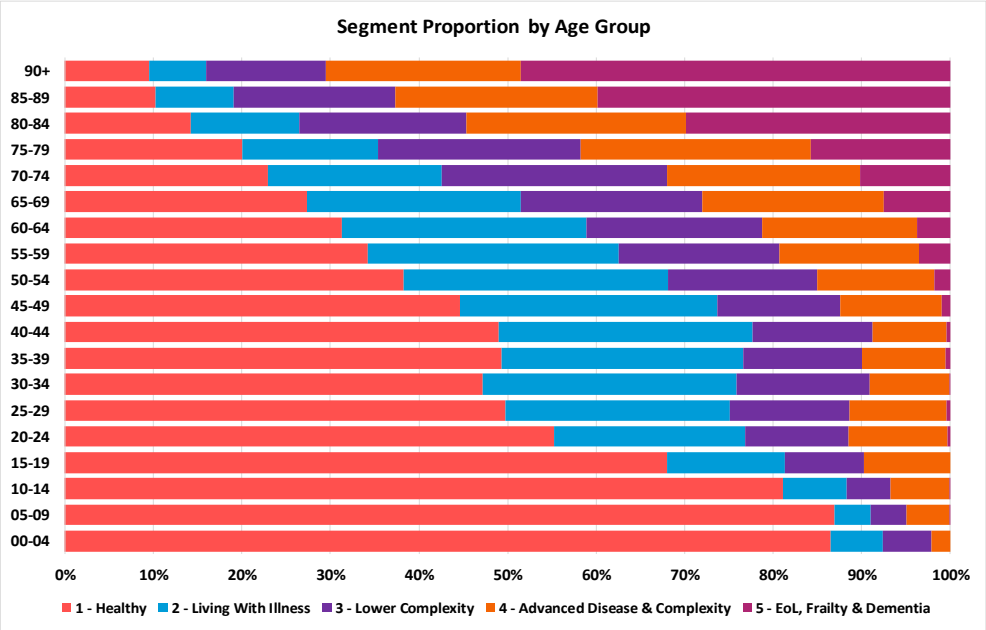
Each registered person is assigned to a segment and this can be cut by age group and also geographically by Place or PCN.

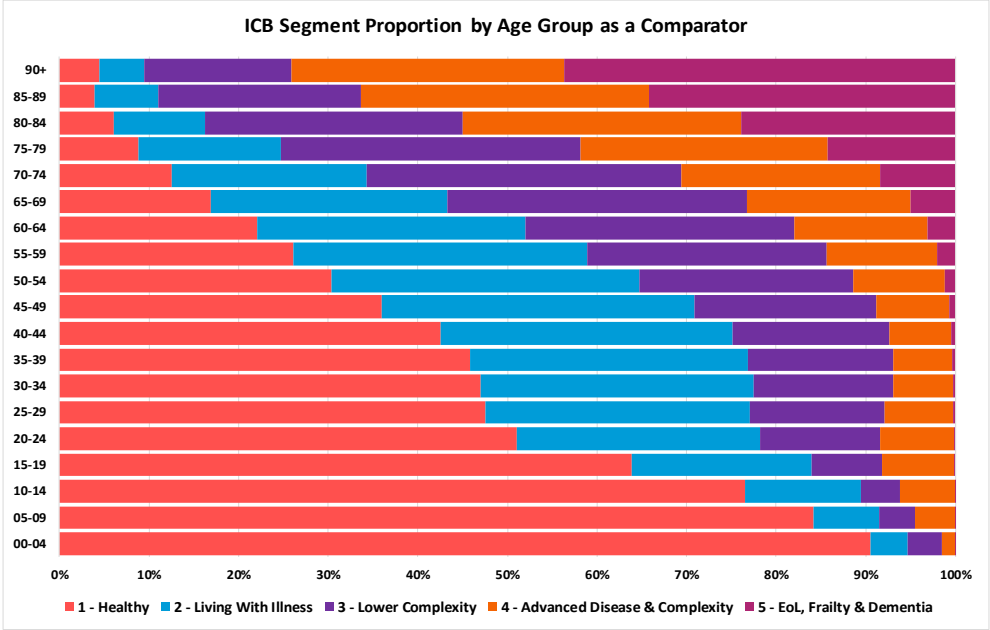
The above looks at the breakdown by age of people within each segment. It provides the PCN value against the Place and ICB value.

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

Demographic Breakdowns - Segment & Deprivation Quintiles

NHS Hertfordshire and West Essex Integrated Care Board



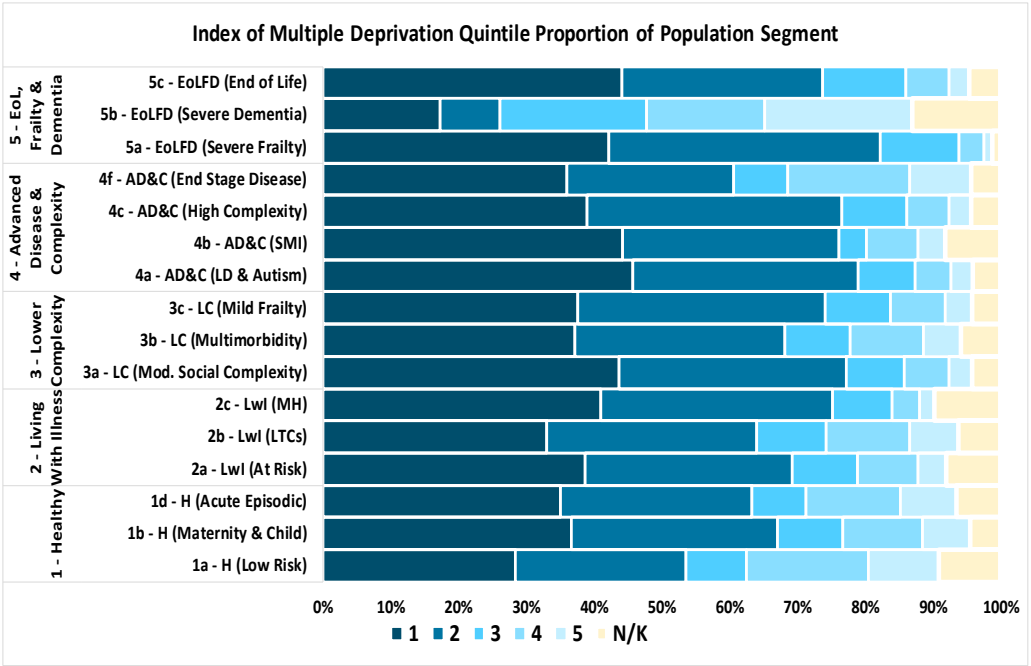


The ICB Health Segments here are broken down by total population and 5 year age groups; as expected with age the proportion of people within the healthy segment decreases.

The illustration on the left represents the PCN breakdown whilst the one on the rights shows the ICB breakdown.

Overall Stevenage South has a slightly lower profile for all age categories for segments 2 to 4, compared to the ICB population.

The illustration bottom right shows the Sub-Segments by Deprivation Quintile, here we can see the levels of deprivation illustrated within the earlier wider determinants slide demonstrated within this breakdown.



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.

When analysing the underlying Segmentation Model data the conditions with highest per 1,000 registered prevalence that are highlighted for Stevenage South PCN are COPD and Obesity.

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

Continued

NHS Hertfordshire and West Essex Integrated Care Board

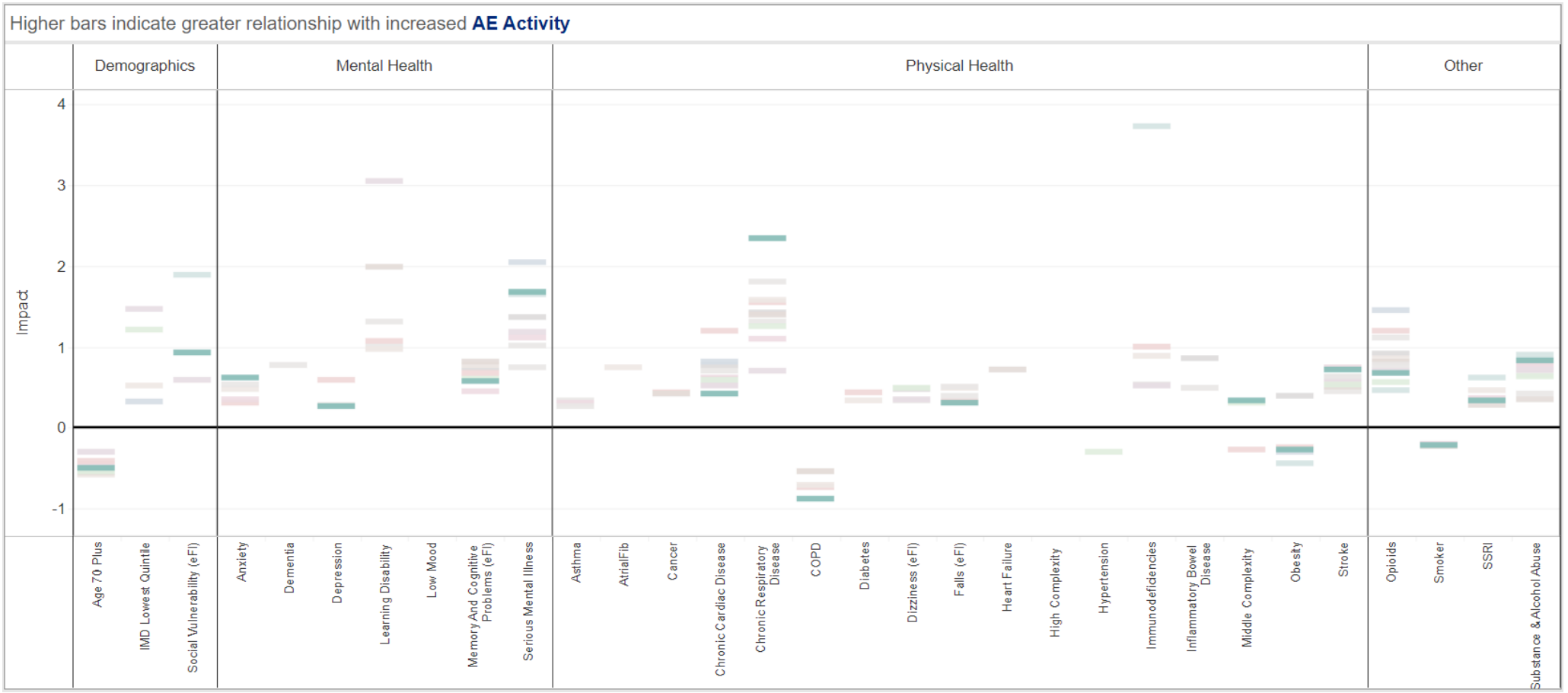
PCN NAME	ASD	Cerebral Palsy	Chronic Respiratory Disea	Cystic Fibrosis	Huntingtons Disease	Inflammatory Bowel Dise	Kidney Transplant	Metastatic Cancer	Multiple Sclerosis	Muscular Dystrophy	Myasthenia Gravis	Osteoporosis	Other Neurological Condi	Parkinsons Disease	Rheumatoid Arthritis	Lupus (SLE)	Sickle 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

On this page of conditions, we can see that the PCN has higher prevalence of Chronic Respiratory Disease, Inflammatory Bowel Disease, Cerebral Palsy, Kidney Transplant, Metastatic Cancer and High BP.

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

PCN Benchmarking - A&E Activity

NHS Hertfordshire and West Essex Integrated Care Board



The charts in the next two pages show activity for the PCN compared against all other PCNs at the Place level.

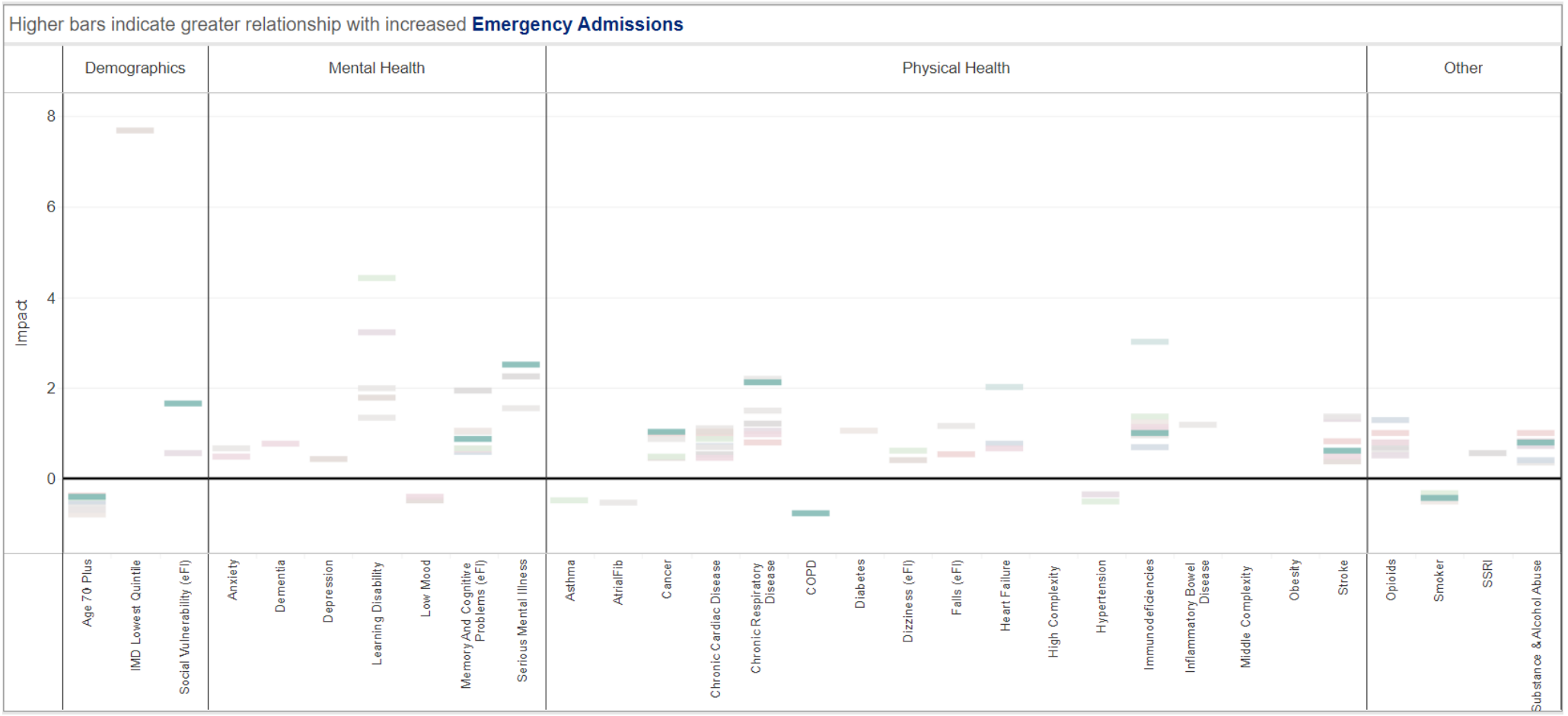
The Model - A statistical regression model is used to decide which Risk Factors correlate with a significant impact on the selected targets as presented in these charts, the height of the bar for each PCN relates to the correlation of a Risk Factor and an increase in impact on the selected target condition.

The impact for the PCN is given and will vary for each characteristic; a wide variance may indicate differences in care or good practice which could be shared; some impacts are positive. Higher bars indicate a greater relationship with increased A&E attendances

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

PCN Benchmarking - Emergency Admissions

Hertfordshire and West Essex Integrated Care Board



This uses the same principles as the previous slide but looks at Emergency Admission.

Learning Disability admissions shows the most variance across all PCNs, meaning that characteristic has a high impact on emergency admissions.

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

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 – East & North

A&E Summary – Who are attending and why?

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

218,296 A&E Attendances in 2021/22

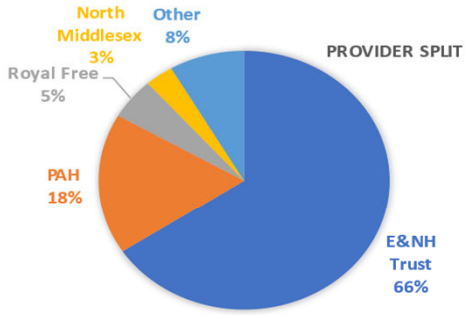
Children = 56,287 (25.8%)
Adults = 111,219 (50.9%)
Older People = 50,790 (23.3%)

128,296 people attended A&E in 2021/22

Children = 34,197 (26.5%)
Adults = 68,101 (52.8%)
Older People = 26,873 (20.8%)

57,811 26.5% of attendances resulted in no investigation and no treatment (includes Uncoded Activity)

Children = 19,082 (34%)
Adults = 30,658 (27.6%)
Older People = 6,944 (15.9%)



This translates to 1 in 5 people registered with East & North attending A&E

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

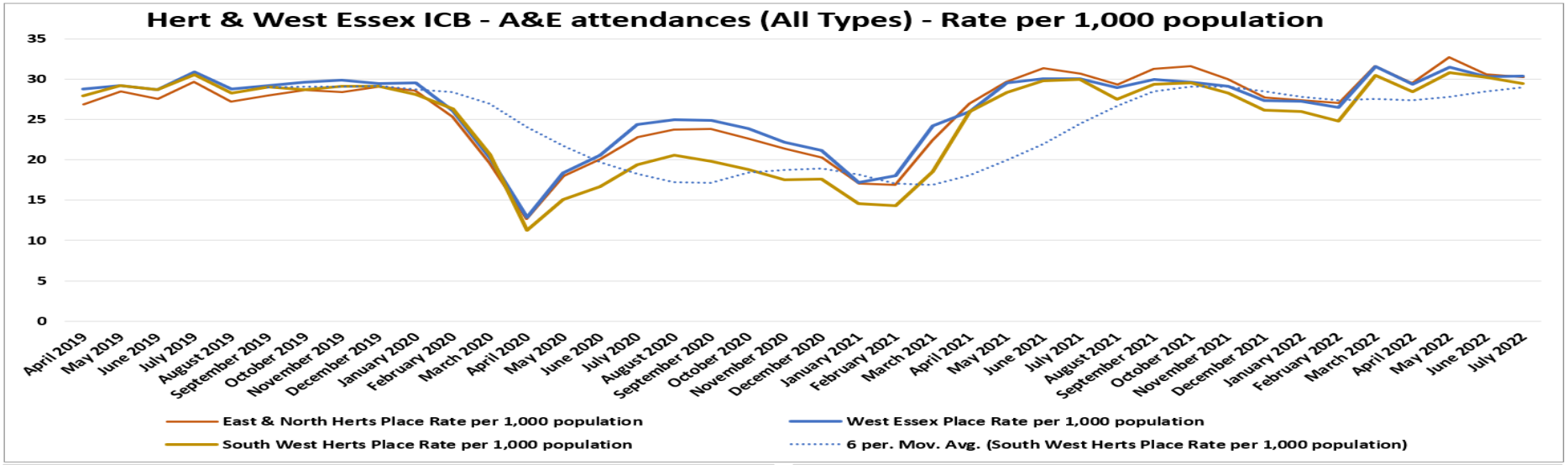
Hertfordshire and West Essex Integrated Care System

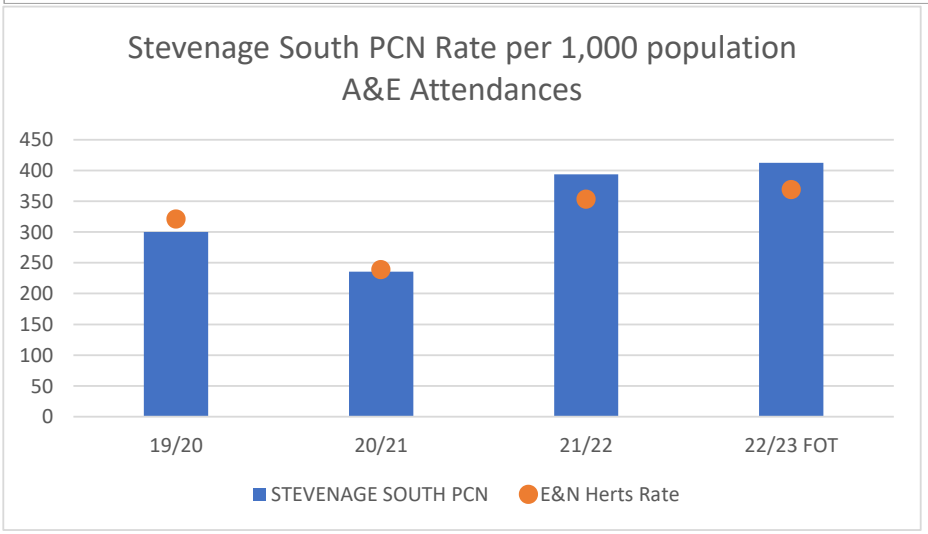
2

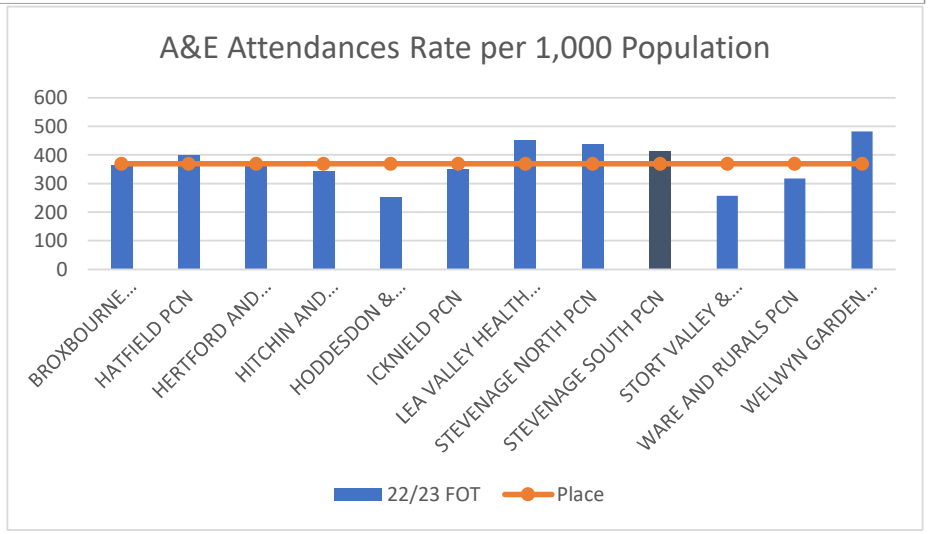
Source: SUS

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 Stevenage South PCN A&E Attendance rates per 1,000 population, is higher than the place rate.

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

Unplanned Hospitalisation for Chronic Ambulatory Care Sensitive Conditions

NHS 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 Stevenage South PCN.

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

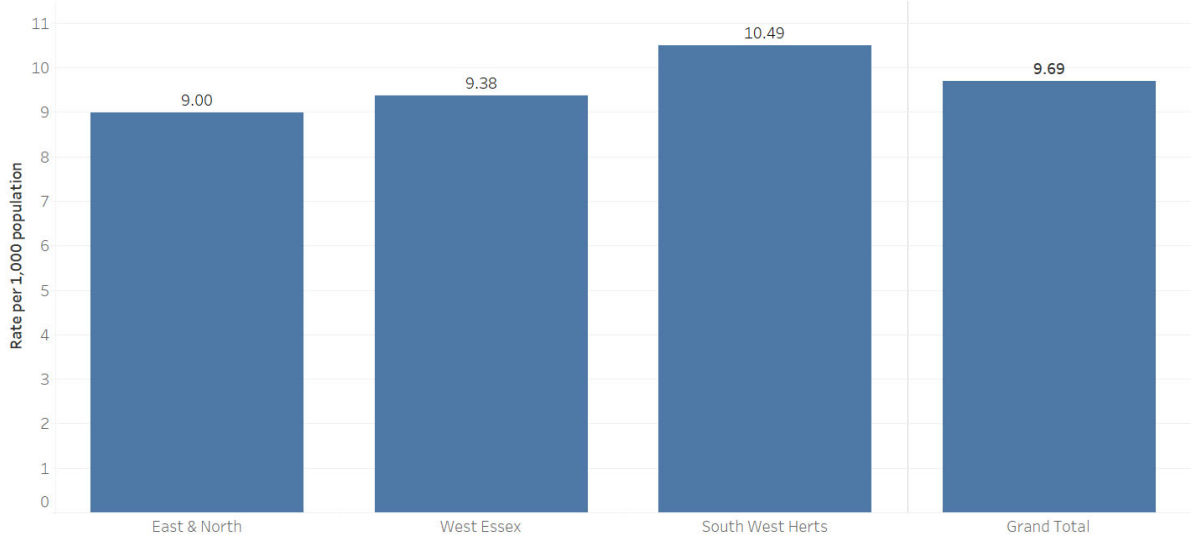
Chronic ACS admissions
April 2021 - September 2022
Herts & West Essex ICB

Chronic ACS	Admissions	People	Average cost of admission	Tariff Total Payment National
CVD: AF and Flutter	48	42	£2,084	£100,034
CVD: Angina	10	10	£1,796	£17,962
CVD: Congestive Heart Failure	121	91	£4,199	£508,101
CVD: Hypertension	20	19	£980	£19,609
Diseases of the blood	26	25	£2,693	£70,029
Mental and Behavioural Disorders	10	9		
Neurological Disorders	78	35	£1,693	£132,084
Nutritional, endocrine and metabolic	105	66	£3,836	£402,790
Respiratory: Asthma	47	40	£1,286	£60,436
Respiratory: COPD	140	96	£2,908	£407,086
Grand Total	**605**	**419**	**£2,840**	**£1,718,131**

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)

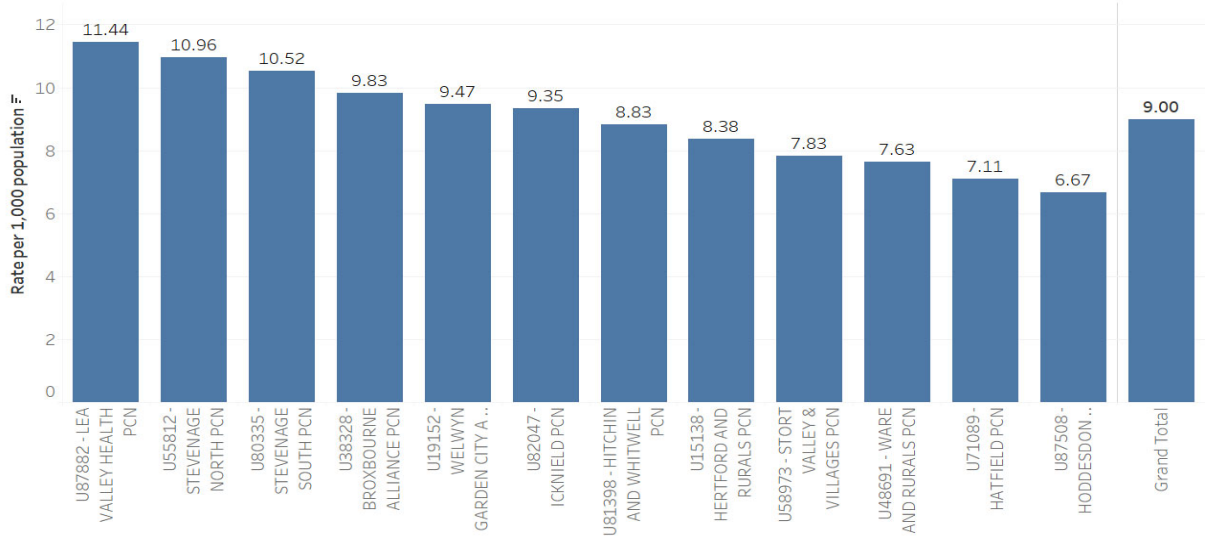


When comparing the Ambulatory Care Sensitive rates per 1,000 population between places, the East & North place has the lowest rate in the ICB.

Within East & North place, Stevenage South 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 Segment

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

When looking at the ACS conditions for Stevenage South the highest volume and cost is within the End of Life, Frailty and Dementia in the over 65 age group and the next highest volume and cost is for the over 65 age group in the Advanced Disease and Complexity segment as well. It is to be noted that under End of Life, Frailty and Dementia and Advanced Disease and Complexity segments, there is a notable spread across 41-64 age group for volume and cost.

The following pages look at which ACSs contribute to this.

Source: HWE PHM Team, SUS UEC data-sets

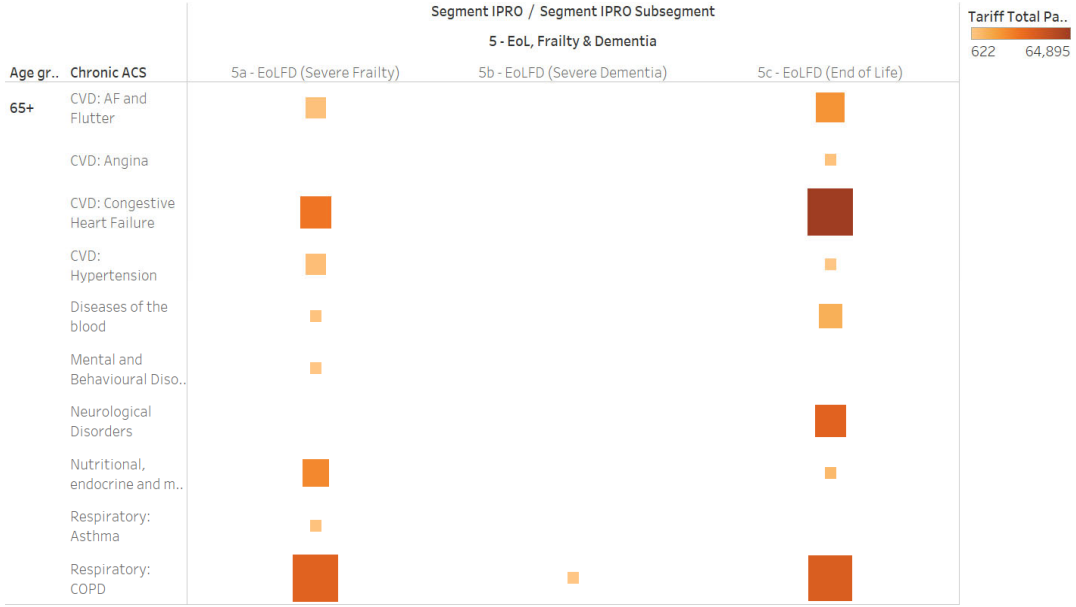
UEC by Advanced Disease & Complexity, and EOL, Frailty & Dementia

Segment 4

Ambulatory Care Sensitive conditions of note for people aged over 65 within the Advanced Disease and Complexity, is highlighted as Heart Failure and COPD, with the highest volume and cost.

For those people aged over 65 within the End of Life, Frailty & Dementia segment, Heart Failure and COPD, is highlighted with the highest volume and cost.

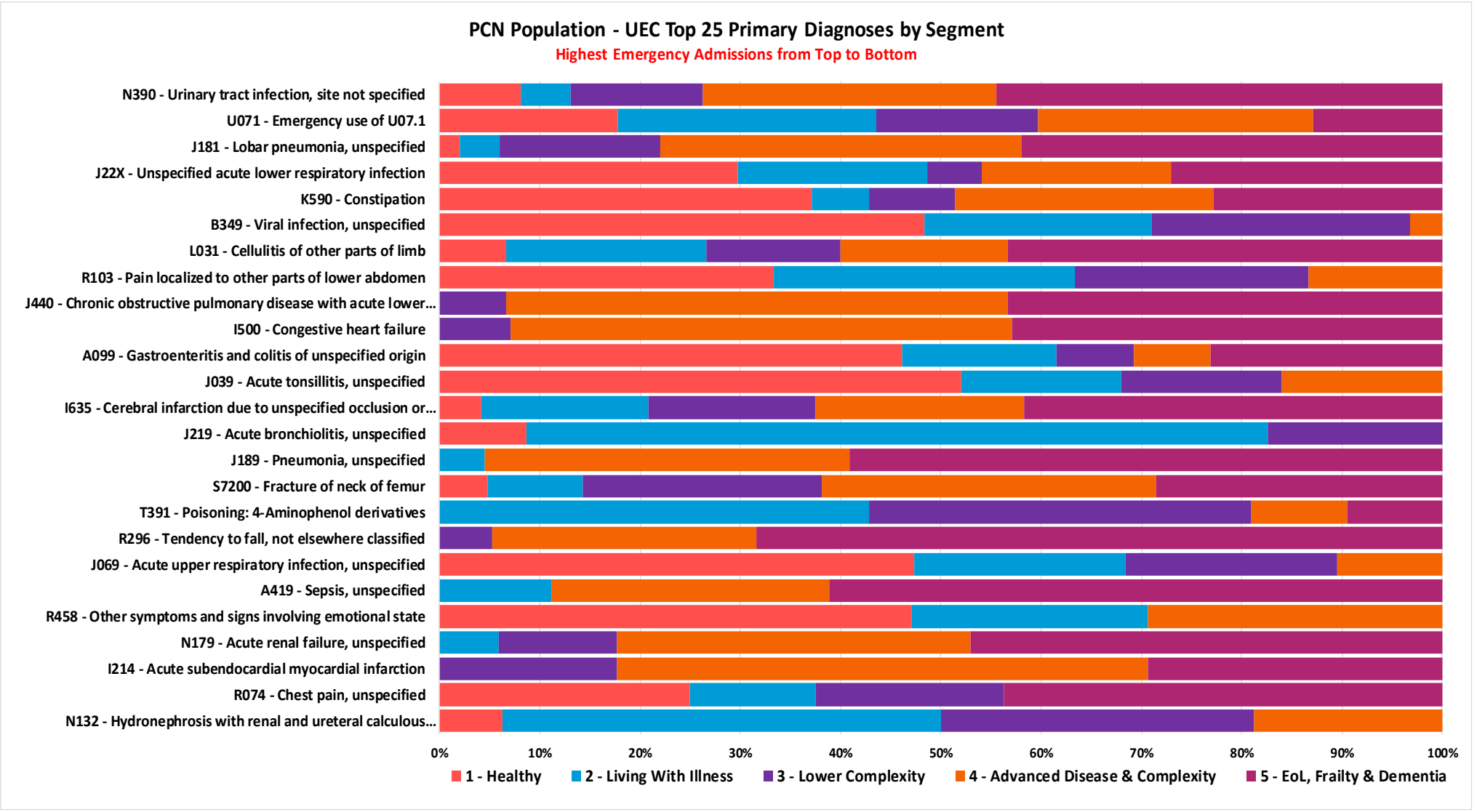
Segment 5



Source: HWE PHM Team, SUS UEC data-sets

UEC Diagnoses by Segment

NHS Hertfordshire and West Essex Integrated Care Board



Here we have identified the top 25 primary diagnoses for the PCN's population, for all UEC admissions - and then these diagnoses split these by the health segments that each patient falls into to see where outliers are for the PCN.

Source: HWE PHM Team, SUS UEC data-sets

UEC & Segmentation + Deprivation by Ward

NHS Hertfordshire and West Essex Integrated Care Board

UEC Patients Seen by Segment & Ward	1 - Healthy	2 - Living With Illness	3 - Lower Complexity	4 - Advanced Disease & Complexity	5 - EoL, Frailty & Dementia	Grand Total
Arbury			1	2	1	4
Ashley		2				2
Baldock Town	2				1	3
Bandley Hill	29	20	43	53	86	231
Bedwell	44	38	29	70	55	236
Bishop's Stortford Central			3		11	14
Bishop's Stortford Meads					1	1
Borehamwood Cowley Hill	1	2				3
Brookmans Park and Little Heath					2	2
Buntingford					3	3
Chells	19	10	7	11	29	76
Chesfield	3		5	3	2	13
Cheshunt North	1	1				2
Clarence	1					1
Codicote	2	3	5	11	12	33
Cunningham	1					1
Datchworth & Aston	5	4	4	13	8	34
Ermine			1			1
Flamstead End			3			3
Gade Valley		1				1
Haldens	1					1
Handside					5	5
Harpenden North		1				1
Hatfield Central		1			3	4
Hatfield South		1				1
Hatfield West	1					1
Hertford Heath	1					1
Hertford Rural North		1		2		3
Hertford Rural South			1			1
Highfield		1				1
Hitchin Bearton	1					1
Hitchin Highbury				1		1
Hitchin Oughton		1		1		2
Hitchin Priory	1					1
Hitchin Walsworth	1				2	3
Hoddesdon Town and Rye Park	2					2
Hollybush	1	2				3
Howlands	1				1	2
Knebworth	48	33	40	65	28	214
Letchworth East				1		1
Letchworth Grange		1	2			3
Letchworth South East	4					4
Letchworth South West			1	1		2
Letchworth Wilbury			2			2
Littlebury, Chesterford & Wenden Lofts				1		1
Longmeadow	53	36	59	74	83	305
Manor	1	4	4	8	16	33
Marshalswick North					2	2
Marshalswick South	1					1
Martins Wood	10	10	10	7	27	64
Nascot				2		2
Northaw and Cuffley					4	4
Old Town	13	6	5	12	12	48
Panshanger					4	4
Peartree	2				1	3
Pin Green	21	9	9	14	14	67
Roebuck	90	53	72	103	83	401
Rosedale and Bury Green					5	5
Shephall	49	50	49	74	76	298
Sherrards			1	2		3
St Nicholas	9	4	15	6	7	41
Sumners and Kingsmoor		1				1
Symonds Green	7	1	3	8	6	25
Walkern			2		2	4
Waltham Cross					4	4
Ware Trinity					2	2
Welwyn East	14	5	17	28	10	74
Welwyn West	1	2	3	4	4	14
Weston and Sandon	1					1
Woodfield	5	2	5	4	3	19
Unknown Ward	29	22	19	35	15	120
Grand Total	476	328	420	616	630	2470

UEC Patients Seen by Deprivation Quintile & Ward 1 = Most Deprived, 5 = Least Deprived	1	2	3	4	5	(blank)	Grand Total
Arbury			1		3		4
Ashley					2		2
Baldock Town	1	2					3
Bandley Hill	39	108	84				231
Bedwell	236						236
Bishop's Stortford Central	6		3	5			14
Bishop's Stortford Meads			1				1
Borehamwood Cowley Hill	3						3
Brookmans Park and Little Heath			2				2
Buntingford				3			3
Chells		64	12				76
Chesfield		2	6	4	1		13
Cheshunt North		2					2
Clarence				1			1
Codicote			14		19		33
Cunningham			1				1
Datchworth & Aston				34			34
Ermine		1					1
Flamstead End				3			3
Gade Valley			1				1
Haldens	1						1
Handside		5					5
Harpenden North			1				1
Hatfield Central	4						4
Hatfield South		1					1
Hatfield West			1				1
Hertford Heath			1				1
Hertford Rural North			3				3
Hertford Rural South			1				1
Highfield	1						1
Hitchin Bearton			1				1
Hitchin Highbury		1					1
Hitchin Oughton	1			1			2
Hitchin Priory				1			1
Hitchin Walsworth	2	1					3
Hoddesdon Town and Rye Park	2						2
Hollybush		2	1				3
Howlands			1	1			2
Knebworth				123	91		214
Letchworth East			1				1
Letchworth Grange		3					3
Letchworth South East		4					4
Letchworth South West	1				1		2
Letchworth Wilbury	2						2
Littlebury, Chesterford & Wenden Lofts					1		1
Longmeadow	96	137	72				305
Manor		7		23	3		33
Marshalswick North			2				2
Marshalswick South					1		1
Martins Wood	36		28				64
Nascot					2		2
Northaw and Cuffley			4				4
Old Town	29		19				48
Panshanger		2			2		4
Peartree	3						3
Pin Green	48	19					67
Roebuck	217	184					401
Rosedale and Bury Green	5						5
Shephall	160	138					298
Sherrards					3		3
St Nicholas	13	28					41
Sumners and Kingsmoor		1					1
Symonds Green	14	11					25
Walkern			2	2			4
Waltham Cross		4					4
Ware Trinity			2				2
Welwyn East				44	30		74
Welwyn West		4		10			14
Weston and Sandon			1				1
Woodfield		14	5				19
Unknown Ward						120	120
Grand Total	920	745	271	255	159	120	2470

It is also useful to note under which Wards that the PCNs population are linked to, and specifically here, where the admissions are highest.

The indication then for these patients split by health segments also adds a layer of importance when considering how the District Councils may help you investigate your population and where the wider determinants and health inequalities may be present.

It is also important to know that a Ward may be made up of different LSOAs, and therefore have different levels of deprivation as found in the Indices of Multiple Deprivation scoring given to us be the Government; in the graph quintile 1 is the Highest or Most deprived, and quintile 5 is the Least deprived.

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

Public Health - Nationally Reported Admissions

NHS Hertfordshire and West Essex Integrated Care Board

Hospital Admissions

	Period	HERTFORDSHIRE AND WEST ESSEX	STEVENAGE SOUTH PCN
Emergency admissions injuries due to falls in those aged 65+	2020/21	2026	1977.7
Emergency asthma, diabetes and epilepsy admissions (aged 0-18)	2020/21	130.8	215.6
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	251.3
Mental health admissions (all ages)	2020/21	177.2	152.9
Emergency Cancer Admissions	2020/21	494.9	590.9
Emergency admissions for acute conditions shouldn't require admissions	2020/21	611.6	449.9

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.

Stevenage South PCN rates vary from significantly better, similar and significantly worse rate of admissions to the ICB, dependent on Admission categories.

Source: Public Health Team

Frailty Segment - Detailed PCN Breakdown

NHS Hertfordshire and West Essex Integrated Care Board

	Most deprived								Most affluent				
Index of Multiple Deprivation Decile	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**NULL**	**PCN**	**ICS**
Overall Population Measures													
Population		89	188	240	343	198	123	46	57	39	18	1341	37725
% of population in cohort		6.6%	14.0%	17.9%	25.6%	14.8%	9.2%	3.4%	4.3%	2.9%	1.3%	100.0%	100.0%
Avg. Age		76.0	73.3	71.7	77.7	76.5	75.2	80.3	76.5	79.8	68.4	75.5	75.6
% BAME Where recorded		5%	4%	7%	6%	1%	4%	9%	2%	3%	22%	5%	8%
Avg. number of Acute and Chronic Conditions		4.8	4.4	4.8	4.6	4.9	5.1	4.5	4.1	4.0	3.9	4.7	5.5
Activity Measure													
Emergency Admissions		0.4	0.3	0.5	0.3	0.5	0.5	1.0	0.7	0.8	0.3	0.5	0.6
A&E Attendances		0.9	0.8	0.9	0.7	1.0	0.9	1.4	1.1	1.4	0.7	0.9	0.9
GP Encounters		110.7	87.3	98.1	96.2	78.5	104.4	144.1	77.3	85.3	75.8	94.6	103.4
Admitted Bed Days		3.3	2.0	3.8	2.4	2.2	4.9	9.1	4.0	4.4	2.0	3.2	4.2
Physical Health													
Asthma		20.2%	27.1%	23.8%	18.1%	20.2%	21.1%	8.7%	12.3%	17.9%	33.3%	20.7%	25.2%
Cancer		18.0%	20.7%	29.2%	31.5%	32.3%	31.7%	19.6%	21.1%	28.2%	38.9%	28.0%	32.8%
Chronic Cardiac Disease		48.3%	42.6%	45.8%	43.1%	47.5%	52.8%	39.1%	35.1%	43.6%	11.1%	44.5%	47.5%
Chronic Respiratory Disease		23.6%	20.2%	26.3%	22.7%	22.2%	22.8%	13.0%	21.1%	17.9%	16.7%	22.4%	22.2%
CKD		21.3%	21.3%	21.3%	20.4%	20.7%	21.1%	17.4%	14.0%	2.6%	11.1%	19.8%	20.7%
Heart Disease		38.2%	30.3%	35.8%	34.4%	31.8%	37.4%	32.6%	15.8%	35.9%	16.7%	33.2%	39.1%
Hypertension		62.9%	81.9%	71.7%	77.0%	76.8%	72.4%	67.4%	59.6%	56.4%	66.7%	73.5%	74.5%
Diabetes		34.8%	36.2%	35.8%	31.2%	38.4%	36.6%	26.1%	29.8%	20.5%	27.8%	33.9%	42.8%
Obesity		31.5%	39.4%	36.7%	31.2%	35.9%	30.1%	17.4%	15.8%	10.3%	27.8%	32.1%	32.8%
Rheumatoid Arthritis		3.4%	2.7%	4.2%	4.1%	4.5%	4.1%	2.2%	5.3%	0.0%	0.0%	3.7%	5.3%
Stroke		21.3%	25.5%	30.4%	31.8%	26.8%	36.6%	34.8%	40.4%	41.0%	22.2%	30.3%	34.5%
Mental Health													
Anxiety		19.1%	19.1%	20.0%	17.8%	23.7%	22.0%	23.9%	19.3%	5.1%	27.8%	19.8%	29.0%
Depression		31.5%	22.9%	30.0%	21.6%	27.8%	28.5%	15.2%	14.0%	12.8%	27.8%	24.8%	33.6%
Dementia		16.9%	8.0%	13.8%	12.0%	15.7%	13.8%	50.0%	19.3%	33.3%	5.6%	14.9%	18.6%
Serious Mental Illness		6.7%	0.5%	2.1%	1.7%	2.5%	4.1%	2.2%	3.5%	0.0%	5.6%	2.4%	6.5%
Low Mood		19.1%	13.3%	18.8%	12.5%	18.7%	10.6%	21.7%	5.3%	7.7%	22.2%	14.9%	18.5%
Suicide		4.5%	0.5%	0.8%	0.3%	2.0%	0.0%	2.2%	0.0%	2.6%	5.6%	1.1%	1.5%
Mental Health Flag		41.6%	36.2%	45.4%	33.8%	44.4%	37.4%	41.3%	28.1%	20.5%	44.4%	38.4%	48.8%
Screening and Verification Refusal													
Bowel Screening Refused		34.8%	38.3%	31.3%	27.7%	25.8%	28.5%	17.4%	19.3%	5.1%	0.0%	28.3%	25.5%
Cervical Screening Refused		4.5%	4.8%	3.8%	3.5%	4.0%	2.4%	0.0%	0.0%	0.0%	0.0%	3.4%	3.6%
Flu Vaccine Refused		42.7%	41.0%	27.9%	28.3%	25.3%	29.3%	13.0%	5.3%	17.9%	33.3%	28.9%	26.4%
Wider Indicators													
Has A Carer		33.7%	21.3%	16.3%	19.8%	22.2%	18.7%	26.1%	10.5%	5.1%	11.1%	19.8%	19.0%
Is A Carer		24.7%	19.7%	21.3%	20.1%	24.7%	16.3%	13.0%	5.3%	5.1%	0.0%	19.3%	11.9%
MED3 Not Fit For Work (ever)		11.2%	14.4%	18.8%	11.7%	15.2%	16.3%	10.9%	7.0%	7.7%	33.3%	14.2%	13.4%
MED3 Not Fit For Work (in Last Year)		2.2%	3.7%	5.8%	2.3%	5.1%	4.1%	0.0%	1.8%	7.7%	16.7%	4.0%	3.5%
MED3 Not Fit For Work (in Last Six Months)		1.1%	3.7%	4.6%	2.0%	4.5%	4.1%	0.0%	1.8%	5.1%	16.7%	3.4%	2.8%
Avg. number of eFI Deficits		13.0	13.8	12.9	13.7	13.7	13.3	12.1	10.5	8.6	9.1	13.1	13.4
eFI_Housebound		10.1%	6.9%	5.8%	6.7%	6.1%	8.1%	26.1%	1.8%	2.6%	0.0%	7.1%	10.9%
eFI_SocialVulnerability		19.1%	14.9%	15.0%	17.5%	12.1%	13.0%	21.7%	12.3%	12.8%	11.1%	15.3%	27.3%
People_ChildrenInPoverty			16.6		11.8	14.3	11.7			9.6		13.0	15.5
Housing_FuelPoverty		13.5	18.5	14.9	13.5	11.8	10.4	6.4	8.0	7.2		13.2	11.1
Housing_OnePersonHousehold		51.9	29.1	31.9	27.3	27.0	21.1	29.3	28.8	26.4		29.5	28.3

14.8% of the general population in HWE ICB live within the 4 most deprived deciles, whilst 16.1% of the population in the EoL, severe frailty and severe dementia segment live within the 4 most deprived deciles.

In Stevenage South 38.5% of the population in the EoL, severe frailty and severe dementia segment live within the 4 most deprived deciles.

The average age of a person within the Frail and End of life segment increases with affluence, ranging from 69 in the most deprived decile to 77 within the most affluent decile within the ICB.

As we would expect the average number of acute and chronic conditions is significantly higher within this segment that the general population as are all activity measures. The average number of Chronic Conditions for people within Stevenage South PCN is lower than the ICB, and the data shows lower usage of GP services.

Within this segment we can see the presence of Obesity, Chronic Cardiac Disease, Heart Disease, Diabetes and Chronic Respiratory Disease being highlighted which chimes with the reason for admission within previous analysis for ACS conditions. It is to be noted that Hypertension is high across all deciles and just lower than the ICB.

Source: HWE PHM Team, SUS UEC data-sets

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:

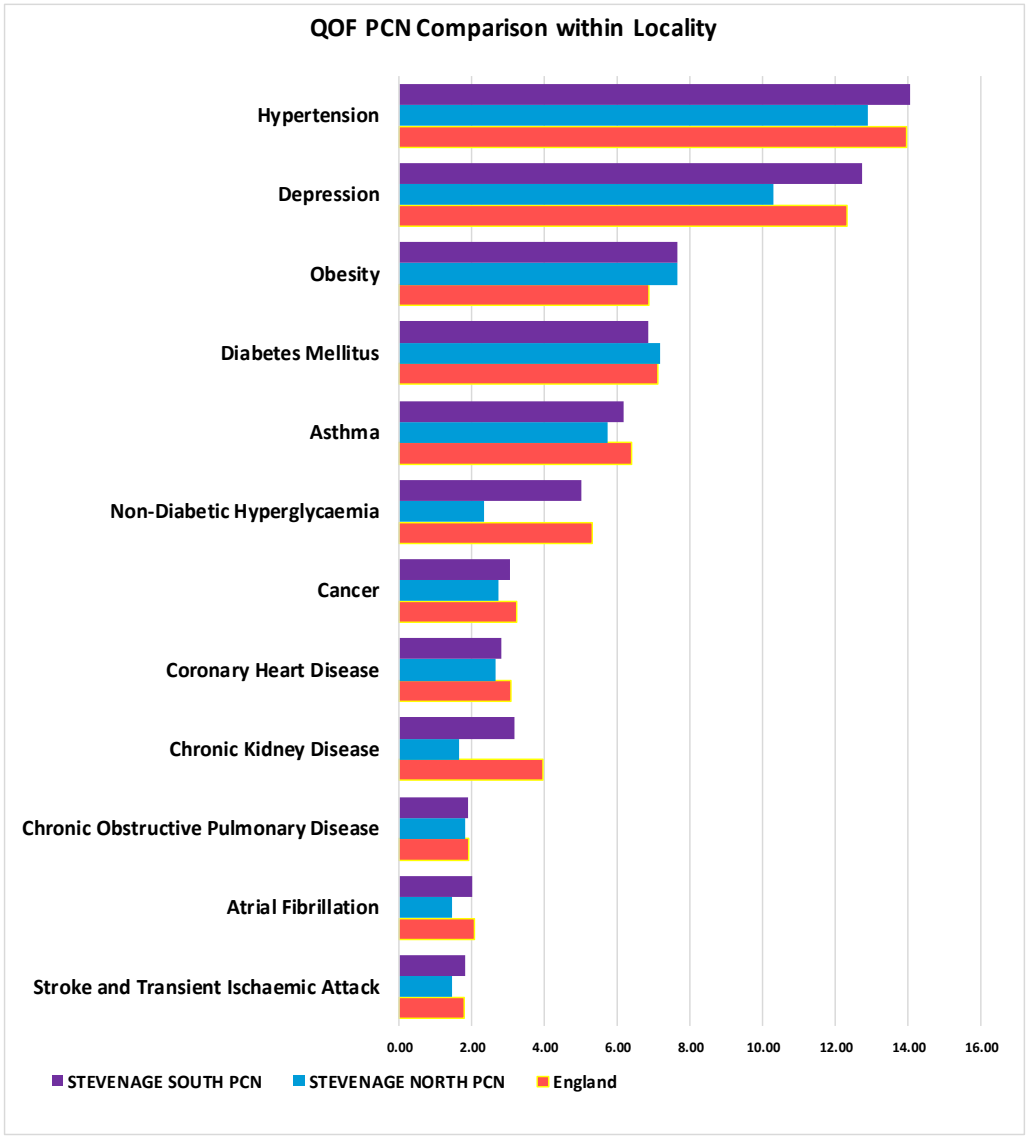
- **QOF Local, Regional, & National Comparison**

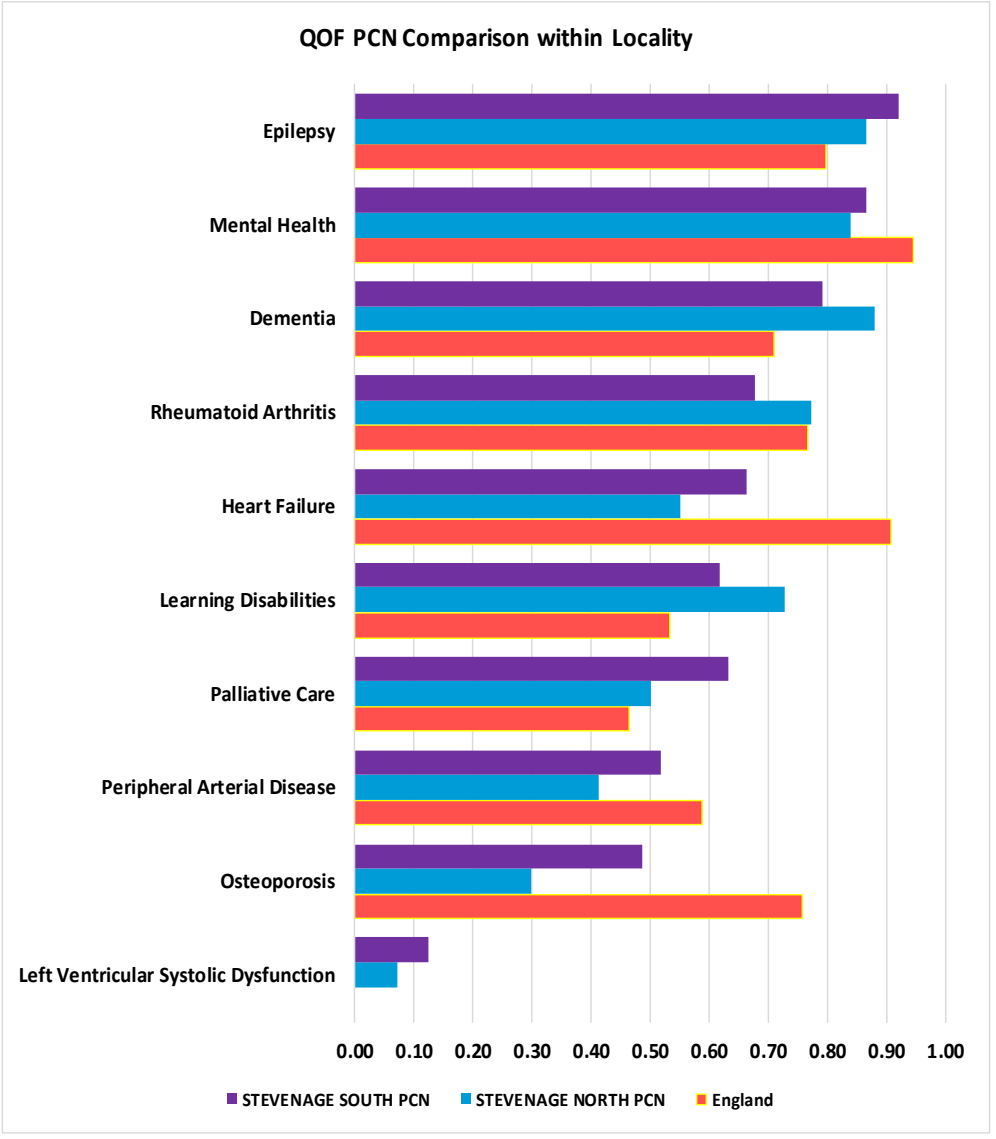
- **QOF Locality & PCN Comparison**

- **QOF Missed Diagnoses & Admission Rates**

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

QOF - Locality & PCN Comparison



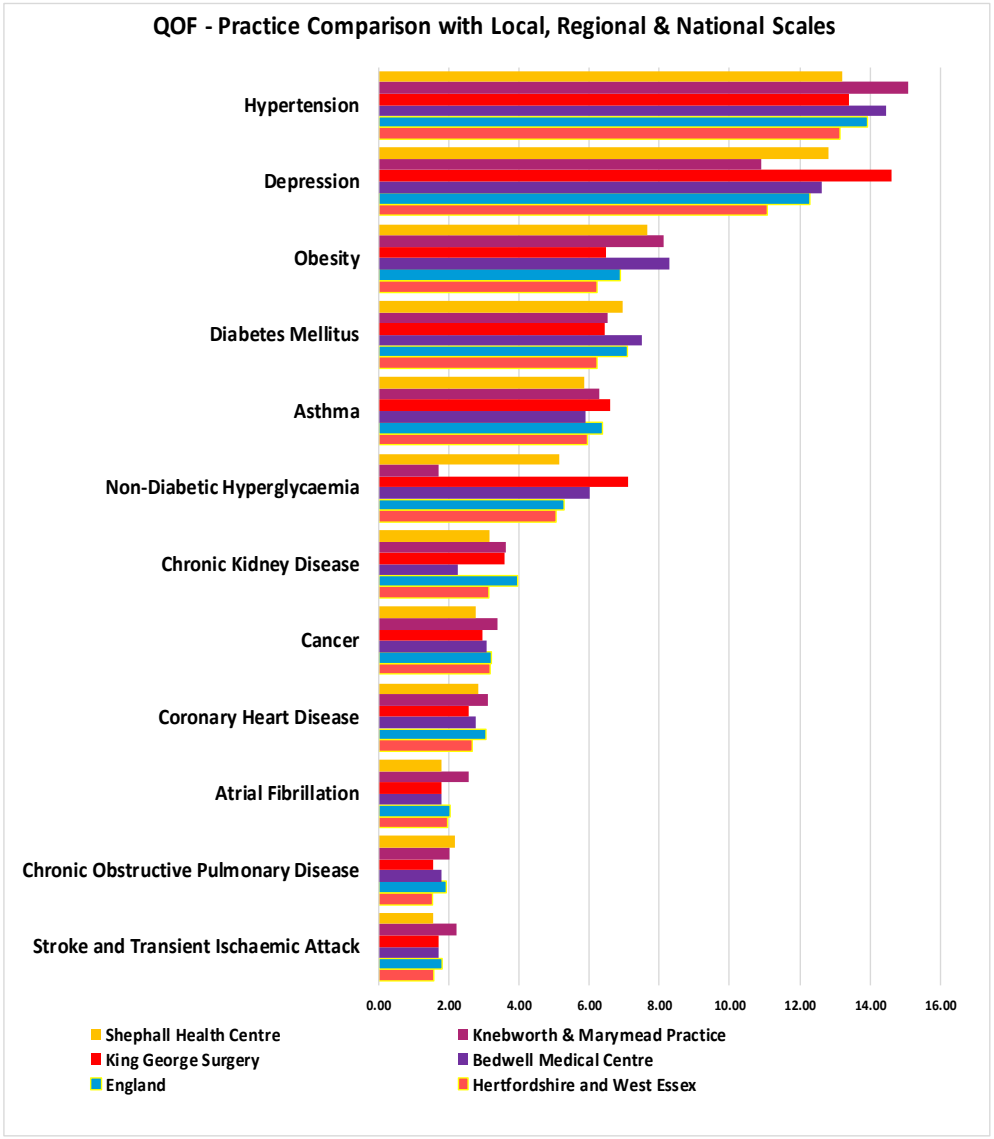


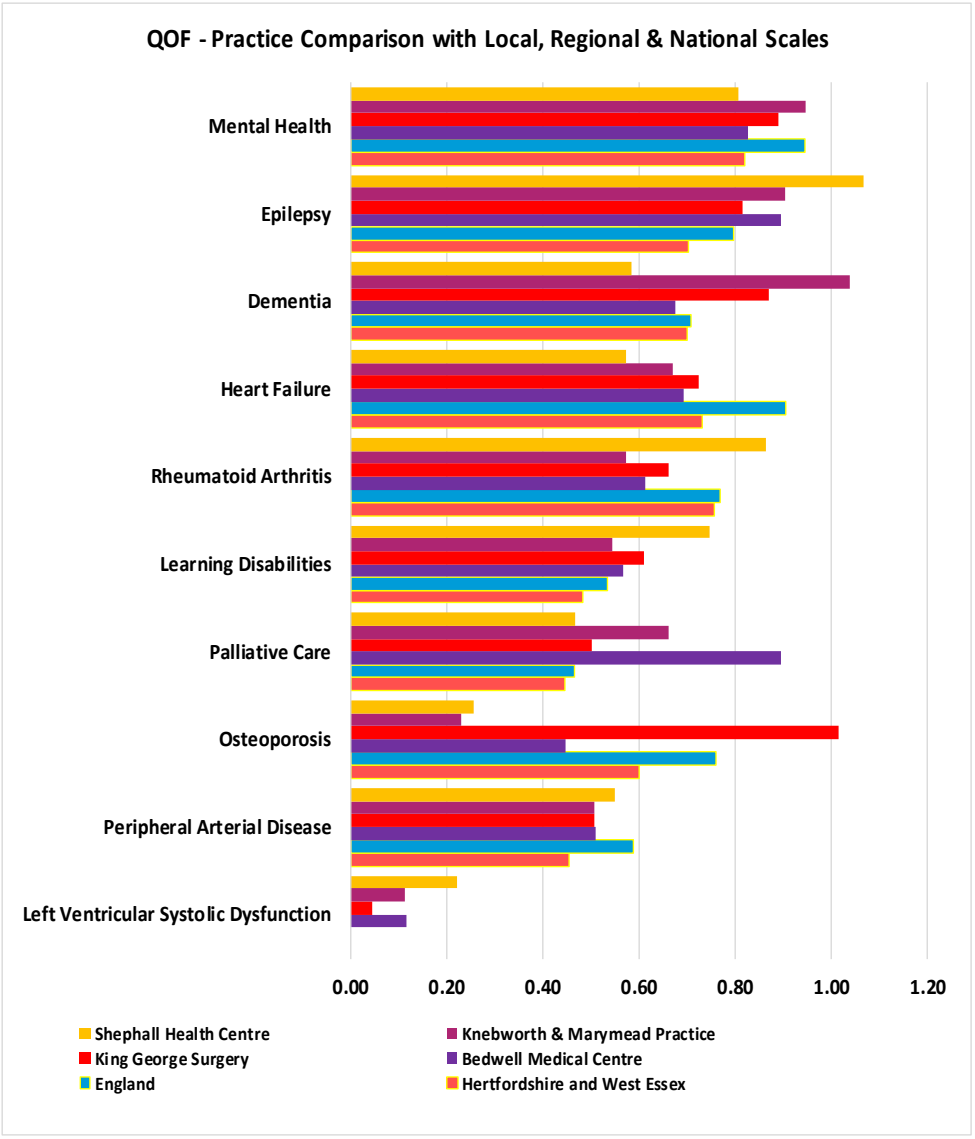
The Quality and Outcome Framework incorporates important benchmarking and scoring for all Practices across the county; we have combined a number of local, regional, and national data sets to highlight the areas that the PCN will need to consider.

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	53319	3438	6.45%	6.39%	6.17%		-32	-149	
COPD	57330	997	1.74%	1.54%	1.49%	2.55%	-117	-145	464
Diabetes	45617	3154	6.91%	6.29%	6.39%	7.78%	-285	-240	393
Non-diabetic hyperglyaemia	45031	2291	5.09%	4.63%	5.87%	10.87%	-206	352	2605
Hypertension	57330	7707	13.44%	13.25%	13.21%		-108	-132	
Atrial Fibrillation	57330	1099	1.92%	2.01%	2.02%	2.50%	55	60	334
Stroke and TIA	57330	969	1.69%	1.70%	1.61%		5	-47	
Coronary Heart Disease	57330	1502	2.62%	2.62%	2.65%		2	19	
Heart failure	57330	355	0.62%	0.71%	0.75%	1.41%	52	78	451
Left Ventricular Systolic Dysfunction	57330	76	0.13%	0.20%	0.30%		39	96	
Chronic Kidney Disease	45031	1379	3.06%	2.53%	3.21%		-239	65	
Peripheral Arterial Disease	57330	274	0.48%	0.46%	0.44%		-12	-20	
Cancer	57330	1748	3.05%	3.33%	3.35%		160	170	
Palliative care	57330	260	0.45%	0.50%	0.43%		27	-14	

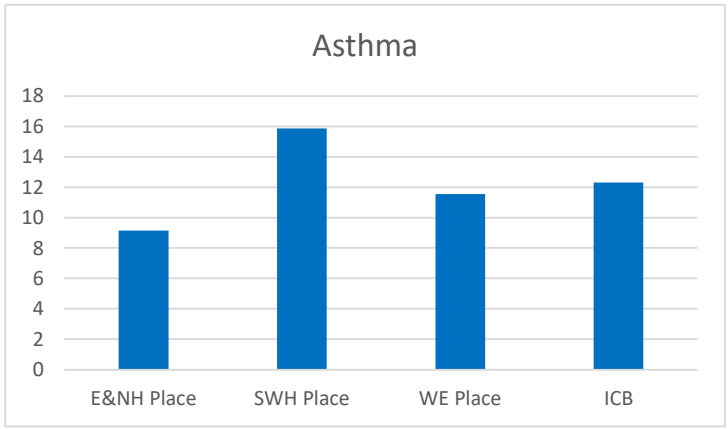
The table above shows the latest prevalence (2021/22 published August 20222) for the PCN alongside the place prevalence, ICB prevalence and the modelled prevalence for the PCN.

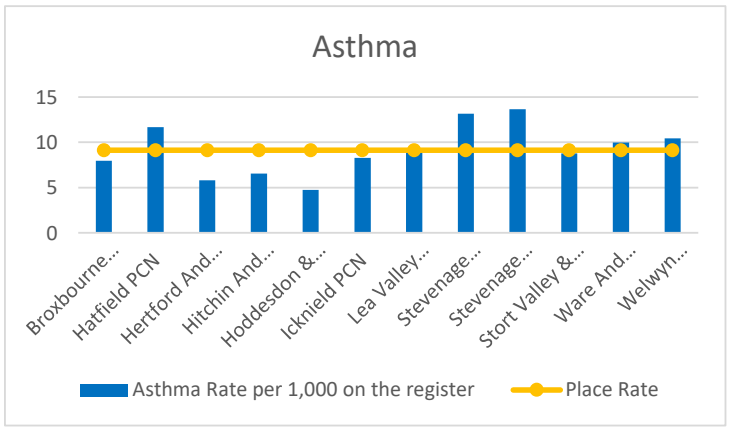
This table shows opportunities for further identification. It outlines the diagnoses to meet the place, ICB and estimated prevalence.

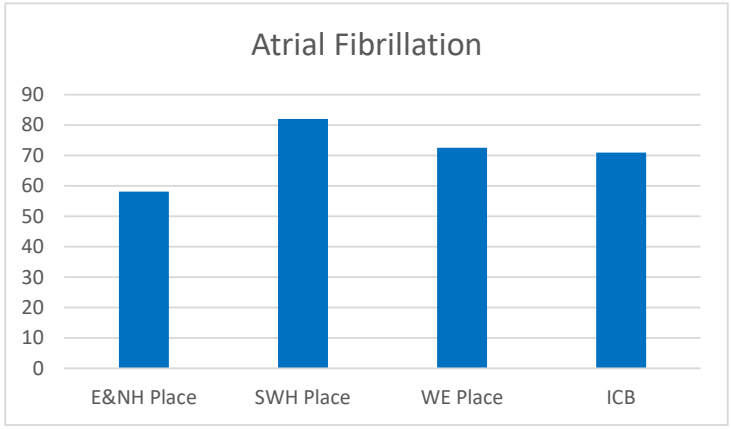
Within Ardens Manager there are case finding searches that can support PCN with identification.

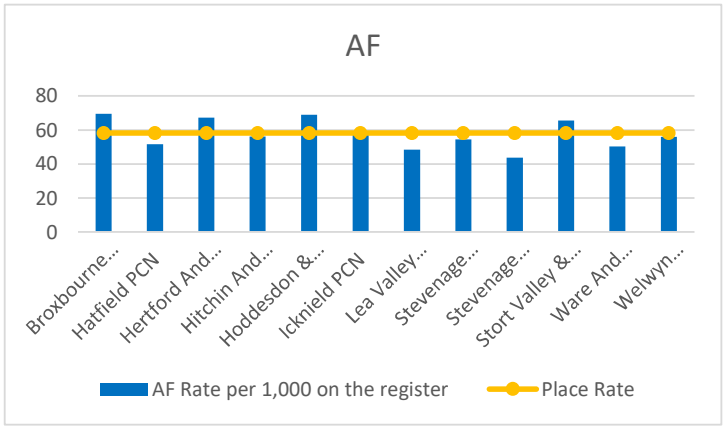
Source: QOF National Figures, HWE PHM Team

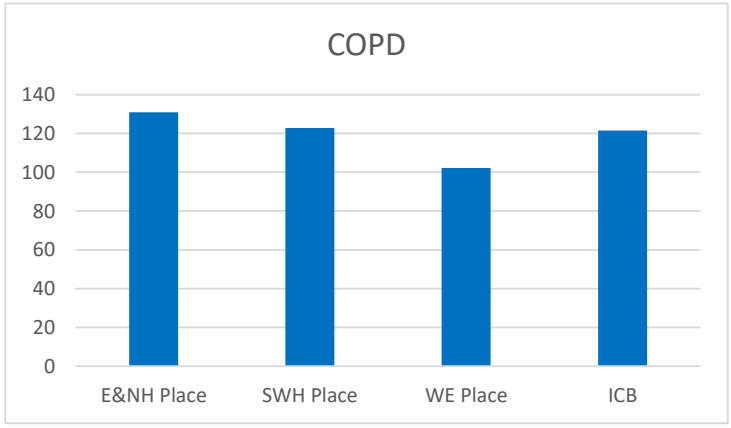
Emergency Admission Rates per 1,000 population on the Disease Register

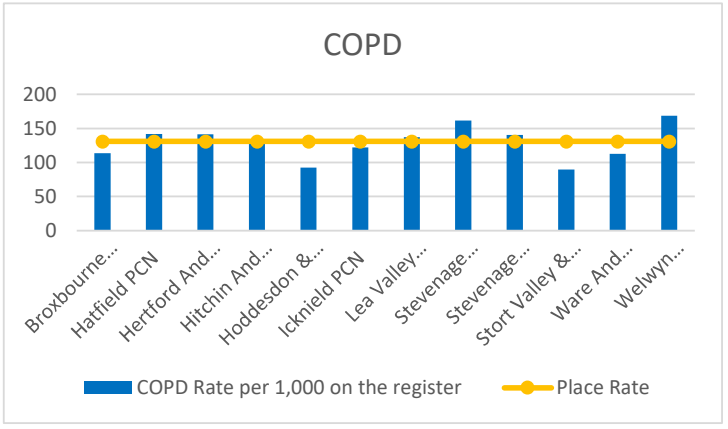












The charts on the left shows the Emergency Admissions Rates per 1,000 population on the disease register.

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

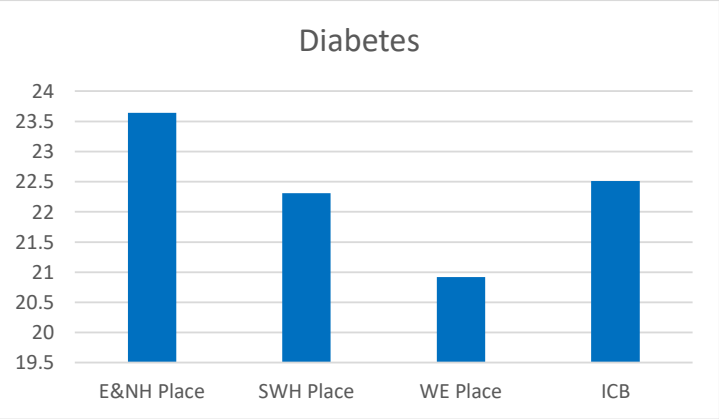
These are continued on the following place.

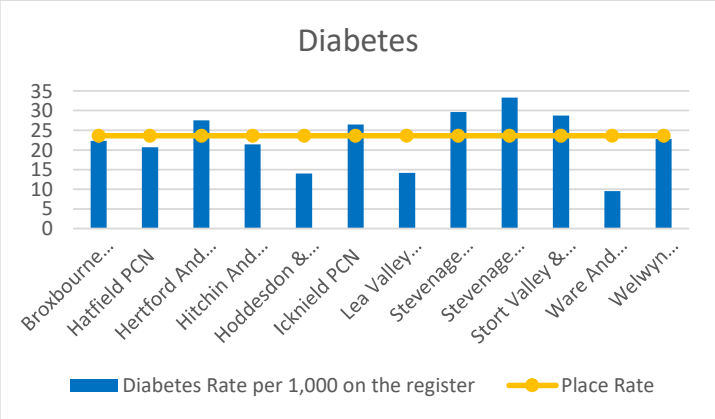
Rates may be high due to a number of factors which may include low identification.

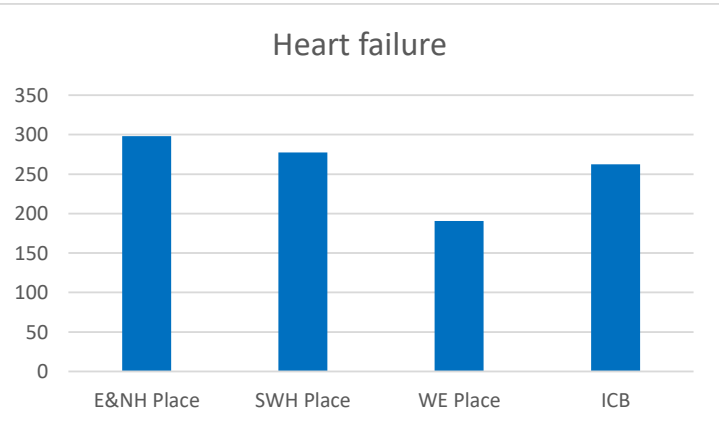
For Stevenage South the data shows higher Asthma, COPD, Diabetes and Heart Failure rates which was identified as a theme within the ACS analysis.

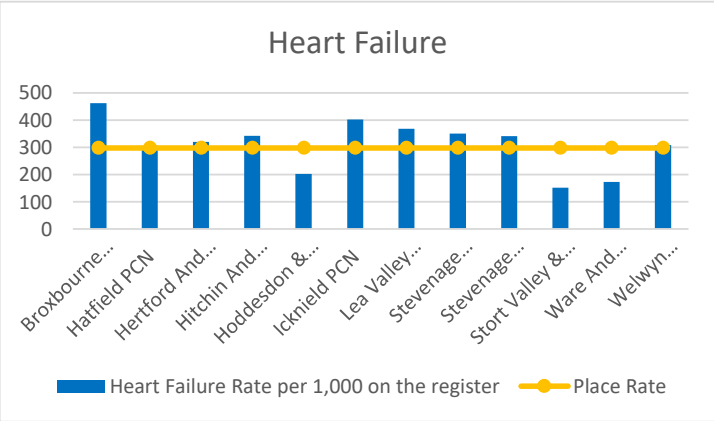
Source: HWE PHM Team, SUS data

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:

- **Matrix by Ethnicity**
- **Matrix by Health Segment & Subsegment**
- **Matrix by GP Activity**
- **Matrix by Health Segment & Deprivation**
- **Matrix by Practice & Deprivation**
- **Bubble Matrix on Conditions**
- **Bio-Psycho-Social Example**
- **Risk Factors by Prevalence against GP Activity & A&E**
- **Public Health Cancer Screening**
- **Public Health Mortality**
- **Public Health Life Expectancy**
- **Public Health Projection on Populations**

Matrix Data - Ethnicity

NHS Hertfordshire and West Essex Integrated Care Board

Ethnicity Group	Other Ethnic Groups			Asian			Asian or Asian British		Black			Mixed			Other			White			Unknown			Grand Total
Complexity	Low Complexit	Middle Complexit	High Complexi	Low Complexi	Middle Complexi	High Complexi	Low Complexit	Middle Complexi	Low Complexit	Middle Complexi	High Complexi	Low Complexit	Middle Complexi	High Complexi	Low Complexit	Middle Complexi	High Complexi	Low Complexit	Middle Complexi	High Complexi	Low Complexit	Middle Complexi	High Complexi	
Overall Population Measures																								
Population	335	84		512	255	24	27	10	482	305	25	324	176	12	407	176	11	12,189	9,348	1,334	5,985	976	27	**33,026**
Age	35	48	67	31	46	70	35	48	31	45	56	20	39	51	29	46	67	32	51	72	36	48	73	**40**
Male %	49.6%	51.2%	50.0%	47.5%	44.7%	54.2%	63.0%	20.0%	51.9%	48.5%	56.0%	51.5%	36.9%	33.3%	45.7%	37.5%	63.6%	50.6%	45.2%	46.7%	57.9%	57.7%	51.9%	**50.1%**
IMD	4.4	4.8	3.0	5.2	5.3	5.3	4.2	5.1	5.0	5.0	5.4	5.4	5.1	4.5	5.3	5.4	3.9	5.8	5.4	5.4	6.3	5.6	5.4	**5.7**
% BAME (where recorded)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%				**12%**
Multimorbidity (acute & chronic)	0.0	1.3	5.0	0.0	1.7	6.3	0.0	1.5	0.0	1.6	6.0	0.0	1.7	6.1	0.0	1.7	5.7	0.0	1.8	6.3	0.0	1.4	5.9	**0.9**
Finance and Activity Measures																								
Spend — Total	£0.1M	£0.0M	£0.0M	£0.2M	£0.3M	£0.1M	£0.0M	£0.0M	£0.1M	£0.3M	£0.1M	£0.1M	£0.2M	£0.0M	£0.2M	£0.2M	£0.0M	£4.0M	£9.9M	£4.9M	£0.5M	£0.4M	£0.1M	#####
Spend — PPPY - Total	£170	£380	£6,345	£366	£1,118	£3,374	£127	£407	£240	£1,043	£4,696	£358	£1,078	£3,145	£486	£1,241	£1,269	£332	£1,061	£3,689	£81	£380	£4,581	**£662**
Acute Elective	£44	£101	£219	£120	£529	£710	£21	£49	£97	£645	£1,646	£100	£573	£507	£160	£428	£526	£133	£518	£1,262	£27	£145	£961	**£281**
Acute Non-Elective	£11	£156	£5,972	£155	£359	£1,714	£5	£163	£80	£212	£2,612	£180	£306	£2,324	£233	£591	£486	£119	£358	£1,955	£15	£115	£3,436	**£256**
GP Encounters	£116	£123	£155	£91	£229	£950	£101	£195	£62	£185	£438	£79	£198	£314	£92	£222	£256	£80	£185	£473	£39	£121	£184	**£125**
Community	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Mental Health	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Social Care	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
GP PPPY	16	37	51	21	48	104	20	55	17	43	130	18	39	94	19	54	81	18	44	92	11	27	58	**29**
Beddays PPPY - Acute EM	0	0	3	0	0	6	0	0	0	1	5	0	0	12	0	1	1	0	1	4	0	0	5	**1**
Physical Health																								
Diabetes	0.0%	35.7%	50.0%	0.0%	39.6%	54.2%	0.0%	40.0%	0.0%	22.3%	56.0%	0.0%	21.0%	75.0%	0.0%	23.9%	54.5%	0.0%	15.0%	47.5%	0.0%	13.4%	51.9%	**7.6%**
COPD	0.0%	1.2%	0.0%	0.0%	1.6%	16.7%	0.0%	0.0%	0.0%	1.0%	12.0%	0.0%	0.6%	0.0%	0.0%	0.6%	18.2%	0.0%	3.0%	33.1%	0.0%	2.4%	37.0%	**2.3%**
Chronic Respiratory D...	0.0%	2.4%	0.0%	0.0%	3.5%	29.2%	0.0%	10.0%	0.0%	3.3%	24.0%	0.0%	1.7%	25.0%	0.0%	1.7%	18.2%	0.0%	4.6%	38.8%	0.0%	3.0%	37.0%	**3.1%**
Hypertension	0.0%	19.0%	100.0%	0.0%	36.5%	91.7%	0.0%	30.0%	0.0%	39.3%	80.0%	0.0%	25.6%	66.7%	0.0%	36.9%	100.0%	0.0%	32.2%	80.5%	0.0%	26.5%	77.8%	**14.5%**
Obesity	2.7%	13.1%	0.0%	2.3%	14.9%	25.0%	3.7%	30.0%	6.2%	17.0%	36.0%	4.3%	16.5%	25.0%	2.7%	14.2%	45.5%	6.9%	25.0%	37.3%	2.3%	17.1%	25.9%	**12.9%**
Mental Health																								
Anxiety/Phobias	0.0%	14.3%	50.0%	0.0%	10.6%	4.2%	0.0%	0.0%	0.0%	11.5%	12.0%	0.0%	15.3%	33.3%	0.0%	11.4%	9.1%	0.0%	19.9%	28.5%	0.0%	14.8%	25.9%	**7.6%**
Depression	0.0%	11.9%	100.0%	0.0%	14.9%	33.3%	0.0%	20.0%	0.0%	13.8%	20.0%	0.0%	21.0%	50.0%	0.0%	17.6%	27.3%	0.0%	27.7%	37.1%	0.0%	21.3%	22.2%	**10.5%**
Learning Disability	0.0%	1.2%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	1.3%	8.0%	0.0%	2.8%	8.3%	0.0%	0.0%	0.0%	0.0%	1.6%	2.2%	0.0%	2.0%	7.4%	**0.7%**
Dementia	0.0%	0.0%	50.0%	0.0%	1.2%	25.0%	0.0%	0.0%	0.0%	0.3%	8.0%	0.0%	0.0%	8.3%	0.0%	1.1%	9.1%	0.0%	1.3%	12.8%	0.0%	1.2%	14.8%	**1.0%**
Other Characteristics																								
Housebound (eFI)	0.0%	0.0%	0.0%	0.0%	0.8%	4.2%	0.0%	0.0%	0.0%	0.7%	8.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.7%	4.1%	0.0%	0.6%	3.7%	**0.4%**
Social Vulnerability (eFI)	0.0%	2.4%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.0%	20.0%	0.0%	1.1%	8.3%	0.0%	1.1%	0.0%	0.3%	2.8%	11.4%	0.1%	2.2%	0.0%	**1.5%**
History of Smoking (T...	12.2%	19.0%	0.0%	3.1%	6.7%	8.3%	3.7%	10.0%	4.4%	7.2%	12.0%	3.7%	15.3%	25.0%	7.4%	12.5%	18.2%	6.4%	16.1%	17.5%	3.6%	13.5%	14.8%	**9.4%**
Not Fit for Work (In Year)	1.8%	7.1%	0.0%	3.9%	10.2%	0.0%	3.7%	0.0%	4.6%	6.6%	16.0%	3.1%	9.7%	25.0%	2.9%	8.5%	18.2%	2.8%	8.5%	5.8%	1.2%	4.3%	0.0%	**4.5%**
On a Waiting List	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**

PHM is underpinned by good linked data, with an appropriate method of extracting segmented or patients under key metrics; this matrix is showing the complexity of ethnic groups is broadly categorised across the PCN.

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

Matrix Data - Segment & Sub-Segment

NHS Hertfordshire and West Essex Integrated Care Board

Life Course Segment	1 - Healthy			2 - Living With Illness			3 - Lower Complexity			4 - Advanced Disease & Complexity			5 - EoL, Frailty & Dementia			Grand Total
Life Course Subsegment	1a - H (Low Risk)	1b - H (Maternity & Child)	1c - H (Acute Episodic)	2a - LwI (At Risk)	2b - LwI (LTCs)	2c - LwI (MH)	3a - LC (Mod. Social Co..	3b - LC (Multimorbidity	3c - LC (Mild Frailty)	4a - AD&C (High Complexity)	4b - AD&C - High Social Complexity	4e - AD&C (End Stage Disease)	5a - EoLFD (Severe Frailty)	5b - EoLFD (Severe Dementia)	5c - EoLFD (End of Life)	
Overall Population Measures																
Population	14,675	356	1,036	2,895	2,983	1,232	131	2,532	2,201	2,927	328	389	803	23	515	33,026
Age	31	15	24	45	46	38	49	50	46	53	48	69	73	85	78	40
Male %	55.1%	25.8%	53.2%	50.8%	51.6%	45.3%	48.1%	48.7%	41.3%	39.0%	50.0%	54.5%	41.6%	34.8%	38.4%	50.1%
IMD	6.0	5.9	5.8	5.4	5.7	5.0	5.1	5.5	5.3	5.2	5.1	6.0	5.0	7.6	5.2	5.7
% BAME (where recorded)	15%	17%	13%	13%	14%	7%	6%	8%	11%	8%	9%	6%	5%	5%	6%	12%
Multimorbidity (acute & chronic)	0.0	0.0	0.0	0.0	1.0	1.0	0.6	2.4	1.4	2.4	2.3	4.6	4.8	4.9	4.5	0.9
Finance and Activity Measures																
Spend - Total	£1.4M	£0.5M	£1.5M	£1.3M	£2.0M	£0.6M	£0.1M	£2.9M	£2.2M	£3.4M	£0.4M	£1.1M	£2.1M	£0.2M	£2.2M	£21.9M
Spend - PPPY - Total	£95	£1,390	£1,423	£451	£666	£516	£654	£1,130	£1,006	£1,154	£1,347	£2,868	£2,588	£9,561	£4,216	£662
Acute Elective	£33	£263	£650	£183	£335	£217	£285	£606	£485	£555	£430	£1,190	£966	£616	£1,124	£281
Acute Non-Elective	£13	£1,012	£638	£154	£194	£193	£132	£347	£357	£400	£642	£1,384	£1,273	£4,897	£2,423	£256
GP Encounters	£49	£115	£135	£114	£137	£106	£237	£177	£163	£199	£274	£294	£348	£4,048	£670	£125
Community	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Mental Health	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Social Care	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
GP PPPY	12	37	28	25	30	30	35	42	42	51	64	74	86	112	108	29
Beddays PPPY - Acute EM	0	1	1	0	0	1	1	1	1	1	5	3	3	10	6	1
Physical Health																
Diabetes	0.0%	0.0%	0.0%	0.0%	16.4%	0.0%	2.3%	19.0%	15.1%	19.4%	18.3%	30.1%	37.6%	47.8%	27.6%	7.6%
COPD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	1.5%	4.4%	4.0%	67.4%	19.1%	17.4%	17.5%	2.3%
Chronic Respiratory Dis...	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	4.8%	2.2%	6.1%	6.1%	72.5%	22.7%	21.7%	21.9%	3.1%
Hypertension	0.0%	0.0%	0.0%	0.0%	26.4%	0.0%	11.5%	34.9%	25.7%	41.6%	25.0%	60.7%	81.3%	52.2%	62.3%	14.5%
Obesity	0.0%	0.0%	0.0%	29.8%	15.8%	15.7%	15.3%	24.6%	24.0%	31.3%	24.7%	31.1%	41.1%	4.3%	19.4%	12.9%
Mental Health																
Anxiety/Phobias	0.0%	0.0%	0.0%	0.0%	0.0%	31.3%	3.8%	36.8%	10.9%	20.2%	18.0%	12.3%	22.3%	0.0%	16.7%	7.6%
Depression	0.0%	0.0%	0.0%	0.0%	0.0%	53.9%	11.5%	44.4%	17.1%	28.2%	19.2%	20.8%	28.6%	0.0%	19.8%	10.5%
Learning Disability	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	4.6%	2.2%	0.1%	0.9%	27.4%	1.0%	1.9%	4.3%	1.7%	0.7%
Dementia	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	6.7%	3.3%	7.7%	100.0%	22.3%	1.0%
Other Characteristics																
Housebound (eFI)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	1.3%	4.7%	0.0%	11.1%	0.4%
Social Vulnerability (eFI)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	57.3%	1.3%	1.3%	2.6%	18.3%	3.6%	16.7%	13.0%	13.2%	1.5%
History of Smoking (Tw...	0.0%	0.0%	0.0%	35.1%	9.9%	18.3%	13.7%	19.9%	13.1%	16.0%	15.2%	24.2%	13.1%	0.0%	9.7%	9.4%
Not Fit for Work (In Year)	0.0%	0.0%	0.0%	14.6%	4.5%	9.8%	8.4%	11.3%	7.1%	9.3%	3.4%	7.5%	5.2%	0.0%	2.1%	4.5%
On a Waiting List	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

This matrix is important in defining the PCN's main segment and sub-segment health classifications, giving simple volumes but also linking how many as a percentage of each subsegment, have defined and diagnosed conditions.

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

Matrix Data - GP Activity

NHS Hertfordshire and West Essex Integrated Care Board

GP Activity / Complexity	0			1		2-3			4-5		6-9			10+			Grand Total
	Low Complexity	Middle Complexity	High Complexity	Low Complexity	Middle Complexity	Low Complexity	Middle Complexity	High Complexity	Low Complexity	Middle Complexity	Low Complexity	Middle Complexity	High Complexity	Low Complexity	Middle Complexity	High Complexity	
Overall Population Measures																	
Population	1,513	188	38	527	69	2,094	197		2,014	258	4,305	740		9,808	9,878	1,392	**33,026**
Age	30	42	81	27	34	30	36	87	31	39	31	40	61	36	52	71	**40**
Male %	67.5%	68.6%	42.1%	56.4%	72.5%	63.8%	67.0%	0.0%	62.9%	62.4%	56.4%	62.2%	50.0%	44.0%	43.4%	47.3%	**50.1%**
IMD	5.8	5.2	5.2	5.5	5.2	6.0	5.4	2.0	6.1	5.2	5.9	5.4	6.3	5.8	5.4	5.4	**5.7**
% BAME (where recorded)	19%	15%	8%	22%	15%	17%	13%	0%	12%	8%	14%	11%	0%	14%	9%	5%	**12%**
Multimorbidity (acute & chronic)	0.0	1.6	7.3	0.0	1.2	0.0	1.3	11.0	0.0	1.3	0.0	1.3	5.5	0.0	1.8	6.3	**0.9**
Finance and Activity Measures																	
Spend - Total	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.1M	£0.0M	£0.0M	£0.2M	£0.0M	£0.5M	£0.1M	£0.0M	£4.4M	£11.1M	£5.3M	**£21.9M**
PPPY - Total	£20	£229	£1,050	£43	£12	£44	£140	£3,928	£79	£152	£111	£193	£799	£451	£1,122	£3,779	**£662**
Acute Elective	£9	£69	£74	£17	£2	£11	£86	£147	£31	£105	£45	£86	£76	£173	£545	£1,276	**£281**
Acute Non-Elective	£10	£160	£976	£23	£7	£26	£43	£3,773	£34	£32	£41	£79	£701	£152	£373	£2,018	**£256**
GP Encounters	£0	£0	£0	£3	£3	£8	£10	£8	£14	£15	£25	£29	£22	£126	£205	£486	**£125**
Community	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Mental Health	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Social Care	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
GP PPPY	0	0	0	1	1	2	3	2	4	4	8	8	8	28	49	95	**29**
Beddays PPPY - Acute EM	0	1	3	0	0	0	0	13	0	0	0	0	9	0	1	4	**1**
Physical Health																	
Diabetes	0.0%	4.8%	36.8%	0.0%	8.7%	0.0%	1.5%	100.0%	0.0%	3.5%	0.0%	4.6%	25.0%	0.0%	17.8%	48.4%	**7.6%**
COPD	0.0%	1.6%	42.1%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	1.6%	0.0%	0.9%	0.0%	0.0%	3.0%	31.9%	**2.3%**
Chronic Respiratory Dis...	0.0%	2.7%	52.6%	0.0%	1.4%	0.0%	5.1%	100.0%	0.0%	2.7%	0.0%	1.8%	0.0%	0.0%	4.5%	37.7%	**3.1%**
Hypertension	0.0%	23.4%	73.7%	0.0%	14.5%	0.0%	13.7%	100.0%	0.0%	12.0%	0.0%	16.6%	50.0%	0.0%	34.2%	81.0%	**14.5%**
Obesity	1.1%	10.6%	21.1%	0.8%	7.2%	1.5%	7.1%	0.0%	2.0%	7.0%	3.2%	8.4%	0.0%	8.4%	25.8%	37.3%	**12.9%**
Mental Health																	
Anxiety/Phobias	0.0%	18.6%	28.9%	0.0%	13.0%	0.0%	13.7%	0.0%	0.0%	19.4%	0.0%	15.7%	50.0%	0.0%	19.2%	27.6%	**7.6%**
Depression	0.0%	28.7%	39.5%	0.0%	29.0%	0.0%	20.8%	100.0%	0.0%	27.9%	0.0%	21.5%	50.0%	0.0%	26.4%	36.4%	**10.5%**
Learning Disability	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	2.3%	0.0%	0.8%	25.0%	0.0%	1.7%	2.4%	**0.7%**
Dementia	0.0%	1.1%	31.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	25.0%	0.0%	1.4%	12.4%	**1.0%**
Other Characteristics																	
Housebound (eFI)	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.8%	4.2%	**0.4%**
Social Vulnerability (eFI)	0.2%	2.7%	21.1%	0.2%	2.9%	0.1%	0.5%	0.0%	0.0%	2.3%	0.1%	0.9%	25.0%	0.3%	2.8%	10.7%	**1.5%**
History of Smoking (Tw...	0.4%	7.4%	23.7%	8.5%	13.0%	2.6%	7.6%	0.0%	2.6%	14.3%	5.1%	13.8%	0.0%	7.6%	15.9%	17.2%	**9.4%**
Not Fit for Work (In Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	2.3%	0.6%	1.6%	0.0%	4.6%	9.2%	6.2%	**4.5%**
On a Waiting List	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**

Whilst the previous GP activity matrix was to investigate HIUs, this matrix has split out the GP activity by order of complexity; another method of looking at distinct patient volumes coming into the PCN which may be managed in a different way.

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

Matrix Data - Health Segment & Deprivation

NHS Hertfordshire and West Essex Integrated Care Board

Life Course Segment	1 - Healthy				2 - Living With Illness				3 - Lower Complexity				4 - Advanced Disease & Complexity				5 - EoL, Frailty & Dementia				Grand Total
Deprivation	Low Deprivation	Middle Deprivation	High Deprivation	Not known	Low Deprivation	Middle Deprivation	High Deprivation	Not known	Low Deprivation	Middle Deprivation	High Deprivation	Not known	Low Deprivation	Middle Deprivation	High Deprivation	Not known	Low Deprivation	Middle Deprivation	High Deprivation	Not known	
Overall Population Measures																					
Population	4,423	9,084	1,909	651	1,199	4,524	1,086	301	769	3,214	730	151	476	2,411	646	111	142	904	277	18	33,026
Age	37	28	25	35	52	43	41	45	58	47	45	46	65	53	51	52	79	75	74	68	40
Male %	51.9%	55.1%	55.5%	56.5%	45.3%	50.4%	53.5%	54.2%	46.3%	44.7%	46.2%	51.0%	47.1%	41.0%	40.6%	38.7%	38.0%	40.4%	40.4%	50.0%	50.1%
IMD	9.2	5.1	2.8		9.1	5.2	2.7		9.1	5.2	2.7		9.1	5.2	2.7		9.0	5.2	2.7		5.7
% BAME (where recorded)	8%	16%	24%	21%	7%	13%	16%	17%	7%	10%	11%	11%	5%	8%	11%	12%	4%	5%	4%	22%	12%
Multimorbidity (acute & chronic)	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	2.0	1.9	1.8	1.9	3.4	2.5	2.5	2.4	4.2	4.8	4.5	3.9	0.9
Finance and Activity Measures																					
Spend - Total	£0.9M	£2.0M	£0.4M	£0.1M	£0.8M	£2.5M	£0.5M	£0.2M	£1.2M	£3.2M	£0.6M	£0.1M	£1.0M	£3.0M	£0.9M	£0.1M	£0.8M	£2.9M	£0.7M	£0.1M	£21.9M
PPPY - Total	£202	£216	£201	£190	£658	£545	£472	£522	£1,622	£983	£870	£770	£2,101	£1,229	£1,339	£980	£5,624	£3,232	£2,471	£3,573	£662
Acute Elective	£83	£79	£70	£59	£351	£237	£202	£270	£973	£480	£398	£394	£967	£565	£553	£430	£1,303	£1,033	£817	£1,316	£281
Acute Non-Elective	£68	£80	£73	£71	£178	£183	£165	£130	£496	£322	£312	£259	£879	£455	£560	£394	£3,145	£1,728	£1,270	£1,264	£256
GP Encounters	£52	£58	£59	£60	£129	£125	£105	£122	£154	£182	£161	£116	£254	£208	£226	£155	£1,176	£472	£385	£993	£125
Community	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Mental Health	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Social Care	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
GP PPPY	13	14	15	13	28	28	29	28	40	42	42	38	57	54	57	49	101	94	95	76	29
Beddays PPPY - Acute EM	0	0	0	0	0	0	1	4	1	1	1	0	2	1	1	0	8	4	3	2	1
Physical Health																					
Diabetes	0.0%	0.0%	0.0%	0.0%	9.4%	6.4%	6.2%	6.3%	17.4%	16.8%	16.6%	13.9%	23.5%	20.3%	20.4%	11.7%	26.1%	34.7%	35.7%	27.8%	7.6%
COPD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.5%	2.9%	2.0%	21.2%	9.7%	9.1%	9.0%	14.1%	19.6%	17.3%	11.1%	2.3%
Chronic Respiratory Dis...	0.0%	0.0%	0.0%	0.0%	1.2%	1.2%	1.1%	0.3%	4.2%	3.3%	3.4%	3.3%	25.2%	11.5%	10.8%	11.7%	17.6%	23.6%	21.3%	16.7%	3.1%
Hypertension	0.0%	0.0%	0.0%	0.0%	14.2%	10.7%	8.6%	12.6%	40.1%	29.2%	24.7%	23.8%	50.0%	41.5%	39.8%	36.9%	61.3%	74.9%	75.8%	66.7%	14.5%
Obesity	0.0%	0.0%	0.0%	0.0%	16.9%	22.9%	21.4%	18.6%	16.3%	25.6%	26.4%	19.9%	19.1%	31.9%	35.0%	27.9%	14.8%	33.5%	36.8%	27.8%	12.9%
Mental Health																					
Anxiety/Phobias	0.0%	0.0%	0.0%	0.0%	3.3%	5.8%	5.7%	7.0%	14.7%	24.9%	28.5%	38.4%	15.5%	19.5%	19.2%	26.1%	16.9%	20.2%	19.1%	27.8%	7.6%
Depression	0.0%	0.0%	0.0%	0.0%	3.8%	9.8%	12.6%	13.3%	16.9%	32.8%	36.0%	45.7%	18.7%	26.9%	29.9%	35.1%	14.1%	26.1%	25.6%	27.8%	10.5%
Learning Disability	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.1%	0.7%	1.4%	1.4%	1.0%	0.7%	3.2%	3.3%	3.3%	2.7%	1.4%	2.0%	1.8%	0.0%	0.7%
Dementia	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.6%	3.1%	1.7%	3.6%	33.1%	13.5%	10.8%	5.6%	1.0%
Other Characteristics																					
Housebound (eFI)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	1.1%	1.7%	0.0%	9.9%	6.5%	7.9%	0.0%	0.4%
Social Vulnerability (eFI)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	3.0%	3.2%	1.3%	6.3%	3.8%	4.3%	0.9%	15.5%	15.0%	16.2%	11.1%	1.5%
History of Smoking (Tw...	0.0%	0.0%	0.0%	0.0%	11.3%	21.4%	33.2%	23.9%	6.5%	17.1%	24.4%	21.2%	10.9%	16.3%	22.4%	20.7%	2.1%	11.0%	19.1%	0.0%	9.4%
Not Fit for Work (In Year)	0.0%	0.0%	0.0%	0.0%	8.1%	9.4%	9.8%	15.3%	4.4%	9.7%	11.8%	12.6%	5.7%	9.2%	8.5%	7.2%	2.8%	4.1%	3.2%	16.7%	4.5%
On a Waiting List	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Deprivation is an important marker for a variety of issues and not just in health, and this matrix has taken the PCN's population split them by health segment, and then further by high, middle, or low deprivation groupings - this may further allows the PCNs to target that selected cohort of individuals to find where the determinants may be, and where a targeted approach from local partners, could be directed.

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

Matrix Data - Practice & Deprivation

NHS Hertfordshire and West Essex Integrated Care Board

Practice / Deprivation	Bedwell Medical Centre				Knebworth & Marymead Practice				Shephall Health Centre				Grand Total
	Low Deprivation	Middle Deprivation	High Deprivation	Not known	Low Deprivation	Middle Deprivation	High Deprivation	Not known	Low Deprivation	Middle Deprivation	High Deprivation	Not known	
Overall Population Measures													
Population	625	7,994	2,832	646	5,949	5,501	483	576	435	6,642	1,333	10	33,026
Age	39	39	38	44	45	40	33	38	44	40	41	36	40
Male %	51.0%	50.2%	50.5%	55.0%	49.2%	49.2%	49.7%	52.6%	51.7%	50.5%	51.1%	20.0%	50.1%
IMD	9.0	5.0	2.8		9.2	5.1	2.6		8.9	5.4	2.7		5.7
% BAME (where recorded)	16%	13%	18%	22%	6%	9%	13%	9%	7%	14%	14%	0%	12%
Multimorbidity (acute & chronic)	0.9	1.1	1.1	0.9	0.6	0.6	0.5	0.3	1.1	1.1	1.2	0.8	0.9
Finance and Activity Measures													
Spend: Total	£0.5M	£5.2M	£1.8M	£0.2M	£4.0M	£4.2M	£0.3M	£0.3M	£0.3M	£4.1M	£1.0M	£0.0M	£21.9M
Spend: PPPY - Total	£768	£650	£629	£368	£666	£758	£651	£566	£658	£618	£739	£575	£662
Acute Elective	£300	£265	£269	£191	£313	£318	£161	£213	£293	£264	£292	£408	£281
Acute Non-Elective	£345	£265	£241	£86	£243	£301	£352	£234	£225	£222	£305	£27	£256
GP Encounters	£123	£121	£120	£91	£109	£139	£138	£119	£140	£131	£143	£140	£125
Community	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Mental Health	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Social Care	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
GP PPPY	39	38	38	29	21	23	22	19	26	25	27	19	29
Beddays PPPY - Acute EM	1	0	1	0	0	0	1	2	0	1	1	0	1
Physical Health													
Diabetes	8.6%	9.7%	9.3%	6.7%	5.1%	5.7%	5.4%	2.6%	9.0%	8.2%	9.7%	0.0%	7.6%
COPD	1.4%	2.6%	2.5%	1.7%	2.0%	1.7%	1.9%	0.7%	1.8%	2.9%	3.6%	0.0%	2.3%
Chronic Respiratory Dis...	2.6%	3.5%	3.3%	2.3%	2.8%	2.2%	2.3%	1.2%	2.5%	3.7%	4.6%	0.0%	3.1%
Hypertension	12.5%	17.5%	16.1%	15.9%	10.7%	9.4%	5.6%	4.0%	20.9%	17.9%	19.3%	10.0%	14.5%
Obesity	11.2%	16.6%	15.3%	14.2%	5.0%	6.3%	7.0%	4.9%	16.6%	18.9%	21.5%	20.0%	12.9%
Mental Health													
Anxiety/Phobias	9.9%	10.8%	9.9%	14.9%	2.5%	2.7%	3.5%	2.8%	9.2%	10.6%	11.3%	10.0%	7.6%
Depression	10.1%	14.1%	14.6%	19.7%	2.8%	4.8%	5.2%	3.8%	12.0%	14.9%	17.0%	40.0%	10.5%
Learning Disability	0.2%	0.8%	0.7%	0.6%	0.5%	0.5%	0.8%	0.3%	0.0%	0.9%	0.8%	0.0%	0.7%
Dementia	2.7%	1.0%	0.8%	0.2%	1.2%	1.2%	1.4%	0.7%	0.5%	0.8%	0.8%	0.0%	1.0%
Other Characteristics													
Housebound (eFI)	2.1%	0.8%	0.9%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.2%	0.6%	0.0%	0.4%
Social Vulnerability (eFI)	2.2%	2.0%	2.2%	0.6%	0.8%	0.9%	0.8%	0.2%	1.1%	1.7%	2.2%	0.0%	1.5%
History of Smoking (Tw...	11.5%	15.8%	19.5%	16.6%	2.4%	3.7%	5.8%	3.1%	5.7%	8.1%	11.8%	20.0%	9.4%
Not Fit for Work (In Year)	6.6%	5.6%	5.4%	7.1%	1.7%	3.9%	4.6%	4.9%	4.6%	5.1%	6.0%	20.0%	4.5%
On a Waiting List	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

This detailed table is offering actionable insight across the PCN's population for each Practice and where their populations are in terms of a High, Medium, or Low deprivation ranking; deprivation is levied from the IMD 2019 scoring per LSOA, and is applied for every individual registered within the PCN's borders.

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

Bubble Matrix - Conditions

NHS Hertfordshire and West Essex Integrated Care Board

x% also have

For people with this condition

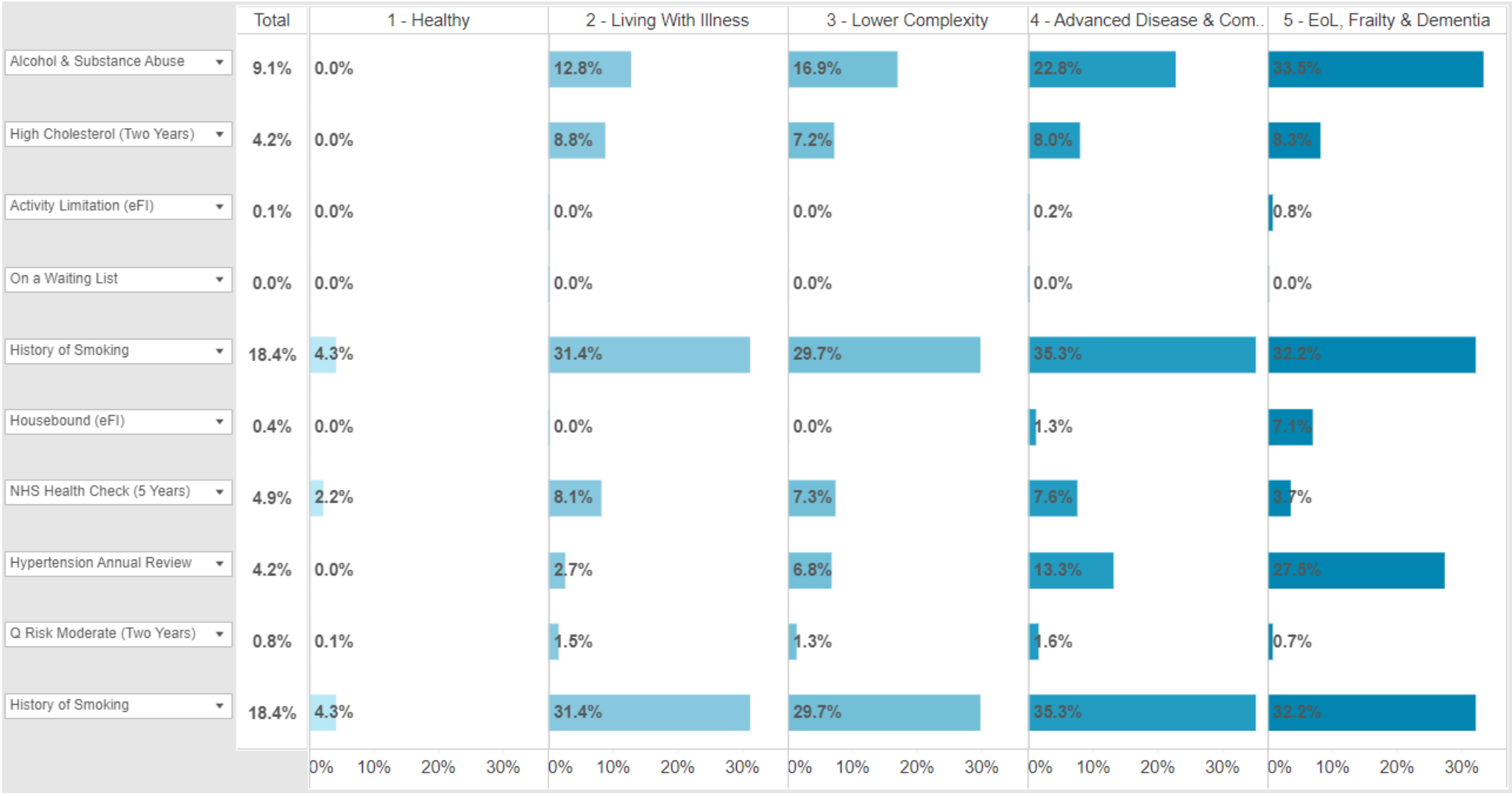
Initial Condition	Other Conditions												
	Alzheimers Disease	Asthma	COPD	Heart Failure	Anxiety	Autism Spectrum Disorder	Dementia	Alcohol Abuse	ABCD Prescription	Anti-Depressive Prescription	Activity Limitation (eFI)	Housebound (eFI)	No Other Condition
Alzheimers Disease		13%	15%	12%	17%	1%		5%	52%	41%	1%	12%	0%
Asthma	1%		7%	2%	15%	2%	1%	3%	20%	19%	0%	1%	50%
COPD	4%	31%		12%	16%	0%	6%	8%	54%	33%	0%	3%	0%
Heart Failure	5%	16%	21%		15%	1%	9%	7%	83%	26%	1%	4%	0%
Anxiety	1%	19%	5%	2%		2%	2%	8%	21%	48%	0%	1%	19%
Autism Spectrum Disorder	0%	19%	0%	1%	14%		2%	2%	4%	14%	0%	3%	44%
Dementia	60%	12%	14%	11%	17%	2%		6%	50%	40%	1%	10%	4%
Alcohol Abuse	1%	15%	8%	4%	25%	1%	2%		34%	29%	0%	2%	25%
ABCD Prescription	2%	13%	8%	7%	11%	0%	3%	5%		22%	0%	1%	21%
Anti-Depressive Prescription	2%	17%	7%	3%	32%	1%	3%	6%	30%		0%	1%	22%
Activity Limitation (eFI)	12%	12%	18%	29%	35%	0%	12%	6%	65%	29%		0%	12%
Housebound (eFI)	16%	13%	18%	11%	20%	7%	23%	10%	50%	38%	0%		16%

When targeting specific conditions to look into, a simple Bubble matrix helps us understand that a single condition will rarely be occurring by itself; this chart then highlights the PCN's linked conditions and breaks down the common diseases linked together in the PCN.

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

Bio-Psycho-Social Indicators - Example

NHS Hertfordshire and West Essex Integrated Care Board



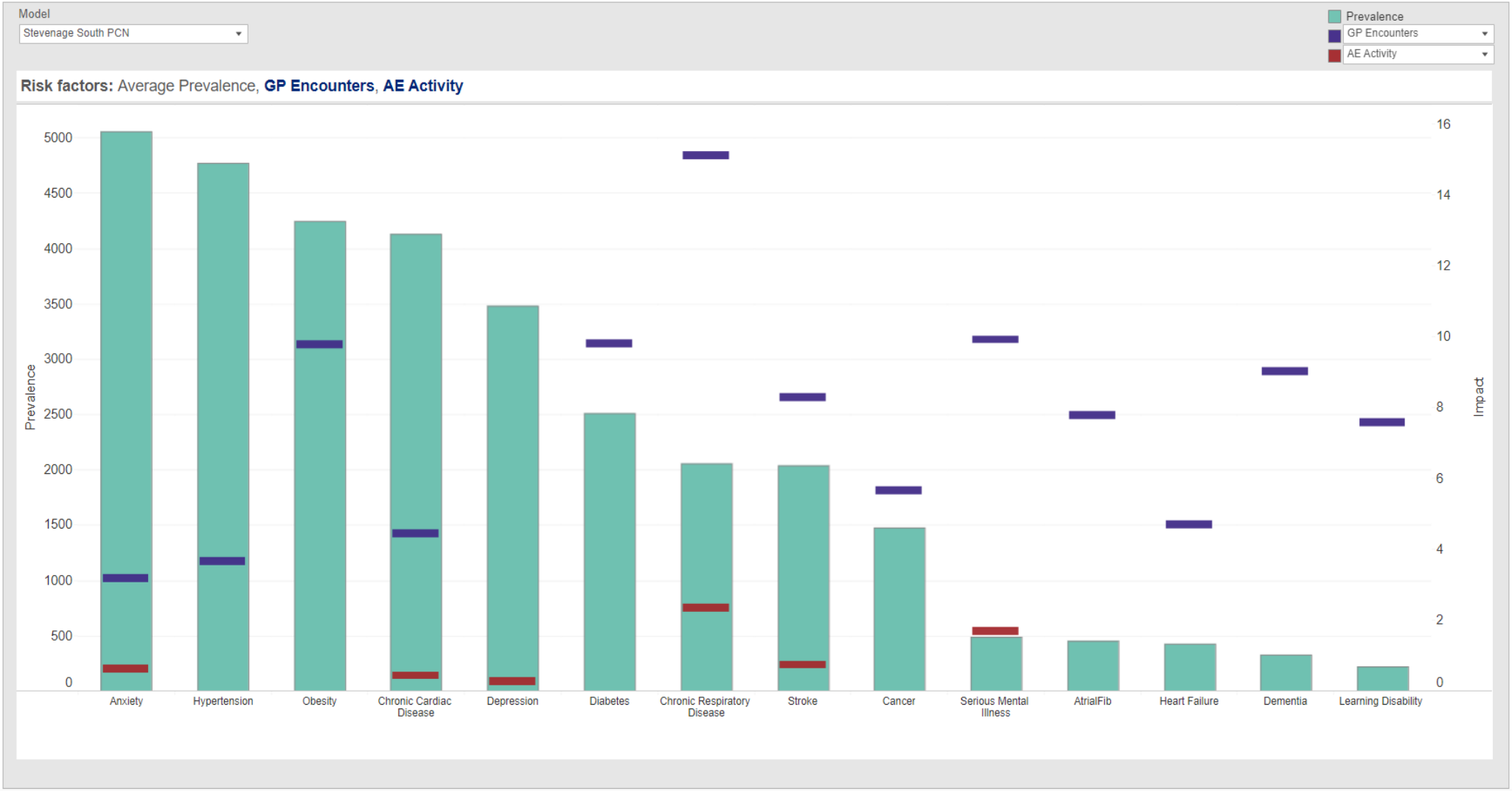
This chart gives a comparison across various selected risk conditions or characteristics, within the health segments of the PCN's population.

Here we have selected a few characteristics within the PCN's data as an example, within each segment the percentage with that risk condition is highlighted proportionately by the shaded bars in the chart.

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

Risk Modelling - Prevalence against GP Activity & A&E

NHS Hertfordshire and West Essex Integrated Care Board



This Risk Model looks at the PCN's prevalence for major conditions, and this chart illustrates the number of people with certain risk factors, and also shows the impact on service utilisation, that these factors have. The height of each bar for each risk factor, shows the number of people who meet that criteria, as shown on the left hand axis; the horizontal lines relate to the correlation of a risk factor and an increase in impact on the selected target, shown on the right hand axis.

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

Public Health - Cancer Screening

NHS Hertfordshire and West Essex Integrated Care Board

Cancer Screening

	Period	HERTFORDSHIRE AND WEST ESSEX	STEVENAGE SOUTH PCN	KNEBWORTH & MARYMEAD PRACTICE	SHEPHALL HEALTH CENTRE	KING GEORGE & MANOR HOUSE SURGERIES	BEDWELL MEDICAL CENTRE
Women, aged 25-49, with a record of cervical screening in the last 3.5 yrs (denominator includes PCAs)	2020/21	73.3	74.6	82.2	77.4	66.3	77.1
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	79.1	77.2	77.7	78.5
Persons, 25-49, attending cervical screening within target period (3.5 year coverage, %)	2020/21	73	73.8	81.6	76.7	68	76
Persons, 50-64, attending cervical screening within target period (5.5 year coverage, %)	2020/21	77	77.2	79	75.4	76.6	77.7
Persons, 50-70, screened for breast cancer in last 36 months (3 year coverage, %)	2020/21	63.9	64.3	65.7	57.7	64.6	66.8
Persons, 50-70, screened for breast cancer within 6 months of invitation (Uptake, %)	2020/21	61.3	59.5	42.9	57.6	64.1	45.6
Persons, 60-74, screened for bowel cancer within 6 months of invitation (Uptake, %)	2020/21	72.1	70.4	72.5	69.9	70.7	67.7
Persons, 60-74, screened for bowel cancer in last 30 months (2.5 year coverage, %)	2020/21	68.8	67.9	70.2	64.3	70.4	63.8

Similar | Significantly Worse | Significantly Better

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Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

Source: Public Health Team

Public Health - Mortality

NHS Hertfordshire and West Essex Integrated Care Board

Mortality

	Period	Hertfordshire CCGs	NHS HERTFORDSHIRE AND WEST ESSEX ICB - 06K	STEVENAGE SOUTH PCN
Percentage of deaths that occur at home (All age)	2021	25.3	26.8	25.1
PYLL - Neoplasms	2021	505	509.8	618.5
PYLL - Diseases of the circulatory system	2021	737.5	782.8	1051.2
PYLL - All Cause	2021	1537.7	1574	2231.7
Premature Mortality - Respiratory Disease	2021	19.2	19.5	32.8
Premature Mortality - Liver Disease	2021	14.6	14.6	31.1
Premature Mortality - Cardiovasular Disease	2021	53.8	56.1	75.2
Premature Mortality - Cancer	2021	98.5	99.9	118.4
Premature Mortality - All Cause	2021	269.6	276.1	354.5

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Hertfordshire Public Health Evidence & Intelligence Epidemiology

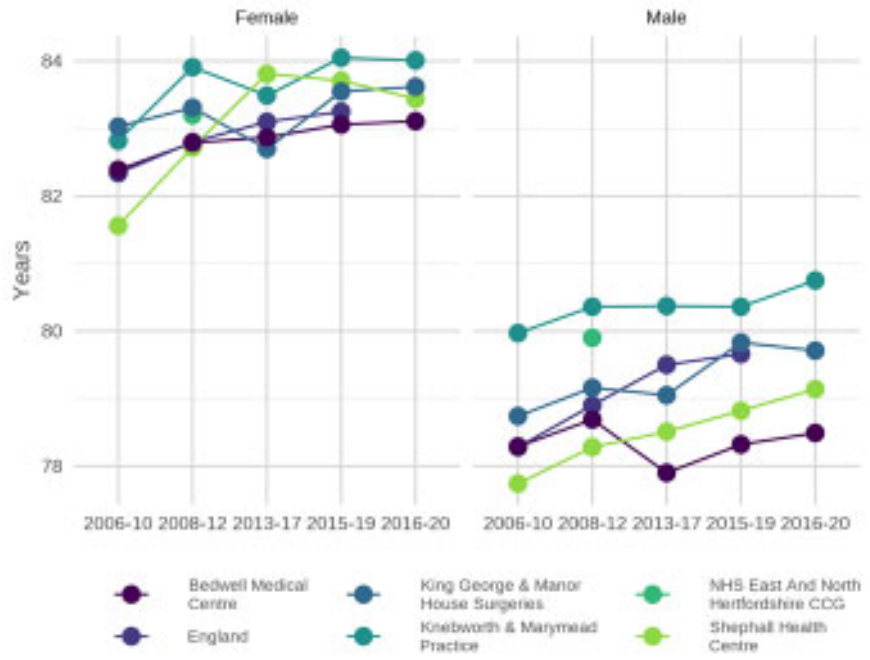
Hertfordshire

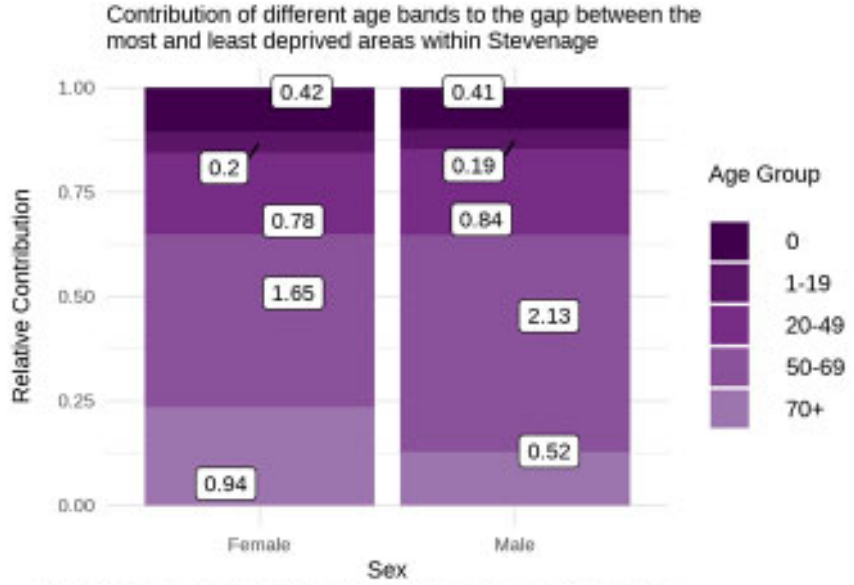
Source: Public Health Team

Public Health - Life Expectancy

NHS Hertfordshire and West Essex Integrated Care Board

Life Expectancy





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 life expectancy at birth for females is 3.99 years and for males is 4.09 years.

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Hertfordshire Public Health Evidence & Intelligence Epidemiology

Hertfordshire

Source: Public Health Team

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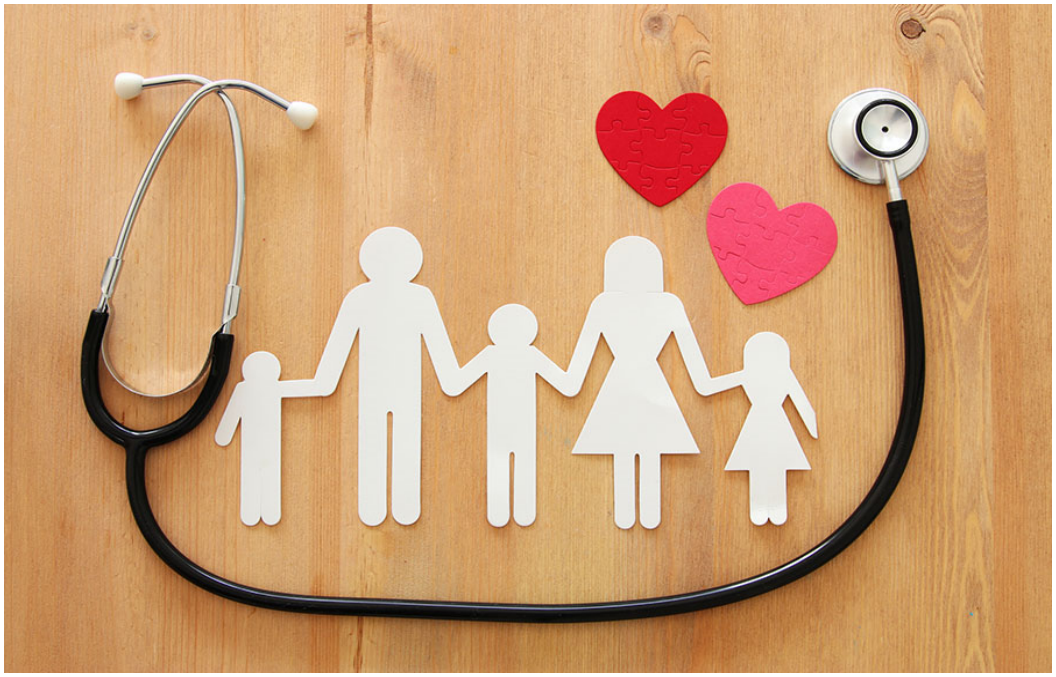

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for a healthier future