Health and Social Wellbeing

In 2017 East and North Hertfordshire Clinical Commissioning Group (ENHCCG) responded to East Hertfordshire District Council's Infrastructure Development Plan (IDP); and in 2019 West Essex Clinical Commissioning Group (WECCG) responded to Harlow District Council's IDP. This 2021 response is a collective response from the Hertfordshire & West Essex Integrated Care System (HWE ICS), ENHCCG, WECCG and all providers that are commissioned to deliver healthcare services across the geographical area of HWE ICS. This section focuses on the primary, community and secondary healthcare needs of HWE ICS in the geographical area covered by ENHCCG and WECCG. The response considers 17,000 new homes planned to 2033, which includes circa 1,000 new homes under windfall opportunities, and the 10,000 new homes planned at Gilston.

Since the time of the previous responses to the IDPs in 2017 and 2019, both ENHCCG and WECCG have moved from joint commissioning status with NHS England (NHSE) to fully delegated commissioning. NHSE have retained direct commissioning for services such as dentistry, optometry, pharmacy, offender healthcare and some services for members of the Armed Forces. The Hertfordshire and West Essex Sustainable Transformation Partnership (STP) has been replaced with Hertfordshire and West Essex Integrated Care System (ICS).

Subject to the passing of a Bill, which at the time of writing (August 2021) is in its second reading in Parliament, further changes are planned beyond April 2022. Those changes see the ICS becoming statutory bodies, taking on the statutory roles, alongside newly formed Integrated Care Boards (ICB) where the staff, functions and responsibilities of the CCGs will transfer to ICBs and the CCGs will cease to exist. The changes also see ICS/ICBs take on the direct commissioning of dentistry, optometry, and pharmacy from NHSE. NHSE are likely to retain some of the specialist services, such as such offender health and for the Armed Forces. Some services may span more than one ICS.

HWE covers a population of 1.6m and commissions healthcare to a value of £2.6bn per annum.

Health and care services and the way they are organised both from a commissioner and provider perspective will change over the lifespan of this plan. Therefore, while it is practical at this stage to describe the additional demand that the population growth will require by the traditional sectors that we currently have and recognise (such as GP services, hospitals, social care etc.), going forward a range of factors will mean that this current model will change and transition over the lifespan of this IDP.

The complexity and level of demand will mean that, for health and care services to meet those needs, a much more integrated approach will need to be taken with blurring of the lines between different sectors within health, and those across health and social care, and between physical and mental health. This will encompass those agencies who manage the wider determinants of health,

including housing, employment, and environment. The HWE Sustainability and Transformation Plan describes the journey that the system has begun over the last couple of years, now and into the future. This builds on the NHS Five Year Forward View and Long-Term Plan (LTP) and, most recently, the 2021/22 Priorities and Operational Planning guidance. As part of this, the HWE ICS has developed its own people plan, to create one workforce across Hertfordshire and West Essex to deliver high quality, seamless and person-centred care. This was part of the 3-phase response to Covid and now also aligns with the National People Plan, as well as our systems health and care strategies and population health needs. It aims to continue to innovate and create new ways of working that enable the HWE system to respond most efficiently to the needs of patients, enabling integration across health and care. The HWE ICS has taken part in the recent Wave 2 NHSEI Population Health Management (PHM) pilot for Place and 4 Primary Care Networks (PCNs), whilst also adopting a PHM approach to identifying the needs and opportunities for those with Long-term conditions (LTCs) and multi-morbidities.

This work will contribute towards the reduction of health inequalities across HWE ICS and sits alongside other priority initiatives to reduce health inequalities, by tackling the elective waiting list, restoring cancer services, mitigating against digital exclusion, and improving uptake of screening. Personalised care and support planning will continue to be expanded; currently all Continuing Health Care (CHC) and Children and Young Peoples Continuing Care (CYPCC) patients have the right to home care packages. Social Prescribing services have been enhanced via PCNs and personalisation is embedded within transformation programmes across LTC, cancer, maternity, and mental health. All these work programmes have engaged with stakeholders in health, care, and the voluntary sector to maximise reach and impact. It is expected that new models of care for our communities over the lifespan of the IDP, combined with technological advances, will lead to greater integrated and technologically advanced models of care for our local population.

Primary Care Networks (PCNs) are groups of GP practices working together with community, mental health, social care, pharmacy, hospital, and voluntary services in their local areas to meet the needs of the population, typically serving a community of between 30,000 to 50,000 people. They are small enough to provide the personal care, valued by both people and GPs, but large enough to have impact and economies of scale through better collaboration between GP practices and others in the local health and social care system. PCNs are led by clinical directors who may be a GP, general practice nurse, clinical pharmacist or other clinical profession working in general practice.

- ENHCCG has 13 PCNs and the PCN most affected by the growth planned under the IDP, specifically the new homes at Gilston, are Stort Valley and Villages.
- WECCG has 6 PCNs, 2 of which are in Harlow (Harlow North and Harlow South). Harlow North is the PCN that is affected by the new homes planned at Gilston.
- Whilst outside the catchment area of this response, but to add context, the Herts Valleys Clinical Commissioning Group (HVCCG) which also forms part of HWE ICS has 16 PCNs.

The ICS/PCN approach will have an impact on not only estate, infrastructure, and digital planning but the way the system will need to plan its workforce requirements in the future.

In future, public sector planning will need to continue to move to considering overall demand for a system, rather than by individual organisations planning for the delivery of these services, and in so doing make the most of the advances and resources that are available to maximise the provision of care to our changing population.

For the purposes of the IDP, health and social wellbeing consists of the following:

- General Practitioner (GP) services
- Hospitals
- Community and Mental Health Services
- Ambulance Services
- Social care
- Public health

This analysis does not consider specific wider primary care service needs such as dentists, pharmacies, opticians as these services are still under the responsibility of NHSE for now, at least. But it is important to recognise that all these services will be impacted by demand from growth.

The Health and Social Care Act 2012 radically changed the way in which health care services are planned and organised. These are primarily provided by the Clinical Commissioning Groups (CCGs) The CCG is responsible for planning and buying ('commissioning') local health care services. Although, as described above, changes post-April 2022 are planned to end the existence of CCGs and put ICS on a statutory footing, with the transfer the staff and functions of the CCGs to ICBs.

In 2019, HWE STP the Sustainability and Transformation Plan was approved by the Department of Health. This incorporated the plans for two new hospital builds at Princess Alexandra Hospital in Harlow and West Hertfordshire Hospitals Trust's site at Watford, plus other community, mental health, and primary care infrastructure plans. This is an iterative document where pipeline projects are reviewed periodically.

Across HWE, Public Health services are commissioned by Essex County Council and Hertfordshire County Council, in partnership with the respective local authorities. These services are primarily focused on prevention and early intervention, specifically developing measures that help to reduce illness and to tackle the causes of poor health at source. This includes initiatives to increase activity and healthy living, such as cycling and walking, as well as provision of green space within developments. The strategic overview of the ICS includes consideration of these issues.

Priorities for Public Health within spatial planning include supporting access to quality open and green/blue space; healthy diets including improving access to local and fresh food; improving community cohesion and reducing social isolation; supporting air quality; increasing active living through movement and play across all ages; and supporting good quality housing design across the life course. Reducing health inequalities underpins our work.

Local data on Public Health is published annually by several national organisations, including Public Health England and the NHS. This includes the local Health Profiles and the Public Health Outcomes Framework. Assessment of Public Health and Wellbeing need will be supported by the Health Impact Assessment processes, local evidence base and current Public Health Policy.

A particular focus of HWE ICSs is bringing diagnostic services into communities. Plans for this are underway, focusing in East and North Hertfordshire during 2021, with further sites planned across West Essex and West Hertfordshire in the year 2 and 3 submissions. This builds on the national Independent Review of Diagnostic Services by Professor Sir Mike Richards in 2020. The HWE ICS diagnostic strategy will build on the population health needs identified by the 3 Integrated Care Boards (ICB) which are currently operating in shadow form within the current CCGs and provider trusts and organisations.

This growing focus on bringing care provision into the community may see the creation of health care 'hubs'/networks and greater integration of services and shared assets. In addition, there may be a need to increase estate, or investment into buildings and infrastructure to make them fit for purpose. New facilities do not have to be standalone buildings.

There are also ICS priorities related to increased use technology, so our patients and citizens can receive the care and support they need to live healthier, happier lives. These include but are not limited to:

- Provision of information and tools to allow our population to take responsibility for their own health and wellbeing
- Our professionals being supported in delivering that care; digital capability must enhance our working lives, not add unnecessary challenge, duplication, or distraction
- Our respective organisations having the technology solutions to operate in an efficient and cost-effective way which supports continued high performance and future sustainability
- Us working as a system to provide joined up health and care to our populations

In combination these will provide alternative methods for patients and the wider community to receive and contribute to care using technologies that most appropriately meet their needs.

Primary Care Services

The Primary Care Strategies of the ICS and CCG's focus on the following key areas:

- General Practice to be provided at scale aligned to defined neighbourhoods.
- The creation of a neighbourhood multi-disciplinary primary care workforce embedded in the Care Closer to Home model of care. This will provide General Practice that is fully integrated, including the local authority and voluntary sectors.
- Improved use of technology in General Practice.
- Improved quality of care and safety of General Practice.

- Increased patient access Fit for purpose estate for the delivery of modern General Practice.
- Supporting the development of a resilient General Practice workforce.
- Improved GP Training Facilities

Existing General Practitioner (GP) provision

Generally, the NHS policy locally is to attempt to accommodate growth wherever possible within current premises envelope, though this is likely to require capital works to adapt facilities over time, and only to seek new premises where this is demonstrably necessary. Given that 17,000 new homes are planned within the IDP to 2033, it is inevitable that new premises will be required.

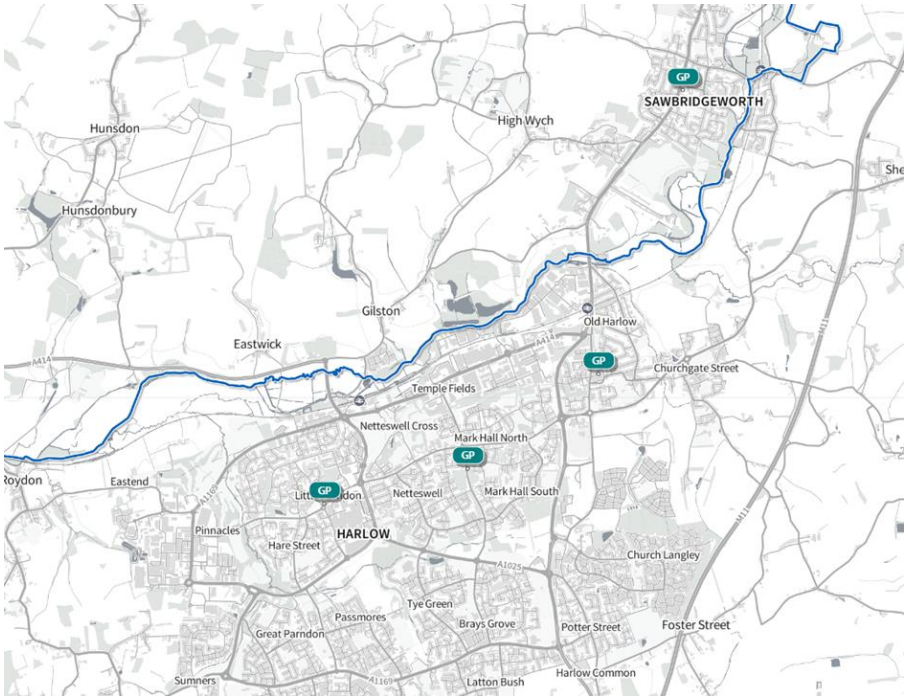
It is not possible to accurately determine the size of new health facilities at this stage but both ENHCCG and WECCG have considered the existing capacity of surgery premises and the planned growth, enabling a ballpark forecast of infrastructure need. The CCGs have also recently undertaken an analysis of recent tendered primary care projects and are able to provide a cost and land cost by m^2. Accuracy depends on a range of complex and inter-related factors that can only be resolved at a more advanced stage in the planning process, e.g., when the type and mix of housing units is known, whether they be 1, 2-, 3-, 4- or 4+ bedroom units. The detail of such impacts on the future demographics needs of the population. It will not be the case that each new health facility would be a fixed size or would have a fixed range of services. The £5,410 per m2 cost upon which Primary Care GP is based is broken down below:

Surveys - £25-£50K	£60,000.00	total	inc VAT
Planning fees - £10-£12K	£12,000.00	total	no VAT applicable
Professional fees - architect, employer's agent, CDM co-ordinator and M&E consultant 10-15% of construction value	£540.00	per m2	inc VAT
Land - circa 1/3 of construction costs	£1,200.00	per m2	inc VAT
Total per m2 costs	£5,340.00	per m2	
Total non m2 cost circa £70K, presuming 1000m2 surgery	£70.00	per m2	
Total per m2	**£5,410.00**		
1,000 dwelling example - New build inc land			
1,000	2.4	2,400	New registrations
2,400	2,000	1.2	GP (based on ratio of 2,000 patients per 1 GP and 199m^2 as set out in the NHS England "Premises Principles of Best Practice Part 1 Procurement & Development")
1.2	199	238.8	Additional space required
238.8	£5,410.00	£1,291,908.00	Total cost
£1,291,908.00	1,000	**£1,291.91**	**Cost per dwelling**

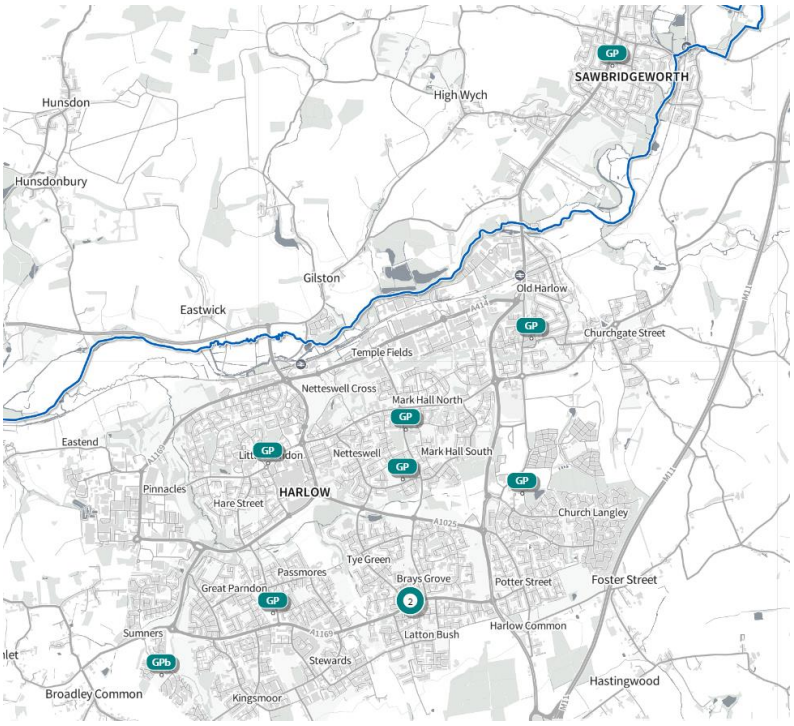
Clinically there are circumstances where co-location of GP and other NHS or social care functions is desirable and would be considered or sought.

The planned growth of 17,000 dwellings within the IDP to 2033 will add significantly to the number of patients within the catchment area. The location of existing facilities mean that it is unlikely that their expansion would address the needs over the plan period. Therefore, a new facility is highly likely to be required.

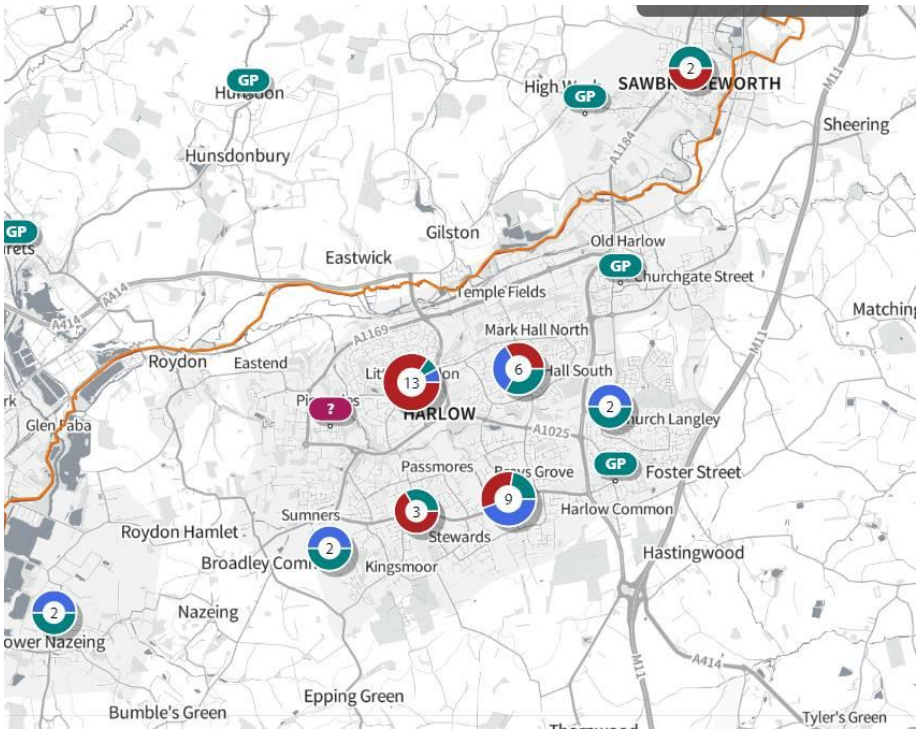
Location of existing practices likely to be impacted by the 10,000 Gilston dwellings



Location of existing GP Practices likely to be impacted by 17,000 dwellings



Primary Care Health Estate likely to be impacted by 17,000 dwellings



The Primary Care GP forecasting of patient growth includes the 10,000 dwelling Gilston development based on the housing trajectory provided by East Herts District Council:

Gilston - housing delivery trajectory

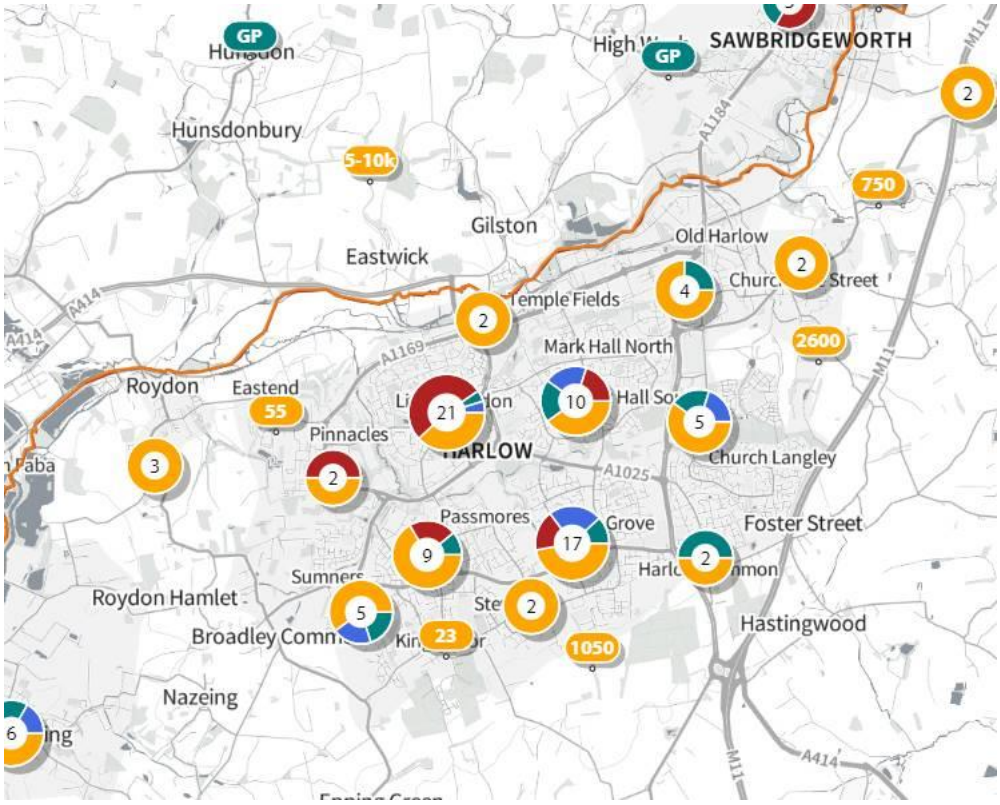
	Village 1	Village 2	Village 3	Village 4	Village 5	Village 6	Village 7	All exc. V7	Cumulative	All	Cumulative
2023	100							100	100	100	100
2024	150							150	250	150	250
2025	200							200	450	200	**450**
2026	250							250	700	250	700
2027	275						175	275	975	450	1,150
2028	275	200					175	475	1,450	650	1,800
2029	275	200					175	475	1,925	650	2,450
2030	275	200					175	475	2,400	650	**3,100**
2031	50	250			175		175	475	2,875	650	3,750
2032		200	100		175		175	475	3,350	650	4,400
2033		200	150		125		175	475	3,825	650	5,050
2034		200	150		125		175	475	4,300	650	5,700
2035		211	180		120		100	511	4,811	611	**6,311**
2036			240	250		100		590	5,401	590	6,301
2037			183	277		100		560	5,961	560	7,461
2038				275		275		550	6,511	550	8,011
2039				275		260		535	7,046	535	8,546
2040				251		210		461	7,507	461	9,007
2041				250		150		400	7,907	400	9,407
2042				240		85		325	8,232	325	9,732
2043				180		88		268	8,500	268	**10,000**
	1,850	1,661	1,003	1,998	720	1,268	**1,500**	**8,500**		**10,000**	

Gilson Build Out	Per 5yr period	Cumulative
by 2025	450	450
by 2030	2,650	3,100
by 2035	3,211	6,311
by 2040 & beyond	3689	10,000

The IDP is based on 17,000 dwellings but when considering Primary Care GP need the impact of these 17,000 dwellings cannot be considered in isolation as other developments across both West

Essex and Hertfordshire are forecast to impact the 4 nearest existing GP practices: Central Surgery in Sawbridgeworth, Addison House Surgery, Nuffield House Surgery and Old Harlow Health Centre.

Primary Care health estate with housing trajectory pre HGGT



Hertfordshire

Central Surgery currently has capacity to absorb circa 1,666 new patients (based on a tested benchmark of 18 actual patients per m2). But given the combined developments known as SAWB2, SAW3 and SAWB4 in Sawbridgeworth and the forecasted 480 dwellings mean that by 2025 the capacity stated above will be reduced, the surgery will be able to accommodate a maximum of 514 new patients. The award in the S106 agreements in relation to those developments already reflect the impact of the patient growth on Central Surgery but are dependent on implementation. Therefore, the direct impact is that there will be limited ability for Central Surgery to absorb any patient increase from the Gilston 10,000 new homes and the developers will need to contribute financially to mitigate the impact of their development as a condition of the application yet to be determined.

West Essex/Harlow

- Addison House Surgery is currently over capacity by circa 5,360 patients but for the purposes of the calculation of future need this existing deficit has been discounted.
- Nuffield House Surgery currently has capacity to absorb circa 7,208 patients.
- Old Harlow Health Centre currently has capacity to absorb circa 1,015 patients.

Patient growth is based on an average of 2.4 occupants per dwelling, when housing types are known, firmer population numbers can be agreed.

Based on current capacity and the impact of the 10,000 dwelling Gilston development alone the following demonstrate the impact by 2025, 2030, 2035 and 2040 and beyond based on an 80% allocation for Hertfordshire and a 20% allocation for West Essex/Harlow:

Surgery Name	Number of patients capacity/ constraint relative to 18 per m2 (1/4/2021)	Number of patients capacity/ constraint of the settlement	NIA shortfall	Capital impact of existing capacity/ shortfall	Number of dwellings proposed by 2025	Projected population growth by 2025	Resulting NIA requirement	No of patients over capacity by 2025	Total NIA shortfall by 2025
Central Surgery	1666	1666	93	-£500,726	360	864	48	802	45
Addison House Surgery	0	0	0	£0	30	72	4	-72	-4
Nuffield House Surgery	7208	7208	400	-£2,166,404	30	72	4	7,136	396
Old Harlow HC	1015	1015	56	-£305,064	30	72	4	943	52
	9889	**9889**	**549**	**-£2,972,194**	**450**	**1080**	**60**	**8809**	**489**

Surgery Name	Number of patients capacity/ constraint relative to 18 per m2 (1/4/2021)	Number of patients capacity/ constraint of the settlement	NIA shortfall	Capital impact of existing capacity/ shortfall	Number of dwellings proposed by 2030	Projected population growth by 2030	Resulting NIA requirement	No of patients over capacity by 2030	Total NIA shortfall by 2030
Central Surgery	802	802	45	-£241,046	2120	5,088	283	-4,286	-238
Addison House Surgery	-72	-72	-4	£21,640	177	425	24	-497	-28
Nuffield House Surgery	7316	7316	406	-£2,198,864	177	425	24	6,891	383
Old Harlow HC	943	943	52	-£283,424	176	422	23	521	29
	8989	**8989**	**499**	**-£2,701,694**	**2650**	**6360**	**353**	**2629**	**146**

Surgery Name	Number of patients capacity/ constraint relative to 18 per m2 (1/4/2025)	Number of patients capacity/ constraint of the settlement	NIA shortfall	Capital impact of existing capacity/ shortfall	Number of dwellings proposed by 2035	Projected population growth by 2035	Resulting NIA requirement	No of patients over capacity by 2035	Total NIA shortfall by 2035
Central Surgery	-4286	-4286	-238	£1,288,181	2569	6,166	343	-10,452	-581
Addison House Surgery	-497	-497	-28	£149,376	214	514	29	-1,011	-56
Nuffield House Surgery	6891	6891	383	-£2,071,128	214	514	29	6,377	354
Old Harlow HC	521	521	29	-£156,589	214	514	29	7	0
	2629	**2629**	**146**	**-£790,161**	**3211**	**7706**	**428**	**-5077**	**-282**

Surgery Name	Number of patients capacity/ constraint relative to 18 per m2 (1/4/2040 & beyond)	Number of patients capacity/ constraint of the settlement	NIA shortfall	Capital impact of existing capacity/ shortfall	Number of dwellings proposed by 2040 & beyond	Projected population growth by 2040 & beyond	Resulting NIA requirement	No of patients over capacity by 2040 & beyond	Total NIA shortfall by 2040 & beyond
Central Surgery	-10452	-10452	-581	£3,141,407	2951	7,082	393	-17,534	-974
Addison House Surgery	-1011	-1011	-56	£303,862	246	590	33	-1,601	-89
Nuffield House Surgery	6377	6377	354	-£1,916,643	246	590	33	5,787	321
Old Harlow HC	7	7	0	-£2,104	246	590	33	-583	-32
	-5079	**-5079**	**-282**	**£1,526,522**	**3689**	**8854**	**492**	**-13933**	**-774**

As evidenced in the table above the existing GP infrastructure cannot absorb the Gilston development as well as other development sites. New health infrastructure will be needed and funded by developers' contributions as a pre-requisite to the granting of planning approval. Whilst it is understood that planning applications must be considered on individual merit, health care cannot be planned piecemeal and holistic planning is needed, recognising that delivery of new housing units are outside the control of the local authorities and health organisations.

Based on Gilston not being considered in isolation:

a) if the forecasted 480 Sawbridgeworth dwellings as mentioned above have been built/occupied by 2025 i.e., before any new units are completed at Gilston, the capacity at Central Surgery will reduce from 1,666 new patients to circa 514 new patients. The table below illustrates the impact of the Gilston development under this scenario. The calculation

below also includes the 8,000 Gilston dwellings apportioned to Hertfordshire. No other developments are included in this calculation.

b) Harlow have a forecast of 11,380 dwellings in total including 2,000 apportioned for Gilston.

	Dwellings to 2025	Dwellings to 2030	Dwellings to 2035	Dwellings to 2040+	
Gilston	90	530	642	738	Total = 2,000
Harlow	4,070	2,834	2,476		Total = 9,380
Total	**4,160**	**3,364**	**3,118**	**738**	**Total dwellings - 11,380**

Taking a) and b) into account the revised calculations are:

Surgery Name	Number of patients capacity/ constraint relative to 18 per m2 (1/4/2021)	Number of patients capacity/ constraint of the settlement	NIA shortfall	Capital impact of existing capacity/ shortfall	Number of dwellings proposed by 2025	Projected population growth by 2025	Resulting NIA requirement	No of patients over capacity by 2025	Total NIA shortfall by 2025
Central Surgery	514	514	29	-£154,486	360	864	48	-350	-19
Addison House Surgery	0	0	0	£0	1387	3,329	185	-3,329	-185
Nuffield House Surgery	7208	7208	400	-£2,166,404	1386	3,326	185	3,882	216
Old Harlow HC	1015	1015	56	-£305,064	1387	3,329	185	-2,314	-129
	8737	**8737**	**485**	**-£2,625,954**	**4520**	**10848**	**603**	**-2111**	**-117**

Surgery Name	Number of patients capacity/ constraint relative to 18 per m2 (1/4/2021)	Number of patients capacity/ constraint of the settlement	NIA shortfall	Capital impact of existing capacity/ shortfall	Number of dwellings proposed by 2030	Projected population growth by 2030	Resulting NIA requirement	No of patients over capacity by 2030	Total NIA shortfall by 2030
Central Surgery	-350	-350	-19	£105,194	2120	5,088	283	-5,438	-302
Addison House Surgery	-3329	-3329	-185	£1,000,549	1122	2,693	150	-6,022	-335
Nuffield House Surgery	3882	3882	216	-£1,166,757	1121	2,690	149	1,192	66
Old Harlow HC	-2314	-2314	-129	£695,486	1121	2,690	149	-5,004	-278
	-2111	**-2111**	**-117**	**£634,473**	**5484**	**13162**	**731**	**-15273**	**-848**

Surgery Name	Number of patients capacity/ constraint relative to 18 per m2 (1/4/2025)	Number of patients capacity/ constraint of the settlement	NIA shortfall	Capital impact of existing capacity/ shortfall	Number of dwellings proposed by 2035	Projected population growth by 2035	Resulting NIA requirement	No of patients over capacity by 2035	Total NIA shortfall by 2035
Central Surgery	-5438	-5438	-302	£1,634,421	2569	6,166	343	-11,604	-645
Addison House Surgery	-6022	-6022	-335	£1,809,946	1040	2,496	139	-8,518	-473
Nuffield House Surgery	1192	1192	66	-£358,262	1039	2,494	139	-1,302	-72
Old Harlow HC	-5004	-5004	-278	£1,503,980	1039	2,494	139	-7,498	-417
	-15272	**-15272**	**-848**	**£4,590,084**	**5687**	**13649**	**758**	**-28921**	**-1,607**

Surgery Name	Number of patients capacity/ constraint relative to 18 per m2 (1/4/2040 & beyond)	Number of patients capacity/ constraint of the settlement	NIA shortfall	Capital impact of existing capacity/ shortfall	Number of dwellings proposed by 2040 & beyond	Projected population growth by 2040 & beyond	Resulting NIA requirement	No of patients over capacity by 2040 & beyond	Total NIA shortfall by 2040 & beyond
Central Surgery	-11604	-11604	-645	£3,487,647	2951	7,082	393	-18,686	-1038
Addison House Surgery	-8518	-8518	-473	£2,560,132	246	590	33	-9,108	-506
Nuffield House Surgery	-1302	-1302	-72	£391,323	246	590	33	-1,892	-105
Old Harlow HC	-7498	-7498	-417	£2,253,566	246	590	33	-8,088	-449
	-28922	-28922	-1607	£8,692,668	3689	8854	492	-37776	-2,099

The above calculations at 2025, 2030, 2035 and beyond 2040 indicate an ascending Primary Care GP "Net Internal Area" (NIA) shortfall to 2,099 m2. This will need periodic re-visiting when housing types and delivery are more certain.

Secondary Healthcare

Hospitals

The Princess Alexandra Hospital (PAH) principally serves the Harlow and Gilston Garden Town and wider catchment area covering a population of approximately 350,000. The Lister Hospital, located in Stevenage, and the New QEII Hospital, in Welwyn Garden City, also serve Garden Town residents.

HWE ICS envisages that hospital services will be reconfigured and transformed, with new models of care meaning more care will be provided as close to people's homes as possible. The PAH will build on their partnership work. This will include a range of significant clinical reconfiguration projects, centralisation of services and programmes to improve quality, safety, and patient experience. It is likely that there will be changes to where some services are delivered.

The STP Medium Term Financial Plan (2019) includes assumptions around the level of activity that will move from acute to a community setting, as follows:

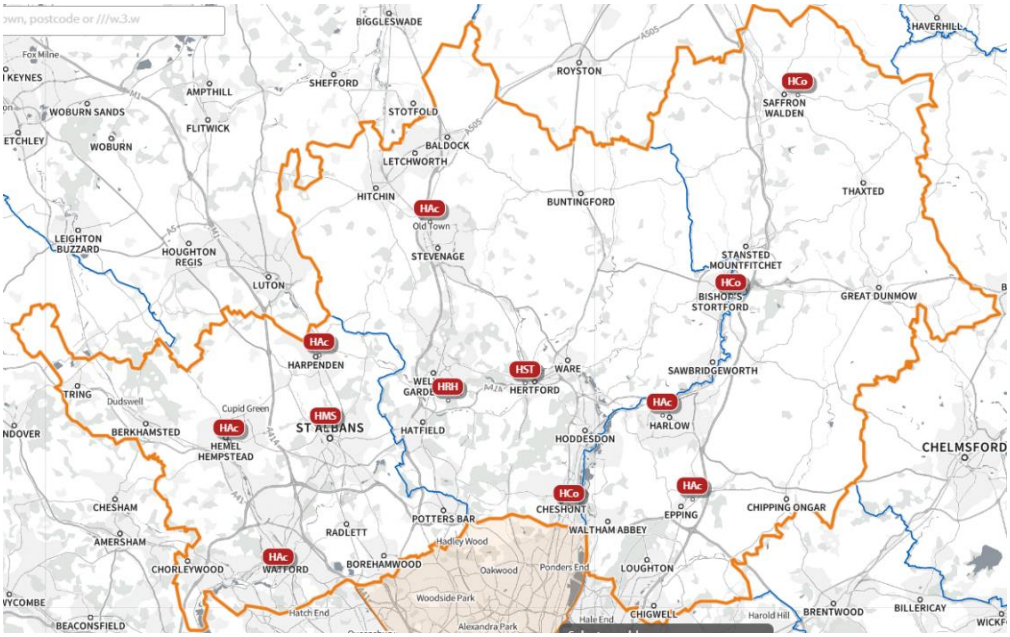
- 15% reduction in elective and day case activity.
- 22% reduction in non-elective activity (excluding maternity); and
- 22% reduction in outpatient activity.

In line with Primary Care Strategies, the Long-Term Plan and shifting care closer to home where possible, it is envisaged that the impact on the acute sector will culminate in greater complexity and health needs of patients presenting in the acute sector. Hospitals will need to be redesigned to treat the patients of the future, with specific redesign based upon:

- Greater community-based care for less acute patients
- An ageing population
- Hospital facilities which maximise the potential to treat the neediest in the most efficient manner possible, centralising services and maximising economies of scale
- Greater treat and discharge models of care, linking to increased community and social care provision
- Move to designated day case and ambulatory models of care and settings
- Increased health needs/acuity of those patients presenting in the Acute sector
- Provision of the transfer of patients to less acute settings as soon as clinically appropriate, providing patients with care closer to home as soon as possible

- The centralisation of support functions and services, such as Pharmacy, enabling the greater provision of community healthcare whilst maintaining the most acute patient care within the acute setting
- Repatriation of tertiary services where practically possible.

Locations of Acute Hospitals in Hertfordshire and West Essex



Princess Alexandra Hospital

The PAH NHS Trust is considering options to meet its future service requirements. The hospital serves a catchment much larger than the Garden Town alone and must meet the existing and future needs of this catchment.

Three Hospital development scenarios are currently being considered:

- Provision of a new hospital East of Harlow (preferred option).
- Refurbishment and partial development of the existing hospital.
- Redevelopment of the existing hospital.

PAH's related cost planning exercise indicates a range of capital cost estimates up to a maximum of £900,000,000. For all development scenarios there is likely to be a significant funding shortfall more than the identified S106 developer contributions.

PAH will incur significant highways and other infrastructure costs associated with the preferred option including: Campions roundabout modifications including pond relocation, the STC underpass bridge link, gas main diversion, and UKPN power connection.

The new hospital has been sized to reflect the new model of care to provide services closer to home and the shift in the way acute services will function including an associated reduction in on site outpatients and modern and efficient ways of working, to enable the required activity rates within a smaller footprint than a traditional acute hospital. Notwithstanding the new model of care, there will still be instances requiring interventions in an acute healthcare setting.

The Trust receives funding via a range of contract arrangements and is also required to find year on year efficiency savings.

The Department of Health indicates the costs for the provision of NHS health services. The National Tariff is broken down with 65% for staffing costs, 21% other operational costs, 7% for drugs, 2% for the clinical negligence scheme and 5% for capital maintenance costs. The 5% capital allowance within the Tariff is not sufficient to provide for new infrastructure. Furthermore, the capital costs of healthcare are not limited to buildings but also includes costly equipment and technology.

As a Trust, there is no routine eligibility for capital allocations from either the department of health or local commissioners to provide new capital capacity to meet additional healthcare demands.

With the above in mind, PAH have taken the following approach:

- Step 1* – Identify the full-service demand associated with the proposed Garden Town development (for approximately 17,000 additional homes) using appropriate evidence.
- Step 2 – Assess existing service capacity and ability, if any, to absorb the identified new level of demand; where existing capacity/funding is available to draw down against the needs of the Garden Town development, a developer contribution will not be justified.
- Step 3 – Confirmed there is no available capacity to absorb the new demand. Consequently, a service capacity gap has been identified, along with appropriate mitigation needed to make the Garden Town development acceptable in planning terms.

* Note – the exercise currently excludes acute outpatient or acute community care provision, which also needs to be factored in, details of which will be provided in due course.

Using the above approach, the following scenarios have been applied to a strategic health model provided by HUDU and the key cost outputs are set out in the summary table below.

Acute Inpatients Costs HUDU Strategic Modelling

	Scenario 1 New Hospital in East Harlow	Scenario 2 Refurbishment in Situ	Scenario 3 Redevelopment in Situ
Acute inpatient Cost (HUDU modelling outputs) [ii]	£17,742,700[iii]	£17,784,600	£20,304,300
Acute inpatient Cost (LPP Calculations using updated PAH estimated build costs) [ii]	£18,756,120[iii]	£17,833,000	£21,049,234

[i] does not include outpatients, intermediate, primary and community services

[ii] includes inflation

[iii] includes land costs

The figures contained in the above Table represent the required level of acute inpatient S106 contributions to be met by the level of planned housing development across the Garden Town.

The rationale for the new hospital is based on the need to modernise facilities and provide additional capacity to meet current and future needs. The PAH Outline Business Case (OBC) is due to be submitted in 2022. Costs are anticipated to be further refined during the subsequent Full Business Case (FBC) process, which will be reflected in the IDP at an appropriate time.

Although the PAH receives HIP1 funding for the acute services it provides based on demand from its catchment population and demographic projections, there remains a significant funding gap in either hospital development scenario i.e., whether it is redeveloped in situ or relocates to the new site East of Harlow. The funding gap is directly and proportionally increased by the 'new' residents of the Garden Town development.

Therefore, S106 contributions are needed to mitigate the additional impacts of the Garden Town development on acute services provision and are an important component of PAH's overall funding and delivery capabilities.

Community and Mental Health

Commissioners such as ENHCCG and WECCG commission community and mental health care from multiple providers. These services are known as secondary services as patients will usually be referred into these services by their GP or on discharge from hospital. These services are delivered from day assessment units or clinics and inpatient facilities.

Community services would include (not exhaustive):

- Adult Community Nursing
- Specialist Long Term Condition Nursing
- Therapy Services
- Preventive Services such as Sexual Health and Smoking Cessation Clinics
- Child Health Service including Health visiting and School Nursing

Mental Health services would include (not exhaustive):

- Schizophrenia
- Bipolar Disorder
- Anxiety Disorders
- Depression
- Eating Disorders
- Personality Disorders
- Drugs, Alcohol and Mental Health

- Post-Traumatic Stress Disorder (PTSD)

The strategies from the three main secondary community and mental health providers that the CCGs commission services from are outlined below.

Hertfordshire Partnership NHS University Foundation Trust (HPFT)

The Hertfordshire Partnership NHS University Foundation Trust delivers on its "Good to Great Strategy", which describes how the Trust are delivering our vision of 'Delivering Great Care, Achieving Great Outcomes – Together'. Achieving our vision means that: we put the people who need our care, support and treatment at the heart of everything we do; we will consistently achieve the outcomes that matter to those individuals who use our services and their families and carers, by working in partnership with them and others who support them; we keep people safe from avoidable harm, whilst ensuring our care and services are effective; that they achieve the very best clinical outcomes, support individual recovery and are of the highest quality. Our Good to Great Strategy demonstrates the key areas of focus for the Trust, in terms of the people, the organisation and partnerships. It focusses on the three domains of quality – safety, effectiveness, and experience.

Through providing consistently high-quality care that is joined up, individuals will be supported and empowered to recover and to manage their mental and physical wellbeing. This will enable us to achieve our mission – 'We will help people of all ages live their lives to their fullest potential by supporting them to keep mentally and physically well.'

This enables the Trust to deliver on our strategic objectives to:

- provide safe services, so that people feel safe and are protected from avoidable harm
- deliver a great experience of our services, so that those who need to receive our support will feel positively about their experience
- improve the health of our service users through the delivery of effective, evidence-based practice
- attract, retain, and develop people with the right skills and values to deliver consistently great care, support, and treatment
- improve, innovate, and transform our services to provide the most effective, productive, and high-quality care
- deliver joined up care to meet the needs of our service users across mental, physical, and social care services in conjunction with our partners
- shape and influence the future development and delivery of health and social care to achieve better outcomes for our population(s)

HPFT seeks to identify and support development opportunities in relation to provision of mental health premises and facilities closer to home to support our objectives of providing the best mental health care for our community.

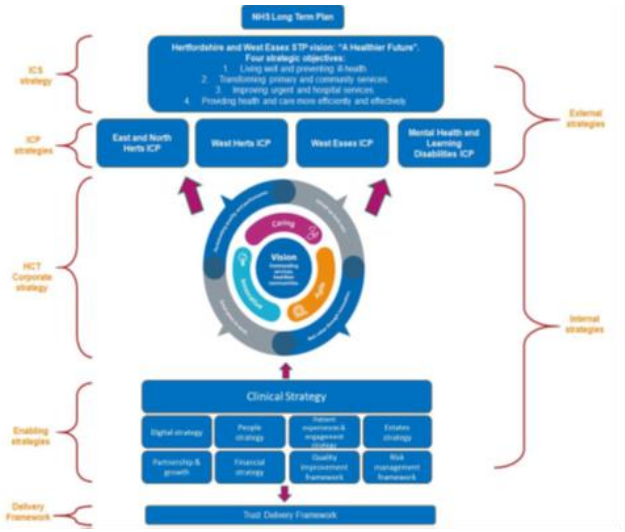
Hertfordshire Community NHS Trust (HCT)

The Hertfordshire Community NHS Trust (HCT) provides community-based healthcare services in Hertfordshire, Bedfordshire, Essex, Luton, and Milton Keynes. We support people at every stage of their lives, from health visiting and school nursing services for children and young people to community nursing, rehabilitation, and palliative care.

The changing demographics within this geographical area and the increasing prevalence of complex long-term conditions will have profound impacts on the services that are needed and the way in which we will need to provide care. Whilst demand growth is likely to be seen across all service areas, this changing picture of our population will see a more significant growth in demand for certain services such as frailty, heart failure, end of life care and other services focused predominantly on our older population. It will be imperative that over the course of this strategy we plan and deliver our services in the most effective and efficient way to meet the needs of our patients and population now and in the future.

Therefore, HCT are committed to supporting the development of suitable premises and facilities within the local areas to adequately support the local population.

We recognise that it is important to ensure our strategies are aligned with each other and regional priorities as per diagram below:



West Essex One Health and Care Partnership

Essex Partnership University NHS Foundation Trust

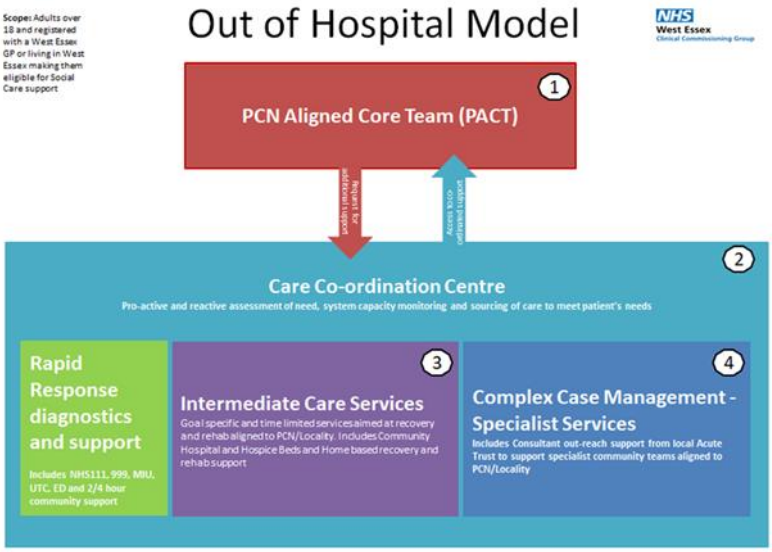
The West Essex One Health and Care Partnership has developed the strategic vision and **Out of Hospital Model of Care** (below). This supports the delivery of the Hertfordshire and West Essex Integrated Care System strategy and has direct synergies with the Community Mental Health Framework delivering integrated services in the community based on personalisation and proactive population health modelling.

The system priorities are to improve health and wellbeing related quality of life and outcomes with a focus on our complex and frail population, those with long term conditions and people at end of life.

The registered population of West Essex is currently aligned to six Primary Care Networks (PCN) - North Uttlesford, South Uttlesford, North Harlow, South Harlow, Epping & Ongar, and Loughton, Buckhurst Hill & Chigwell.

The proposed new Princess Alexandra Hospital design is contingent on more health and care taking place outside of the acute hospital. Most of the community, mental health and social care provision will be deployed by providers - primary care aligned teams (PACT's) including Adult Social care at a PCN level.

To deliver the Out of Hospital Model of Care in West Essex, it is essential that there is functional estate that supports integrated multi-disciplinary working to enable operational delivery of services in the community.



Given the integrated care model, community and mental health would ideally be located with GP services. It has been identified that it is essential to develop a comprehensive, high quality "Health and Wellbeing Centre" to adequately provide the community and mental health services for the increasing population proposed within the plan period covered within this IDP.

Based on current capacity and the impact of the proposed additional dwellings it is identified that there is a need to develop an increased community and mental health, Health and Wellbeing Facility to cover Net Internal Area" (NIA) of 2,500 m2. This may require review once it becomes clearer about housing types, quantum of units and confirmed delivery.

Type of Service Development	£/m2
- Mental Health cost per £/m2	£1,810 (Cost excludes land purchase, fees, VAT)
- Community Health cost per £/m2	£ 1,900 (Cost excludes land purchase, fees, VAT)

Ambulance Services

East of England Ambulance Service NHS Trust (EEAST) Estates Strategy (2020-2025) summary position is to provide cost effective and efficient premises of the right size, location, and condition to support the delivery of clinical care to the community served by the Trust.

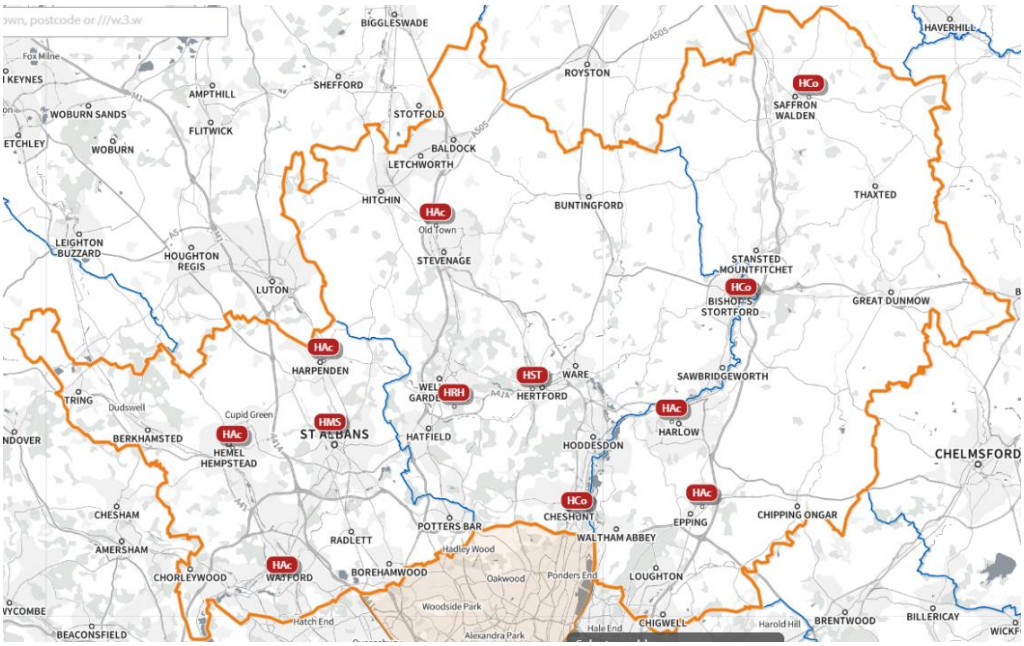
A range of national initiatives are underway aimed at improving performance and sustainability within the NHS. There is widespread agreement from the stakeholders sponsoring these initiatives about the changes required within ambulance services and across the wider urgent and emergency system in all six counties along with Local Authorities and Councils, Universities, military establishments, and private providers of ambulance services.

Addressing these changes requires the Trust to develop revised operating models and strategies for all aspects of its services, including operational support services such as the Estates Service. A key component of this process has been to establish the Trust's future Operating Model and to commence planning for the resulting transformation of support services. Expansion to the existing Make Ready Hub and Spoke network will be required to meet the growing demographics.

Each Hub will have a network of Spokes termed Ambulance Station Response Posts (ASRP), tailored to meet service delivery and patient response specific to their local area. The spoke network is determined by the local population health care needs through patient flow modelling and subsequently EEAST staffing requirements. The aim is to create demand-centric and agile spokes which are adapted to activity requirements as these change over time. Spokes can be made up of:

- Ambulance Station Reporting Base - 24/7 permanent reporting base for staff and primary response location for one or more vehicles.
- Ambulance Station Response Post - primary response location which includes staff facilities
- Standby Location - set in strategic locations where crews are placed to reach patients quickly. Facilities used by staff are provided by external organisations to EEAST.

Ambulance Stations in Hertfordshire and West Essex



The resulting estate configuration which consists of a network of up to 18 ambulance Hubs. Each 'hub' will incorporate

- A make ready centre from which the Make Ready Service is delivered
- Workshop facilities providing service, maintenance, and repair services for operations vehicles within the local spoke network, including Patient Transport Service (PTS) vehicles
- Consumable product stores, with stock-levels maintained on a just-in-time basis by direct supplier delivery
- Some hubs will operate additionally as the bases for certain corporate, administrative and support services
- PTS facilities incorporated into the operational estate, primarily at the 'hubs'

In addition, across the Trust's region there are:

- Two Hazardous Area Response Team (HART) bases, located to best support the major airports within the Trust's region
- A Trust HQ co-located within operational premises
- A regional training school providing staff professional training, co-located with driver training and supported by up to two satellite professional training locations plus general training facilities at each of the 'hubs'
- A fleet logistics centre at one of the hubs', incorporating a 24-hour fleet logistics call-centre.

In reference to West Essex, Harlow forms part of the 18 Make Ready Hubs across the region and the Trust is currently in the process of identifying a potential new site, ideally adjacent to planned redevelopment of Princess Alexander Hospital that would meet the requirements to support the operational delivery. Within Essex there are also Hubs at Chelmsford, Basildon, and Southend-on-Sea with plans for refurbishment or to identify appropriate sites for development to meet the Trust's Integrated Transformation Plan.

In reference to Hertfordshire, there are Hubs in Stevenage, Watford, and Hemel Hempstead with plans for refurbishment or to identify appropriate sites for development to meet the Trust's Integrated Transformation Plan.

EEAST estates and development plans consider growth in demographics of population changes and therefore any increase in requirements to meet these changes will require modelling to account for the required increased workforce, equipment, and vehicles. EEAST are currently participating in an independent service review commissioned by healthcare regulators to better understand what resources are needed to meet patient demand.

As ICSs deliver hospital services reconfiguration and transformation into new models of care meaning, ambulance services will be impacted by:

- Ageing population and greater number of people living with long term conditions – creates greater demand on both emergency and patient transport services.
- An increased need for emergency ambulance services to deliver more out of hospital care, such as by expanding their "hear and treat" and "see and treat" services.
- Development of centralised care hubs, such as vascular and stroke networks, may lead to increased conveyance times, but with improved outcomes for patients.

- Changes to discharge care models are likely to increase the number of patients discharged with more complex needs and are likely to require increased levels of care during transportation as well as effective and timely handover of care.
- Focusing on improvements to acute and ambulance service diagnostic and digital connectivity.

The provision of health and social care services out of hospital care into community and social care via diagnostic hubs and community locations will require changes to patient transport services.

Below are 2 projects that EEAST are putting forward in this IDP to mitigate the impact of the 17,000 new homes:

Project 1 Description	Relocation of East of England Ambulance Service NHS Trust Hub with HE1 relocation or redevelopment of Princess Alexandra Hospital
Phasing	2025-2033 – as HE1 relocation/redevelopment of Princess Alexandra Hospital
Total Cost	Land purchase (1 hectare or 10,000m^2) not included Estimated/indicative costs and subject to change. VAT (where applicable) to be added £7.9m for hub
Developer Contribution Sought	Yes
Other Funding	Request to Department for Health and Social Care / NHS England Capital Resource Limit to be submitted and approved
Comments	TR27 Hospital relocation to East Harlow strategic site - transport mitigation measures including M11 Junction 7A capacity works

Project 2 Description	Additional/expanded East of England Ambulance Service reporting and response posts to service the community	
Phasing	2023 onwards	
Total Cost		
	GIA m^2	£2819 per m^2
Standby	20	£56,380
Ambulance Station (Response post small)	477	£1,344,663
Ambulance Station (Reporting post medium)	1328	£3,743,632

	Ambulance Station (Reporting post large) 2802 £7,898,838 Land costs not included Estimated/indicative build/refurbishment costs for each type of ambulance station and subject to change. VAT (where applicable) to be added
Developer Contribution Sought	Yes
Other Funding	Request to Department for Health and Social Care / NHS England Capital Resource Limit to be submitted and approved
Comments	Contribution to healthcare to serve new development, covering primary healthcare, mental healthcare, community healthcare and acute care East of England Ambulance Service are in a unique position that intersects health, transport and community safety as patients are treated on scene and transport to hospital for further acute care or referred to community services

Social care

Social care for both adults and children is provided by Essex County Council (ECC) and Hertfordshire County Council (HCC). This covers a range of functions and services and is provided by a range of different providers.

County council can make specific provision of built infrastructure for care services, e.g., extra care.

Public health

Responsibility for public health was moved out of the NHS into local government in April 2013. Health and Wellbeing Boards (HWBs) promote co-operation from leaders in the health and social care system to improve the health and wellbeing of their local population and reduce health inequalities.

HWBs are responsible for producing a Joint Health & Wellbeing Strategies (JHWS), Joint Strategic Needs Assessments (JSNA) and Pharmaceutical Needs Assessments (PNA) for the geographical area covered by HWE ICS.

Funding

NHS capital funding is extremely limited and is mainly allocated to backlog maintenance and small improvement works. For the provision of new healthcare facilities there are various non-NHS capital funding options, for which the NHS would be responsible for the revenue consequences.

Revenue consequences of any infrastructure works would need to be carefully considered and subject to the NHS approval process.

Shared facilities may necessitate the need for individually leased spaces and separate revenue funding streams.

As evidenced throughout this health chapter, the existing health infrastructure across all sectors cannot absorb the planned growth of 17,000 new homes. Delivery of, or contributions to, new health care facilities must be sought from all developers as part of the mitigation caused by the direct impact of the planned housing growth of the new homes and increased population. It must be a prerequisite to delivery of sustainable development. People are living longer, have more complex health needs and no one should be disadvantaged 'birth to grave' on equitable health and social care services. The costs put forward are those relevant to 2021 costings and will need periodic review as costs increase year on year. For example, RICS BICS are predicting 8% increase in 2022 based on current 2021 figures.

		NIA* Sq M	Cost / Sq M £	Funding Requirement Minimum £	Funding Requirement Maximum £	Phasing
Community and Mental Health Health and Well-Being Facility	Mental Health	1,125	1,810	2,036,250	2,036,250	
Community and Mental Health Health and Well-Being Facility	Community Health	1,375	1,900	2,612,500	2,612,500	
Primary Care GP		2,099	5,410	11,355,590	11,355,590	
Ambulance	Project 1 - Relocation***			7,900,000	7,900,000	2025-2033
Ambulance	Project 2 -Additional/expanded East of England Ambulance Service reporting and response posts to service the community***	1,328	2,819	3,743,632	3,743,632	Post 2023
Secondary Care	Acute care excluding outpatient and acute community care provision			17,742,700	21,049,234	
Secondary Care**	Acute outpatients and Acute Community Care			TBC	TBC	
Total				**45,390,672**	**48,697,206**	

Note:
* - Net Internal Area - NIA
** - Excludes acute outpatient or acute community care provision, which also needs to be factored in, details to follow
*** Excludes land costs
All costs exclude VAT

Timing and Nature of Future Provision

The provision of appropriate healthcare facilities across all disciplines of health: hospital, community, mental health, primary care, and general medical services to support the planned growth is a critical item. The necessary provision should be delivered as new growth comes forward to ensure that health care impacts are appropriately mitigated.

Where any on-site provision is required. This may need to be phased to reflect the time over which growth is expected or to accommodate certain issues. The IDP identifies a series of infrastructure requirements, either in the form of new build, expansion, or improvement of existing or new health care facilities. The exact quantum of space and the nature of the requirement will need to be discussed at the point of the development of specific proposals.

The reason for this is that healthcare services and models of care are under review, are changing and likely to change further as models and pathways of care are adapted to meet demand. Also, there needs to be greater certainty on when housing units are built out and occupied as well as detail on unit types as mentioned earlier.

Over the plan period, health care provision will need investment. It is likely it will be in very different forms than the buildings that have traditionally been developed. It will be important that requirements are reviewed regularly as part of the IDP iterative process. It is important that local authorities and developers liaise with health commissioners and their providers at the earliest possible stage to understand what type of provision will fit most appropriately with local needs.