Chapter 4: Infrastructure and Services

Table of Contents

Figures

Tables

Key findings

Local infrastructure

- Community hubs are flexible spaces that serve as focal points to bring residents, local groups and businesses together. These hubs can be used to promote place-based health and wellbeing activities.
- Digital infrastructure underpins the delivery of digital healthcare, including remote patient monitoring and telehealth. It's important that digital infrastructure is deployed efficiently and universally across Cambridgeshire and Peterborough, to avoid exacerbating health inequalities in rural or deprived areas.
- Interim or "meanwhile use" community buildings in new developments can bridge the gap for key services between residents moving into to an area and the creation of permanent facilities.
- The NHS can act as an anchor institution, supporting its surrounding communities and influencing upstream determinants of health, such as housing, employment, transportation, and sense of community.
- Co-creation and co-delivery involve local communities in decision-making processes and can be leveraged for formal planning-related matters or broader engagement with stakeholders.

Infrastructure delivery plans for health

- Infrastructure delivery plans (IDPs), sometimes also referred to as infrastructure delivery schedules, are documents that set out *what*, *where*, *when,* and *how much* of future infrastructure requirements to support a local population. They should provide answers to the following set of questions:
    - *What infrastructure is required for the future?*
    - *Where is this infrastructure needed?*
    - *When will this infrastructure be required?*
    - *How much is this infrastructure likely to cost?*
        - *How will it be funded and who is responsible for providing it?*
        - *Are there any identified funding gaps? If so, how are they likely to be overcome?*
- Although most of the areas within Cambridgeshire and Peterborough do have existing IDPs, there is limited detail with respect to the health infrastructure components. This lack of detail is particularly missing with respect to identifying specific locations of required infrastructure, timing, and funding.
- To ensure future health needs can be met, it's essential that health partners and planners collaborate to robustly describe health infrastructure requirements in IDPs.

Primary and secondary health services

- Quality Outcomes Framework data indicates that the prevalence of major non-communicable diseases (e.g., hypertension, diabetes mellitus, asthma) is

lower in populations living in New Developments and Older Developments, compared with those in Settled Areas. This reflects the older demographic of communities in Settles Areas.

Education

- Education forms the cornerstone of a healthy start to life. The health benefits associated with school attendance range from the short-term (e.g., access to school nursing or educational psychology) through to the long-term (e.g., reduced risk of diabetes, heart disease, and overall mortality).
- People with less education have higher risk of smoking, physical inactivity, obesity, and suffering from alcohol-related harm.
- Provision of high-quality early years, childcare, primary and secondary school services (including special education needs and disability) is vital to help reduce health inequalities and provide children with the best possible start to life.

Recommendations

4.1	Commissioners and health service providers should ensure that there are adequate healthcare facilities and services in place from day one of first occupation. These should be designed to be adaptable and evolve as the resident population expands.
4.2	Local planning authorities should ensure that there is adequate provision of community spaces (e.g., community building, green space, etc) delivered by day one of first occupation in major new developments.
4.3	System partners should develop mechanisms to financially support commercial enterprises during the early years of a new development (e.g., café, community shop). For example, rent-free periods or subsidised business rates. Support should be contingent on the enterprise being able to demonstrate intent to benefit the physical and/or mental health of residents (e.g., through promoting healthy eating or facilitating community cohesion). Support should be time-limited until the resident population is sufficiently large to make the enterprise independently commercially viable.
4.4	System partners should ensure that digital connectivity and access to digital-enabled healthcare are universal across Cambridgeshire and Peterborough.
4.5	Local plans should have a flexible approach to developer contributions (Section 106 and Community Infrastructure Levy), ensuring funding can be used for revenue, as well as capital, adapting to the changing needs of the community.
4.6	The ICB should produce an infrastructure delivery plan based on projections of need over time. This plan should serve as a health services "shopping list" to inform local plan development.
4.7	The ICB should survey its healthcare infrastructure to ensure that estates are compliant with accessibility standards.
4.8	Education directorates should explicitly take into account the evidence presented in Chapters 2 and 3 of this JSNA when considering prospective sites for new schools.
4.9	Local plans should include policies to prevent business covenants on new build dwellings (e.g., to facilitate childcare businesses in new developments).

1.Local infrastructure

1.1.Community hubs and co-location of services

Community hubs should serve as focal points to bring residents, local groups and businesses together to organise activities that improve quality of life. Spaces should be flexible and serve multiple purposes such as a café, library, meeting room, performance space, and employment services. The internal and external layout, design and use of buildings should promote opportunities for physical activity:[1]

- Ensure that buildings are connected to surrounding walking and cycling routes, with direct access by these modes prioritised over access by vehicular modes.
- Promote the use of stairs (over the lift) utilising signage and creating spacious and clean stairwells that are welcoming with colour, art and lighting. This should be balanced with the need to ensure elevators are easily accessible for those who cannot use the stairs.
- Explore methods to promote natural physical activity in the workplace, such as using sit-stand desks.
- Integrate sports facilities in larger buildings (for instance an atrium, small outdoor spaces or courtyards) that could accommodate lowkey sports or recreational activity which are accessible for all, such as table tennis.
- Design buildings to provide appropriate amounts of internal space for rooms along with circulation and external space.
- Methods to reduce sedentary behaviour for children in childcare settings, schools and colleges should be explored such as creating modern learning environments or using sit-stand desks

Section 106 agreements for community facilities should consider the space's overall size, general properties, and timing of delivery, alongside flexibility to ensure it meets the community's changing needs over time. Whilst there is a need to generate flexible community spaces, trying to combine multiple uses cannot always be successively achieved – for example the combination of indoor sports with meeting halls suitable for the spoken word. Where a community facility features within a much broader application, for example within a mixed-use development or combined within a neighbouring residential parcel, there is a risk that the building design does not receive the attention it might if it were a stand-alone application.

The Melbourn Hub

The Melbourn Hub is a community space partnered with the local Primary Care Network, Meridian. The Hub's purpose is to provide benefits and services to the residents of Melbourn and nearby communities, using a mixed platform of paid staff and volunteers, strongly supported by the Melbourn Parish Council. The Hub hosts a vibrant café and host a range of community support functions such as initiative to address loneliness and isolation, mental health consultations, dementia services, Mobile Warden schemes, Citizens Advice, a Community Library and a permanent office for Melbourn Parish Council.

Key services delivered include:

- **Personalised Care:** Provides a base for in-person access to Health & Wellbeing Coaches, Social Prescribers and Care Co-ordinators. Over 12 months the team have seen 342 patients, some of whom have gone on to make appointments and access other different practitioners to improve their health. The team are not looking to expand into nearby primary care surgeries to support patients and ensure clinicians are aware of their services.
- **Group cafes:** Face-to-face group workshops are conducted, such as the Menopause café. Since October 2022, this café has worked with 75 women over 9 sessions, each mixing health coaching and wellbeing advice. The Care Co-ordinator team also initiated a Carers Café to support local carers, offering a chance for peer support.
- **Nursing Clinic:** The Melbourn Orchard surgery team have been providing a phlebotomy service from the Hub. Other treatments such as suture removals, B12 injections, dressing changes, blood pressure readings and health reviews are also conducted. Over a 3-month period, 632 individuals accessed these Nurse appointments.
- **Covid-19 Vaccination:** The Hub has worked very closely with the *Vaccinators on Tour* teams, making provision for the local delivery of the Covid vaccine. During the most part of 2022 and to date in 2023, the vaccine teams have vaccinated up to 500 people per session through walk-in clinics. During 2022 a total of approximately 3,500 were vaccinated at the Hub, this rising to around 5,000 to date during 2023.
- **COPD Clinic:** Melbourn Orchard Surgery COPD patients are seen regularly by a nurse at the Hub for long-term health reviews. Alongside individual reviews, an in-person workshop was offered at the Hub for all Meridian PCN patients. The initiative was based on the partnership between Meridian and the CPFT (Cambridge and Peterborough Foundation Trust) specialist respiratory nurse team. 59 people attended the workshop, 48 completed the survey, 36 recommending to others and 27 feeling it had helped them to manage their condition more effectively.

- **Physiotherapy:** The Meridian First Contact Physiotherapist (FCP) team have been providing their services from the Hub. The increased access ensures patients can be seen promptly so they can be referred on correctly and provided with self-management advice and exercises to help improve their condition where suitable. Over 6 months there have been 310 patients seen by this team at the Hub.

The project was initially planned against a three-year timeframe and funding secured on that basis. However, the allocated funding may not last for three years as the local response has exceeded all expectations and additional purchases were required to make clinical spaces fit-for-purpose. The joint Melbourn Hub-Meridian PCN delivery team believe that the project to date represents value for money. Melbourn Orchard surgery have re-allocated staff resource to offer nursing staff at the Hub. Consequently, patient waiting is reduced, and appointments have been made easier by being offered at the Hub.

1.2.Digital infrastructure

> *"Digital health should be an integral part of health priorities and benefit people in a way that is ethical, safe, secure, reliable, equitable and sustainable. It should be developed with principles of transparency, accessibility, scalability, replicability, interoperability, privacy, security and confidentiality."* – World Health Organization[2]

Digital health is becoming increasingly integrated into traditional healthcare infrastructure. NHS Digital highlights 3 major areas of digital healthcare:[3]

- Point of care applications – used directly by healthcare workers for a specific purpose (e.g., a regional 111 call centre or the national Summary Care Record application)
- Patient-facing application – used by patients to manage their healthcare (e.g., a GP portal to book appointments or the NHS app used to order repeat prescriptions)
- Back-end applications – accessed and relied on by other applications (e.g., the Personal Demographics Service national database of NHS patient details or the Electronic Prescription Service)

Technology can be used for both remote patient monitoring and telehealth. Both aim to improve and enhance healthcare delivery, but they do it in different ways. Telehealth covers a broad range of healthcare services, such as virtual visits, remote consultations and examinations, and telemedicine, which can include everything from online follow-up appointments and prescription refills to therapy sessions delivered over the phone.

Remote patient monitoring specifically is the continuous collection, transmission, and monitoring of patient data. Technology is becoming increasingly important in enabling people to live independently in their own homes for longer. For example, apps can remind people when to take medication, or motion-sensitive monitors can learn peoples' routines and send automatic alerts to named carers if routines are not followed – they can even be set to alert health services or emergency response

services. There are also wearable devices which can sense a fall and alert emergency services.

If telehealth and remote monitoring are combined, healthcare professionals can provide more comprehensive patient care. NHS England report that more than 487,000 people "have been supported at home with digital home care and remote monitoring technologies" between November 2020 and January 2023.[4]

The Technology for our Ageing Population Inquiry (TAPPI) Report into the future technology and digital infrastructure needs "*heard from people with lived experience about the technological opportunities and barriers faced in their lives, especially during COVID. It also captured evidence and examples of innovative practice from over 30 sector leaders on tech solutions across housing, health and social care used to enable people to live independently and well at home*".[5] The report outlines ten foundational principles to build technology into housing (Figure 1).

Figure 1: 10 principles of the TAPPI report

Source: TAPPI [5]

The TAPPI Inquiry also makes recommendations, including:[5]

- Establishing a clear benchmark for a **Minimum Digital Living Standard**, which sets out what is needed to live well and safely in a digital society
- **Create a housing and care products** that will enable easy consumer access to relevant digital products and services

- Review and update planning policy and guidance and the regulatory framework for housing so that **smart technology infrastructure is built into new homes**
- Develop and introduce a new Technology Facilities Grant to futureproof Government guidance on **Disabled Facilities Grants** so the scheme supports retrofitting and adaptations of homes for an ageing population

Digital healthcare has the potential to improve health outcomes and to yield substantial efficiency savings for healthcare systems.[6] To facilitate this, without exacerbating health inequalities, it's essential that digital infrastructure is rolled out consistently and universally across Cambridgeshire and Peterborough, avoiding black spots in connectivity that are more likely to affect rural and deprived communities. None of the interventions above are possible without good digital infrastructure and connectivity.

Connecting Cambridgeshire operates across Cambridgeshire and Peterborough has a remit to ensure homes and businesses have access to superfast broad band, 4G and next generation 5G mobile services and the expansion of the free public access CambWiFi service.[7] Such digital connectivity is necessary to support effective public service delivery, thriving communities and sustainable business growth. Their programme of collaborative work with multiple partners underpins wider ambitions for the region, including greater use of sustainable transport, reducing health inequality, progress towards net zero and mitigating climate change.

It is important that the deployment of digital infrastructure is delivered as efficiently as possible and that those who are at risk of remaining digitally excluded are identified and provided with the tools they need to thrive. To achieve this, Connecting Cambridgeshire is seeking to enable the delivery of digital infrastructure across the region by making it easier for operators to deploy in suitable locations whilst also supporting inclusive connectivity via interventions such as free public access Wi-Fi and access to devices. This will enable emerging technology and data solutions to be harnessed to support regional ambitions to improve quality of life for our residents.

Faced with increasing digitisation across all industries, it is more important than ever that citizens have safe, affordable, inclusive, suitable access to connectivity, devices, and the skills and confidence required to function and engage with them properly to live a full life. However, the 2023 UK Consumer Digital Index report indicates that, 8.5 million people across the UK lack the most basic digital skills they need.[8] It is therefore important that interventions are implemented to resolve these on-going disparities.

Connecting Cambridgeshire is also exploring how data, emerging technology and digital connectivity can be harnessed in ways that for example, could in future engage with health management in the home and community. 5G is the next generation of mobile communications and provides the underpinning to future connectivity, including the "Internet of Things".

New Communities frequently lack mobile infrastructure, which can lag significantly behind occupations. The Cambridgeshire and Peterborough Digital Connectivity Strategy 2021-2025 notes that “Planning authorities have seen a marked increase in planning applications to upgrade masts for 4G and 5G from mobile operators and new legislation has revised guidance on permitted infrastructure.[9] The provision of mobile masts continues to divide public opinion and mast upgrade planning submissions are problematic for both planning teams and the infrastructure providers supporting mobile operators. 65% of the 44 planning applications for new mobile phone masts across Cambridgeshire and Peterborough decided between April 2019 and August 2021 were refused - particularly taller structures of 18-20m required to upgrade 4G and deliver 5G coverage.”

It is necessary when planning major growth sites to make allowances for inclusion of mobile phone masts at the master planning stage, as retro-fitting such imposing structures in high density housing areas is otherwise a considerable challenge.

Cambridge University Hospital Virtual Ward
The CUH virtual ward was established in 2022 and operates 24 hours a day, seven days a week, 365 days a year by a dedicated nursing and consultant team. Patients on the virtual ward are monitored constantly by using smart phone apps, technology platforms and wearable medical devices, such as temperature readers and pulse oximeters. At the same time, a team of senior nurses check in with patients up to four times a day by phone or video call, with care also available face-to-face from multi-disciplinary teams.
If patients need further care, such as blood tests, scans or intravenous therapy, they can come into hospital for regular appointments or be visited in their own homes.
It has helped treat more than 1,700 patients recovering from a wide variety of medical and surgical conditions. These include respiratory, gastrointestinal, and frailty conditions that can be safely managed remotely. It has achieved a 97 per cent positive patient experience and freed up more than 6,000 bed days.
Dr Iain Goodhart, intensive care consultant and virtual war programme lead, explained, “for patients, virtual wards mean they can leave hospital days or even weeks earlier, while still getting the expert care they need…They can benefit from the comfort of their own surroundings, sleeping in their own bed, eating their own food, and being in the company of their family, friends and pets…This often speeds up their recovery and reduces the risk of hospital acquired infections, with patients able to steadily return to daily routines and avoid deconditioning.”

1.3.Interim (meanwhile) infrastructure

The provision of interim or meanwhile community buildings in new developments is key to bridging the gap for key services between residents moving into to an area and the creation of permanent facilities.

A “meanwhile use” describes where a site is utilised for a purpose (other than it’s intended final purpose) for a duration of time before it is turned into a more permanent end state. Meanwhile uses are tactical and slot into wider strategies of planned change. The types of uses are varied, including entertainment, arts and

culture and restaurants, as well as commercial businesses. They may be fixed development or “pop-up” facilities e.g. pop-up bar, art exhibition or store.

Commercial rents often prohibit experimentation in urban spaces, and affordability is a key consideration for developers and local authorities alike. Planning and Licensing can support such activities and uses. Private and public landowners, as well as planners, need to collaborate in identifying and facilitating the delivery of meanwhile spaces.

Meanwhile spaces could include:

- Opportunities for meanwhile uses in early phases of development to create temporary public realm (places of land for people to informally congregate)
- Use of vacant properties and/or land for meanwhile uses for cultural and creative activities to promote viability and diversity of town centres
- Opportunities for the provision of meanwhile space for community gardening, including food growing, within new developments.

The Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended) (GPDO) states that any use with a duration over 28 days (consecutive or within one year) will require planning permission.[10] Unless a scheme is proposed to operate for less than 28 days (or it qualifies for temporary change of use under permitted development (PD) rights) a full detailed planning application must be submitted for any meanwhile use. Therefore, for new developments it is important to establish both meanwhile and final use of the development at the earliest stage and include both in the initial planning application.

The Greater London Authority have published a framework for meanwhile uses.[11] The framework considers the opportunities and barriers to enabling meanwhile uses. Although the framework is London-based it is generalisable to Cambridgeshire and Peterborough. Many areas of the report relevant to Cambridgeshire and Peterborough and this JSNA include the relationship between meanwhile uses and growth, the relationship between meanwhile uses and resilience and climate change; the relationship between meanwhile uses and community cohesion; the opportunities and barriers in the current planning system.

The framework links good growth principles to meanwhile uses highlighting that meanwhile uses can support growth.

Table 1: Greater London Authority Good Growth principles and meanwhile uses

Good Growth Principles	Meanwhile use enabling characteristics
Promoting inclusiveness	• The use of underused assets across the city can generate accessible business opportunities within communities and unlock innovative and more affordable business models (e.g. affordable or emergency housing projects, economic inclusion opportunities through free or affordable office space, etc.).

	• Meanwhile uses encourage developers and local authorities to assess the needs of specific communities or neighbourhoods prior to development. Meanwhile uses can be used as powerful tools for consultation and participative design of permanent development, finding common ground between existing and future residents and users.
Best use of land	• Meanwhile uses enhance productive use of city land which would otherwise not be used at all, or which would stay idle for various reasons (e.g. in-between developments, administrative or legal challenges, etc.). Some longer-term meanwhile uses create jobs as well. • Insomuch as meanwhile uses can drive demand and footfall prior to development, they can reduce the risk of construction delays and the blight of empty spaces by creating and demonstrating demand for uses
Healthy city	• Diverse meanwhile uses, including green spaces, allotments to grow organic food, and even temporary health centres, can be developed across the city can make streets and neighbourhoods healthier and contribute to Londoners' wellbeing.
Delivering homes	• Meanwhile uses can be used as tools to test and inform the right mix of uses in the design of new development. They also offer the opportunity to progressively activate a new place or development and ensure a gradual integration within the existing development and surrounding communities. • Successful meanwhile uses can enhance the perception of areas and make them more attractive to developers, business owners, and existing and potential residents. Accordingly, meanwhile uses can support development viability.
Efficient and resilient	• Meanwhile uses offer opportunities to address some of the most aspirational and complex goals of cities, as they allow testing and trialling of new ideas and space to create diverse, resilient and sustainable cities, communities and economies. • The unlocking and operating of meanwhile uses often requires close collaboration between the public and private sectors, offering unique opportunities to jointly come up with more sustainable development opportunities. • The business models enabled by meanwhile uses can contribute to the social value of the city as well as being financially sustainable for small and independent businesses, thus enhance the economic and social resilience of the city.

Source: Greater London Authority[11]

The report also identified links between resilience (JSNA Chapter 5) and Climate Change (JSNA Chapter 2). Meanwhile uses are also important to consider in relation to the other chapters in this JSNA.

Figure 2: Meanwhile uses and their roles in responding to major shocks and chronic stresses

LONDON'S IDENTIFIED SHOCKS & STRESSES	EXAMPLE OF MEANWHILE USES	LONG-TERM BENEFITS
Examples of Major Shocks		
Drought & Flooding	Parklets, plazas and retrofitting of small open spaces using materials that are drought resistant and assist with stormwater	Supports placemaking and addresses city's adaptation to climate change impacts
Disease Pandemic	Temporary accommodations in empty buildings or re-purposed buildings or temporary field hospitals in open spaces	Providing accommodation for homeless people, care workers etc., boosting capacity of healthcare facilities
Examples of Chronic Stresses		
Lack of Social Cohesion	Community infrastructure – provision of public spaces and services	Assists with urban renewal and placemaking, enhances local community interaction and active urban environments
Food Insecurity and poor health and wellbeing	Community food growing (gardens/ allotments/hydroponics), active streets and playgrounds and parks (shared spaces)	Sustainable food production, re-connect people with food (improved links to disadvantaged communities), educational and helps combat health issues
Poor housing affordability and quality	Modular construction – temporary housing to address immediate housing crisis	Delivers housing across multiple locations where it is required at any one time and provides a multi-purpose, sustainable structure

Source: Greater London Authority[11]

The report identifies the strengths and weaknesses of the current planning system to enable meanwhiles uses.

> *"In 2009, the Department for Communities and Local Government (DCLG) published the 'Meanwhile Project' which was a support service for groups seeking to turn economic crisis into opportunity and transform vacant shops and light industrial units into vibrant community uses. This was at a time when the opportunities of meanwhile use in terms of social benefits and local wellbeing were referenced largely in the context of reviving town centres following the 2008 financial crash. Consistent with this view, meanwhile use was again referenced as a temporary solution in DCLG's 2009 publication of 'Looking after our town centres' and latterly in the*

Portas Review published in 2011. Ever since, a call for greater guidance on meanwhile use provision has resulted in the UK Government publishing further reports that begin to recognise a value of meanwhile use, albeit primarily economic in practice rather than social or environmental.

Most recently, the Ministry of Housing, Communities & Local Government (MHCLG) has initiated an 'Open Doors' project in partnership with the Meanwhile Foundation. This seeks to promote meanwhile uses as a mechanism for high street revitalisation by matching landlords to meanwhile tenants.

In planning terms, however, planning policy and guidance remains bereft of a well-defined meanwhile use policy approach. Although changes in recent years have resulted in a planning system that is increasingly aware of the benefits of meanwhile use, minimal changes have occurred to facilitate the implementation of meanwhile uses and recognise them as a valid planning and development tool." – Greater London Authority[11]

In summary, meanwhile uses are important and can enable a different approach to traditional development and can resonate with many sectors, from developers to local authorities and community groups. They can provide opportunities for community interaction and growth or can trial adaptive new uses such as affordable workspace.

Interim infrastructure in Northstowe

At Northstowe, one of the ten NHS England Healthy New Towns, there are around 10,000 new homes planned for development by 2040, split across four phases: Phase 1 (1,500 homes), Phase 2 (3,500 homes, including the town centre), Phase 3a (4,000 homes), and Phase 3b (1,000 homes). After several years of planning and development, the first homes were occupied in Phase 1 in 2017, alongside the completion of The Pathfinder Primary School.

To facilitate community development from the very first occupation, the primary school was built out to its full extent, instead of being phased in construction. A portion of the school was used as an interim community facility until the point where it was needed for educational purposes.

This community facility – known as The Wing – supported a range of community uses, including a café, a library space, and two bookable halls. These bookable spaces allowed not only community activities that promoted healthy living, such as yoga and dance classes, but also allowed for statutory provision, such as Child and Family Centre services. The space also incorporated two consulting rooms offering the flexibility to deliver health care from this site if required. The Wing was closed to community use in July 2022 for refurbishment and returned to educational use from that September.

The s106 anticipated that the Phase 1 Permanent Community Centre would be phased to allow a straightforward transition from this interim provision to the permanent facility. However, the land on which the permanent centre was to be

delivered was acquired from the developer by the district council, as part of a wider acquisition of the local centre and enterprise zone and the creation of a comprehensive master plan for the whole parcel was undertaken. It became clear that a second interim facility would be needed as the new approach whilst enabling a better solution in the long term, would mean a delay to delivery of the permanent community building in the short term.

The interim community facility, known as The Cabin, was opened in July 2023. This facility is a bespoke modular temporary building (leased from Portakabin) located on land owned by South Cambridgeshire District Council within the Phase 1 local centre, which is to be developed for mixed uses, to include retail, food and beverages, and the future permanent community centre. Community groups and NHS Estates specialists were consulted on the design of the temporary building, to ensure the building would be fit for purpose.

The Cabin supports continued community development through similar, but improved, mechanisms as The Wing, including a café and bookable spaces for the community to use. The Cabin maintained the flexibility provided at The Wing to host community health services, by including an NHS room, which provides Health Visitors and Midwives a space to operate from within Northstowe. Child and Family Services run sessions and specialist support groups for children and families with special needs are also now available. This approach to community health care responds well to the characteristic demographic of new communities, which exhibit higher birthrates than established communities.

The permanent Phase 1 Community Building will similarly incorporate interim health provision, with an NHS room included within the design, delivery of which is anticipated in Spring 2026.

Additionally, permanent health facilities will be included within the Civic Hub, which will be delivered in the town centre as part of Northstowe Phase 2. This will provide a total of 1,740m^2 of space for health services: offering 1,300m^2 for General Medical Services (GMS), 200m^2 for Community Health Trusts (120m^2 for Pharmacy Services, and 120m^2 for Dentistry. Prior to this, the neighbouring Cambridge Northern Villages Primary Care Network (PCN) GP practice, Willingham Medical Practice, is expanding capacity via its Longstanton Branch Surgery, optimising use of existing estate until the Civic Hub facility comes forward, which is anticipated to be in 2028.

1.4. *Anchor institutions*

> *"Anchor institutions are large, public sector organisations that are called such because they are unlikely to relocate and have a significant stake in a geographical area – they are effectively 'anchored' in their surrounding community. They have sizeable assets that can be used to support local community wealth building and development, through procurement and spending power, workforce and training, and buildings and land."* – The Health Foundation[12]

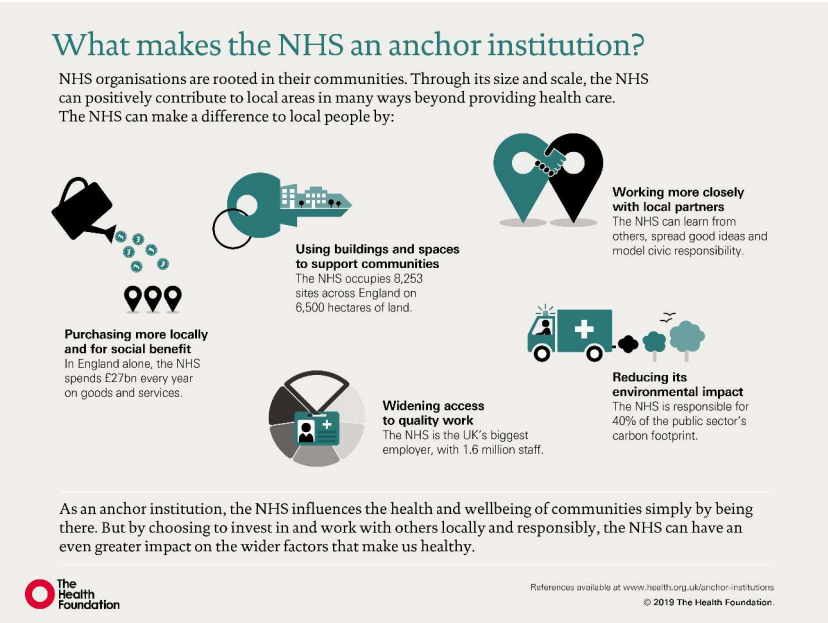
NHS organisations act as anchor institutions within their surrounding communities (Figure 3). They serve as major employers, purchasers, and owners of estate. Their role extends beyond delivering clinical care and impacts on local communities in a variety of ways. Understanding this broader influence is important to harnessing the power of NHS organisations to influence upstream determinants of health, such as housing, employment, transportation, and sense of community. Through leveraging influence over these wider determinants of health at a local level, the need for acute services can be reduced.

Examples of NHS organisations working as anchor institutions include:[12]

- Barts Health NHS Trust – allocation of a proportion of roles to locally unemployed applicants
- Leeds Teaching Hospitals NHS Trust – in collaboration with Leeds City Council set up a programme, *Priority Neighbourhoods*, to develop 'neighbourhood profiles' to help channel local investment towards the most deprived local areas
- University Hospitals Birmingham NHS Foundation Trust – established a Learning Hub, used to deliver a 12-week programme including pre-employment advice, training, guidance, and direct links to NHS jobs for unemployed local people

The wider role of NHS organisations is reflected through recent changes to NHS procurement.[13,14] Since 2022, all NHS procurement includes a minimum of 10% net zero and social value weighting. This weighting can be considered across 5 social value themes: fighting climate change (which must be included in all procurement), wellbeing, equal opportunity, tackling economic inequality, and COVID-19 recovery. This weighting can be increased to further support initiatives that reflect the wider influence of NHS organisations as anchor institutions.

Figure 3: The NHS as an anchor institution



Source: The Health Foundation[12]

1.5. Co-creation and co-delivery

- This entails involving community members in decision-making processes related to community building initiatives, whether in new or settled communities. These could be for formal planning-related matters or engagement with local stakeholders like the CCVS in order to get a new group constituted.
- Engagement events and workshops can go a long way to understanding the unique needs and aspirations of a local community. Communities know their own communities best.
- Co-creation fosters a sense of empowerment and ownership among community members, as they are actively involved in shaping the development and direction of their own communities. This approach acknowledges and leverages the local knowledge, expertise, and resources present within the community, ensuring that solutions are contextually relevant and sustainable.
- This method also embraces inclusivity and diversity, ensuring that the voices of all community members, including marginalized groups, are heard and valued in the decision-making process.

Figure 4: Principles of co-production, NHS England

Source: NHS England[15]

Cambridge Urban Room
Urban rooms are intended as a "one-stop-shop for community consultation".[16,17] They are physical spaces, permanent or pop-up, that explore community perspectives and issues regarding their local built and natural environment. The Cambridge Room is being set up as a Charity in collaboration with the Cambridge Association of Architects. The first pop-up location will open in the Grafton Centre, July 2024. The Cambridge Room will form part of the wider Urban Rooms Network, which seeks to better engage local communities in planning decisions and priorities regarding their local area.

Community Consultation for Quality of Life
Code of Practice and the Inclusive Engagement Toolkit
Community Consultation for Quality of Life is a multi-partner research collaboration aimed to develop a new, map-based model of community engagement through consultation practices.[18] This project used the *Quality of Life Framework* as the basis of understanding what people value in their nearby area.[19] Two important outputs from this research are the Code of Practice and Inclusive Engagement Toolkit. The Code of Practice sets out what 'good' and 'excellent' planning consultation practice looks like in terms of 8 themes (accountability, effectiveness, transparency, inclusivity, timeliness, supporting mutual learning, demonstrating impact, and publishing feedback). Planning authorities and developers are then able to use the Inclusive Engagement Toolkit to support their approach to the consultation process, with an emphasis on co-design and co-creation.[19] Adoption of these resources could help to facilitate community voices to engage with the planning system, helping to shape local decision-making in an inclusive and holistic manner.

1.6.Effective infrastructure delivery

Learnings from the Healthy New Towns Programme provide principles of effective infrastructure delivery.[20]

- **Plan ahead collectively**
    - Establish shared leadership early on
    - Agree a joint health vision statement, supported by joint goals
    - Get health into local policy frameworks
    - Influence development decisions
    - Embed long-term income streams
- **Assess local health and care needs and assets**
    - Assess local health and care needs and assets
    - Lay the foundations for evaluation
- **Connect, involve and empower people and communities**
    - Engage early and regularly with new and existing communities to involve residents
    - Establish community resources and information
    - Enable community governance and stewardship
- **Foster health in homes and buildings**
    - Create workplaces that stimulate productivity, efficiency and resilience

    - Provide educational settings that support growth and development
    - Set up community hubs that support health and social connections
- **Enable healthy play and leisure**
    - Enable community activities and events
    - Create play and leisure spaces for everyone
- **Develop health services that help people stay well**
    - Strengthen and integrate 'out-of-hospital' care
    - Develop the future workforce
    - Link health services to wider community assets
    - Support self-management of health conditions
    - Use digital technology to support care
- **Create integrated health and wellbeing centres**
    - Maximise the benefits of integrated health and wellbeing centres
    - Strategic estates planning
    - Develop a schedule of accommodation
    - Options for project funding

Based on recent local experience across Cambridgeshire and Peterborough, barriers to effective delivery have included:

- **A lack of collective vision**. It is essential that system partners come together to develop a mutually agreeable vision for what infrastructure is required for an area. This should be based on an assessment of local needs, both current and likely future needs. Without a clear plan for the services that need to be delivered in an area, misalignment between infrastructure and need is likely to occur.
- **Inflexible developer contributions**. Section 106 fundings is frequently highly prescriptive, which limits its usage to specific infrastructure delivery. However, flexible funding allows for infrastructure to be adaptable to changing needs as a local area evolves and needs chance. For example, funding for a "healthcare facility" instead of a "GP surgery".
- **Aligning timescales of infrastructure delivery with need**. In major developments, local needs change over time as the development advances and occupation rises. It's important that (temporary) infrastructure is in place from day one of first occupation (see Meanwhile uses, Section 1.3).
- **Effective governance**. An effective governance structure should be established from the beginning of the infrastructure development to bring together all relevant partners to develop the initial vision, project delivery timelines, and to monitor progress and outcomes and infrastructure development proceeds. This may, for example, be a steering group composed of health service providers, commissioners, and the lead developer.
- **Community involvement.** To understand local needs, it's important that a community is involved in decision-making. Ideally, this should occur at an early point in development to ensure that meanwhile use and temporary infrastructure appropriately meets needs.

2.Infrastructure delivery plans for health

2.1.What is an infrastructure delivery plan?

Infrastructure delivery plans (IDPs), sometimes also referred to as infrastructure delivery schedules, are documents that set out *what*, *where*, *when,* and *how much* of future infrastructure requirements. To do this, IDPs should assess current infrastructure and existing infrastructure deficits, as well as to predict future need. IDPs should provide answers to the following set of questions:[21]

- *What infrastructure is required for the future?*
- *Where is this infrastructure needed?*
- *When will this infrastructure be required?*
- *How much is this infrastructure likely to cost?*
    - *How will it be funded and who is responsible for providing it?*
    - *Are there any identified funding gaps? If so, how are they likely to be overcome?*

IDPs are developed by local authorities, usually the Local Planning Authority (LPA), however they require input from many public sector bodies including the NHS, Police, Fire, ambulance service and upper tier authorities to ensure that infrastructure is planned in the right place and time to support the growth of the area. IDPs should cover major and essential infrastructure required to support the local population, including:[21]

- Transport infrastructure
- Social and community infrastructure
- Primary and secondary education
- Community facilities and libraries
- Health infrastructure
- Green infrastructure, sports and leisure
- Infrastructure for utilities

Cambridgeshire and Peterborough have experienced high levels of growth over the past 10 years with new developments in many parts of the area. This high level of growth is expected to continue and therefore robust planning for infrastructure requirements is essential.

As of November 2023, there are four IDPs for this area: Fenland, Huntingdonshire, Peterborough and a joint IDP for Cambridge and South Cambridgeshire. East Cambridgeshire does not currently have an IDP, citing lack of capacity to develop one, although housing developments are being approved despite this absence of an IDP.

2.2.Health infrastructure and IDPs

2.2.1.What health infrastructure should be considered in an IDP?

What health infrastructure will be needed can be broken down into two broad concepts, the type of infrastructure and the number/amount. To determine this, consideration should be given to:

1. The **number of additional residents**, which can be estimated from the type (e.g. family homes, flats) and number of new homes.
2. **Nearby healthcare facilities** and any spare capacity they might have.
3. The **health needs** of the population and how this may change over time.

An IDP should include planning for all health and health-related infrastructure which is required to support the local population to maintain good health outcomes. This should include, but is not limited to:

- Primary care
- Secondary care
- Dentistry
- Optometry
- Pharmacy
- Mental health services
- Community-based services
- Ambulance services
- Social care services

For most elements of healthcare infrastructure there is no guidance relating to the healthcare infrastructure needs per head of population. However, national averages and approximations for requirements for some of these services are shown below (Table 2). These are not intended as prescriptive standards. Modelling for need should account for local population characteristics, growth projections, and existing infrastructure. Average provision may underestimate need as some areas of the country are underserved, leading to the national averages being lower than the ideal provision.

Table 2: National averages and approximations for health infrastructure provision

Type of Health Service	Estimation for provision
Primary care	One FTE GP per 1,750 population 120sqm floorspace (net internal area) per GP for assessing existing capacity 150sqm floorspace (gross internal area) per GP for determining future requirements
Secondary Care	Average in UK, 2.4 hospital beds per 1,000 people
Dentistry	In England, 4.3 dentists per 10,000 people
Optometry	In 2017 the UK had 2.3 optometrists and 1.01 opticians per 10,000 people
Pharmacy	In Cambridgeshire and Peterborough, 18.7 community pharmacies per 100,000 people
Mental health services	Uncertain
Community-based services	Uncertain
Ambulance Services	New build ambulance hubs should cover approximately 1 hectare of land and host 35-50 emergency facing vehicles Current estimates indicate that 1 ambulance per ~12,000 persons is appropriate, with variation based on local demographic profiles.

Especially given the rurality of some part of Cambridgeshire and Peterborough, accessibility of services should also be considered. For example, the proportion of a population able to access primary care of a community pharmacy within a 20-minute walk, or feasibility of ambulance services meeting national response time standards (Table 3). Further details of pharmacy services across Cambridgeshire and Peterborough are available in the Pharmaceutical Needs Assessments.

Table 3: Ambulance Quality Operational Standard 2024/25

Operational Standards	90th Percentile (No Greater Than)	Mean (No Greater Than)
Category 1 (life-threatening) incidents – proportion of incidents resulting in a response arriving within 15 minutes	15 minutes	7 Minutes
Category 2 (emergency) incidents – proportion of incidents resulting in an appropriate response arriving within 40 minutes	40 minutes	30 Minutes
Category 3 (urgent) incidents – proportion of incidents resulting in an appropriate response arriving within 120 minutes	120 minutes	-
Category 4 (less urgent "assess, treat, transport" incidents only) – proportion of incidents resulting in an appropriate response arriving within 180 minutes	180 minutes	-

Source: NHS England[22]

2.2.2. Health infrastructure - core considerations

The core components for a comprehensive IDP covering health-related infrastructure are:

1. **What?** – A clear description of all required health infrastructure such as GP practices, infrastructure related to health such as dentistry, pharmacy, community wellbeing provision, sports facilities and those which may have a multipurpose such as a community centre. The 'what' should factor in the type and amount of any given type of facility with projected future growth in need also considered.
2. **Where? –** This should incorporate not only which towns or growth site but also where within that development, how services may be co-located and consideration of issues such as access and transport.
3. **When? –** Building infrastructure such as a GP or dentist surgery may take several years from identifying the need through to the functioning practice. It is important to identify when the infrastructure will be required, how long this will take to complete and therefore when planning and building should start. It is necessary to start planning infrastructure before the first homes are occupied, even if, for example, a GP practice won't immediately need to be opened. However, consideration will need to be given for early settlers to receive access to primary care services through alternative routes e.g. digital.
4. **How/who? –** How much will it cost to put any proposed infrastructure in place and how will it be funded? For any given component it is important to identify who will be responsible for building, paying, owning and maintaining it. How much the proposed infrastructure will cost and who will fund it is often missing from IDPs but is an essential component for ongoing population health and wellbeing. Capital expenditure for NHS infrastructure is constrained.
5. **Additional considerations** – Sitting across all of the plans, consideration should be given to issues such as how the plans will support community cohesion and sustainability.

To ensure that health infrastructure requirements arising from future housing growth are fully understood by local authorities, a comprehensive IDP should encompass:

Table 4: Staged approach to consideration of healthcare infrastructure in IDPs

Stage	Requirements
Identify Health Infrastructure Delivery Standards	As defined by the ICB and relevant partners, IDPs should be based on system-wide healthcare infrastructure standards such as floorspace per population and minimum requirements for new facilities (location, accessibility, operational viability, facility requirements, etc) for all types of health infrastructure.

Baseline assessment of current provision, including any deficits and plans/strategies	Based on identified infrastructure standards, layered over ICS spatial scales and with key delivery agencies for service provision identified.
Assessment of new/expanded provision needed to support housing growth proposed in Local Plan	Based on identified infrastructure standards and ICB geographies of provision. Clear description of all required healthcare infrastructure to support growth locations and/or specific sites, how services may be co-located and considerations around phasing/triggers for provision.
Estimate funding requirements to provide new/expanded infrastructure	Indicative cost per square meter of delivering ready to occupy healthcare floorspace based on typical cost of providing floorspace in the locality
Develop indicative list of infrastructure projects required to suport growth	Preferred mitigation options for growth locations and/or sites. Level of detail will depend on level of certainty regarding growth levels in Local Plan and phasing.
Identify potential funding sources and quantify funding gap	Only include approved/confirmed funding sources and clarify national capital funding restrictions.

Timing of Infrastructure Delivery

It is important that infrastructure is in place to support the community development and health needs of a population. This means that planning is necessary several years in advance and it is not acceptable to establish infrastructure following the need arising as people move into new homes. For some aspects of health infrastructure, such as primary care services, there may be capacity in the system meaning that a new surgery may not be needed for the first newly occupied homes. However, given it will take some time to plan, build and recruit to a new surgery it still may be necessary to start this process even before the first homes are occupied.

Delays in providing health-related infrastructure may have both direct and indirect implications for the health of the community and other communities nearby, who are often used as an interim measure – this can create local tensions and ill-feeling as existing resources are stretched to accommodate new settlements. It may explicitly make seeking health services such as primary care services more challenging if, for example, there are no GPs in the new development when the first new residents move. Decisions around whether a new facility is needed will need to be made several years before it is actually required to be taking on new patients.

As part of assessing future needs, the IDP should consider the threshold population needed for a service to identify how many homes need to be occupied before the infrastructure needs to be operational. This will depend on how much capacity there is in the existing system, as well as how service transformation objectives, for example around digital, may impact how new residents access services. Where

there is a lack of existing capacity to provide for early residents on large development sites, but it would not be operationally viable to open a new healthcare facility from first occupation, temporary forms of provision may need to be considered.

How much will it cost and who should pay?
Costs will vary depending on the type of infrastructure and the location. Cost of infrastructure will be higher in areas where land is more expensive, however it is also likely that developers in these areas (e.g. Cambridge City) will be able to make greater profits on new housing and therefore may be more able to contribute to health infrastructure.

It is recognised that developers have a responsibility to contribute to the costs of community infrastructure associated with new developments. There are several components to the question of who will pay:

1. Who will pay for the building of new infrastructure?
2. Who will pay to maintain the new infrastructure?
3. Who will own the new infrastructure?

Where the cost for identified infrastructure is greater than the identified budget consideration, infrastructure may be made financially feasible through flexible usage as set out above. It may also be that community and health infrastructure can share buildings with residential accommodation in order to make it financially viable – for example having flats above a GP surgery on the ground floor.

There are two primary routes for local planning authorities to secure these sources of funding, Section 106 and the Community Infrastructure Levy (further details in JSNA Chapter 3). Both can be used in tandem and different parts of Cambridgeshire and Peterborough use different combinations as funding sources for local infrastructure.

2.2.3. Health infrastructure - additional considerations

Multiple additional considerations should be taken into account when deciding on the appropriate location for new health-related infrastructure.

The ICS forward plan has acknowledged the need to link estates, co-delivery of services at an integrated neighbourhood level.[23] The forward plan recognises that an efficient and effective estate is a key foundation for the delivery of patient care, for meeting the needs of our current and future workforce and for supporting the delivery of the system's strategic objectives.

The estates need to be fit for purpose, accessible, financially viable and environmentally sustainable at system, place and integrated neighbourhood level, that enables the right care to be delivered in the right place enabling better health outcomes for patients.

The ICS carried out a strategic review of estates as a basis for future strategic planning.[23] The review covered approximately 240 properties with a total gross internal floor area of 650,000 sqm, including 128 primary care properties (87 GP practices), four main acute hospitals and eight main community and mental health hospitals/main sites. The review did not cover other public or voluntary sector estate, but the ICS are committed to continue the work with partners through the System Estates Group and One Public Estate to maximise the opportunities for efficiencies and integration through joined up working.

The ICS have identified the key challenges and opportunities, these include:[23]

- *Ageing and undersized primary care estate, with additional pressures from a growing and ageing population.*
- *Third party owned property that may not be maintained to modern standards and that may be sold and therefore lost to the system, without succession plans in place.*
- *NHSE require assurances from each ICB that all their General Practice buildings are not constructed of Reinforced Autoclaved Aerated Concrete (RAAC). If any are found to be, then plans need to be submitted to NHSE on mitigating the risks.*
- *Structural problems at Hinchingbrooke (RAAC) requiring reprovision of services.*
- *Strategic developments at the Cambridge Biomedical Campus (Cancer and Children's Hospitals and the wider masterplan).*
- *Underutilised back-office accommodation.*
- *Lack of comprehensive and consolidated data to support strategic planning*

The Forward Plan identifies the need to transform spaces and places by:

- *Develop a hub strategy integrating primary, community and specialised services. Identify neighbourhood hubs that improve local access to a wider range of services more locally, incorporating the social and voluntary sectors.*
- *Develop solutions for areas of highest population growth. New localities present opportunities for the system to design new facilities that embrace our principles of integrated care closer to home.*
- *Increase access to diagnostics in the community and widen the reach of testing by bringing these services closer to people's homes.*
- *Work with partner organisations to optimise public sector estate options. Encourage better integration with social care and voluntary sector to realise our ICS objectives*

Service Sustainability

Infrastructure considerations should not be considered in isolation for each development. It may be more sustainable to implement shared infrastructure for closely located developments e.g. one larger GP practice rather than smaller separate practices. Shared infrastructure is likely to be more cost-effective and more sustainable.

Transport
For any infrastructure it is important that the chosen location is accessible to those who need to use it. In particular, consideration should be given to accessibility by public transport and active travel such as walking and cycling routes.

Poor public transport links have the potential to increase inequalities, for example we know 93% of people could access their nearest GP within 15 minutes by car, only 70% of people could access their nearest GP by walking or public transport and for some it would take more than 45 minutes. Those who don't have access to a car may well have greater need to access healthcare, such as the elderly. These differences in accessibility are even more pronounced for services such as hospitals which are more spread out.[24]

Active travel can also benefit health and wellbeing. Initiatives to promote active transport for both patients and staff, such as bicycle lanes should therefore be incorporated into planning.[25] Therefore, IDPs should seek to strategically link healthcare infrastructure with other key elements, such as transport infrastructure.

Co-location
Co-location refers to the concept of including multiple services on the same or adjacent sites. By locating multiple services together, it can increase convenience and access for people, and reduce overall build cost for the occupiers of the same site. This may be particularly valuable for people who are time poor, such as families with children, or who have difficulty in travelling to services such as those on low income or with poor mobility. An example of co-location might be locating the GP and pharmacy in the same location and close to other services such as libraries. This may also enable cost-savings and the opportunity for the better integration and co-commissioning of services.[26]

Co-location is not just about locating health services together but also wider services which support people's wellbeing. Libraries can also offer good flexible spaces alongside their core function, with meeting spaces for children's groups and use of computer facilities for education programmes. A report for the Art's Council sets out 6 case studies of where libraries have been co-located in and with other services including health services.[27]

The National Institute for Health Research (NIHR) conducted research specifically looking at the co-location of mental health services in community settings such as libraries and community centres.[28] They found through this that co-locating services had five broad consequences:

1. Improved provision of holistic and person-centred support.
2. Reduced stigma by creating non-judgemental environments that were not associated with clinical or mental health services.
3. Delivered services in psychologically safe environments.
4. Helped to overcome barriers to access by making service access less costly and more time efficient.
5. Enhanced the efficiency and sustainability of services through better pooling of resources.

Bromley by Bow Centre, a case study for co-location of services

The Bromley by Bow Centre is a community centre in East London which was founded in 1984 and states its purpose as enabling the community to thrive. It recognises that health is primarily driven by social factors.

The centre brings together a wide range of health and social services and activities including through the GP practice, children's centre, community facilities, church, and café. It seeks to integrate health and wellbeing support and is closely affiliated with the Bromley by Bow NHS health partnership.

According to the centres' annual report, they worked with 5,623 people in 2023. The centre is also engaged in research and tracks wellbeing of the people they work with:

- Over half of the people they worked with arrived with a negative wellbeing score.
- On average, there was a 39% improvement in their wellbeing after engagement with the centre's services.
- For those reporting negative wellbeing, this improvement rose to 58%.

They also help people meet basic needs such as heating and access to food and increase people's awareness of where to access the support they need. The centre also provides numerous volunteering and education opportunities.

Flexible spaces

Given funding is usually limited, plans for new infrastructure should carefully consider how it can be used flexibly. This may be considered alongside co-location of services. For example, if a new centre will include a community hall, consideration should be given to how that hall can serve the community flexibly, both in a given week and over the lifetime of the building as a community matures. Community centres can host multiple functions related to health and wellbeing such as:

- Midwifery clinics
- Foodbanks
- Sport and fitness classes
- Cafes
- Social groups including for different age groups (e.g. parent-toddler, elderly, youth groups)
- Religious meetings

Designing infrastructure and community facilities with flexible usage in mind will enable them to evolve as the needs of the community change through time. As with co-location, flexible use of spaces may also enable cost savings as one building may be able to serve multiple functions during a given week and during the lifetime of the building. This may be particularly important in deprived communities where there are limited facilities.

Environmental factors

Consideration should be given both to the impact of new infrastructure on the environment but also on how the environment in any chosen location may impact the new infrastructure. For example, we know that children are more vulnerable to air pollution.[29] It therefore would not be advisable to locate primary schools and children's facilities close to major roads or other polluting infrastructure.

As identified with respect to transport, the NHS is a major contributor to national carbon emissions and therefore efforts should be put in place to minimise the environmental impact of health infrastructure. Enabling greener travel is a key part of this.

Community cohesion and integration

As set out above, a lack of community infrastructure can have significant impacts on the mental health and wellbeing of a new town. Therefore, explicit consideration should be given to whether development plans take into account the social and community needs of a new town or development. Opportunities for interaction can be built into developments through amenities like cafes and community gardens but also through the design and layout of housing, for example front gardens and walkways. New developments should seek to foster integrated rather than segregated communities.

Social cohesion and belonging not only need to be fostered at the beginning of new developments but also sustained in the long term. Factors associated with social cohesion and belonging should therefore also be considered when redeveloping areas or building infill. The Young Foundation has developed a framework for building new communities which are successful and sustainable in the long term.[30] It is based on four elements:

1. Amenities and social infrastructure
2. Social and cultural life

3. Voice and influence
4. Space to grow

Other infrastructure that impacts health

In addition to the direct health infrastructure listed above, other infrastructure covered in an IDP have indirect roles in promoting good physical or mental health or in supporting access to health services. For example,

- Public transport to health services
- Community centres with flexible usage for community health services, vaccination campaigns
- Infrastructure relating to public health commissioned services such as the 0-19 children's service
- Infrastructure for VCSE organisations which support health services
- Sports fields
- Children's playgrounds – this should be implemented in most new developments.
- Leisure centres
- Swimming pools – these will require a large population to support a new pool.
- Libraries
- Active travel infrastructure – this should be implemented throughout new developments.
- Green spaces – this should be implemented throughout new developments.

2.2.4. Do local IDPs adequately cover health infrastructure?

Although most of the areas within Cambridgeshire and Peterborough do have existing IDPs, given the large number of considerations and elements that can be included in an IDP, there is limited detail with respect to the health infrastructure components (Table 5). This lack of detail is particularly missing with respect to identifying specific locations of required infrastructure, timing, and funding.

Table 5: Details of health infrastructure in local IDPs

	Cambridge City and South Cambridgeshire (2020)[21]	Fenland (2022)[31]	Huntingdonshire (2017)[32]	Peterborough (2016)[33]
Does the IDP reasonably describe existing health infrastructure?	No	Yes	Yes	No
Does the IDP reasonably review if existing health infrastructure is sufficient?	No	No[1]	Yes	No[2]
Does the IDP detail future requirements with respect to:				
Primary Care	Yes	No	Yes	No
Secondary Care	No	No	Yes	No
Dentistry	No	No	No	No
Optometry	No	No	No	No
Pharmacy	No	No	No	No
Mental health	No	No	No	No
Ambulance services	No	No	No	No

1: "At the time of writing this Growth Study, there is little available data on the capacity of Fenland's health services." "The NHS has a presumption that the delivery of health infrastructure will be met through developer contributions. Fenland's Local Plan viability assessment suggests that there is limited scope for planning obligations (in addition introduction of a CIL is not feasible). Funding of primary care infrastructure via developer contributions is therefore likely to be challenging over the plan period."

2: "NHS England note that existing healthcare infrastructure requires investment and improvement in order to meet the requirements/needs of planned growth. The specific projects and measures required to mitigate the impacts of growth are not currently identified."

As the primary commissioners of local healthcare services, it is recommended that the ICB leads the process for articulating all health and health care infrastructure requirements over the next 10 years (requirements should also align with local plan periods). The review needs to consider current capacity, quantity, location, and timing of expected future health infrastructure requirements. These needs should be incorporated into each Local Planning Authorities IDP. If the infrastructure needs are not considered feasible, the system must collaborate to ensure alternative means of meeting or preventing these health needs, for example, through upscaling prevention.

It is vital that health and healthcare infrastructure requirements are planned for over the next 10 years, and this should align with each Local Authority's Local Plan Period.

At minimum, this should include:

- Determining if current healthcare infrastructure and services adequately meets local need.
- Modelling/predicting the quantity, location, and timing of expected future health infrastructure requirements. (This modelling should at minimum include health infrastructure listed in Section 2.2.1, and not unduly focus on primary care).
- Working with the Local Planning Authorities to incorporate the findings and predictions in their respective IDP.

3.Primary and secondary health services

Integrated Care Systems, or ICSs, are partnerships working together to improve health and care for all, through shared leadership and collaborative action (Figure 5 and

Figure 6). The ICS works together under one umbrella organisation, different parts of the health and care system are better able to improve the health and wellbeing of local communities, reduce health inequalities and put patients at the centre.

Figure 5: Integrated neighbourhoods, places, and integrated care systems

Source: Cambridgeshire and Peterborough ICS[34]

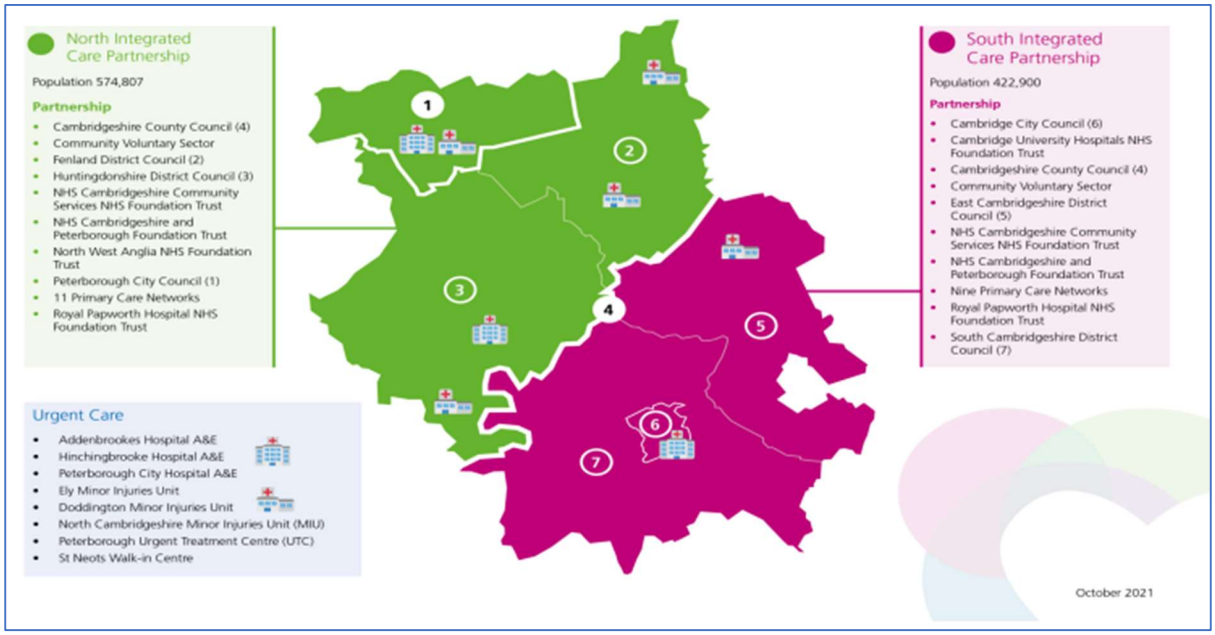
Figure 6: Integrated care system components

Source: Cambridgeshire and Peterborough ICS[34]

There are four spatial scales relevant for understanding healthcare commissioning and infrastructure planning in Cambridgeshire and Peterborough:

- The boundary of the Integrated Care System is the geography within which each Healthcare Trust and Integrated Care Board (ICB) commissions primary and secondary health services to meet the requirements of the persons residing in or registered with a GP in that area. ICSs were designed to each cover a population of around one to three million. The Cambridgeshire and Peterborough ICS has a population of around one million people.
- The second relevant geography within the NHS Long Term Plan is the 'Place' geography. This is smaller than the ICS and roughly corresponds with the size of a local authority area. This geography is aimed at the integration of hospital, local authority, and primary care teams and services, and is designed to cover a population of approximately 250,000 and 500,000 people. There are six local authorities covered by the Cambridgeshire and Peterborough ICS. The ICS has also formed two partnerships based on larger geographical places – North Cambridgeshire and Peterborough (focusing on Peterborough, Fenland and Huntingdonshire) and Cambridgeshire South (focusing on East and South Cambridgeshire and Cambridge City).

Figure 7: Cambridgeshire and Peterborough Integrated Care System North and South Partnerships



Source: Cambridgeshire and Peterborough ICS[34]

- Primary Care Networks (PCNs) cover a neighbourhood level geography. PCNs provide care to a defined, registered population and are where most locally based care is delivered. A PCN will generally have a population of between 30,000-50,000 people. Most PCNs are geographically based and between them will cover all GP practices within an ICB. There are 13 PCNs in the area covered by the North Cambridgeshire and Peterborough Partnership, and 9 PCNs in the area covered by the Cambridgeshire South Partnership.
- Registration with a GP practice is what creates the relationship between the patient and the healthcare system. Each GP within a PCN has its own geographical catchment area, sized to ensure that practices do not take on too many patients. This means that GP catchment areas can vary widely in size depending on the population density of the area and the number of GPs in the practice. Other than in very rural/remote areas, households will generally be within the catchment of more than one GP practice – this supports the principle of patient choice. As per the NHS Act, GPs who are accepting new patients must register any patient who lives within their catchment area.

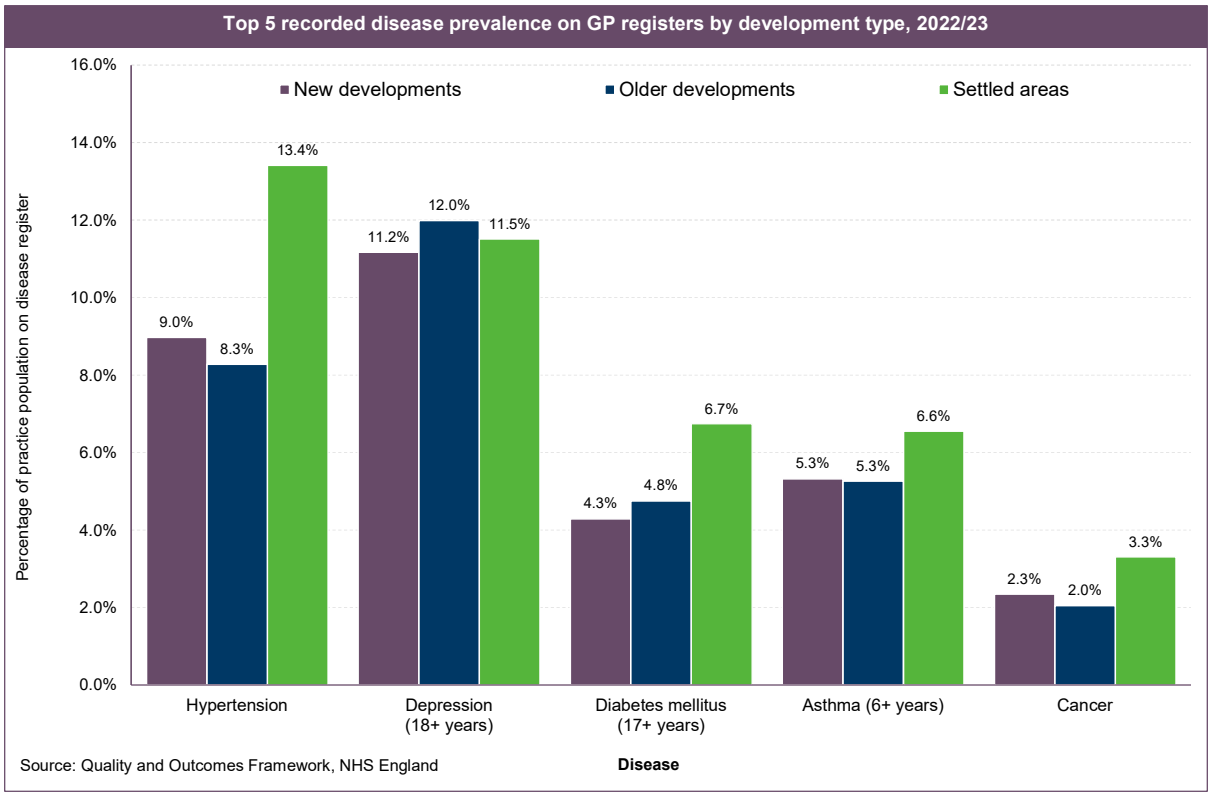
3.1.Primary healthcare

3.1.1.Quality and Outcomes Framework: New vs. Existing Communities

The Quality and Outcomes Framework is part of GP contracts and provides prevalence of health conditions as part of disease registers. Figure 8 below presents the 5 highest conditions on these registers and compares new developments, older developments and settled areas. Overall, disease prevalence is relatively low in new and older developments, as may be expected due to the relatively young populations living in these areas (see Chapter 1 of this JSNA fur further details).

Data are only available at GP practice level and each practice was assigned as a New or Older developments based on having sizable, registered populations living within those types of developments. All other practices were classed as 'Settled areas'. It is important to note that people living outside of these developments are also included in the data.

Figure 8: Disease prevalence by type of development, 2022/23



3.2.Secondary healthcare

3.2.1.Hospital attendance rates and admissions: New vs. Existing Communities

Data comparing utilisation rates of hospital (admission and attendance rates) was not available at the time of writing this JSNA, however data from the 2010 "New Housing and the Built Environment JSNA" showed that First Outpatient attendances form new communities was approximately twice as high compared to the

Cambridgeshire and Peterborough CCG area. A&E attendance from the majority of the new communities (with the exception of “Loves Farm”) were below the Cambridgeshire and Peterborough CCG area. Emergency Admissions and elective admissions from new communities were broadly similar to the Cambridgeshire and Peterborough CCG area. Did Not Attend (DNA) rates (with the exception of “Loves Farm”) were broadly similar to the Cambridgeshire and Peterborough CCG area.

Using this data we can infer a higher need in some new communities which translates into increased utilisation of health services. This is not to take focus from assets but to understand what services have been utilised to establish whether there is a gap in support in new communities. By identifying gaps, we can look to the assets and how to build upon those to close any gaps in future new communities.

3.3.Pharmacy, Optometry, Dentistry (POD), and Health Visiting

3.3.1.Pharmacy

The ICB has taken on delegated responsibility for dental, general ophthalmic services and pharmaceutical services (including dispensing doctors and dispensing appliance contractors).

The National Health Service (Pharmaceutical and Local Pharmaceutical Services) Regulations 2013 places a statutory duty on all Health and Wellbeing Boards (HWBs) to publish and keep-up-to date a statement of the needs for pharmaceutical services for the population in its area. These statements are referred to as Pharmaceutical Needs Assessments (PNAs).

The PNA is a structured approach to identifying unmet pharmaceutical need. It can be an effective tool to enable Health and Wellbeing Boards (HWBs) to identify the current and future commissioning of services required from pharmaceutical service providers.

The PNA is used by the Pharmaceutical Services Regulations Committee (PSRC) in its approval process for applications to join the pharmaceutical list under the NHS Pharmaceutical Services and Local Pharmaceutical Services Regulations 2013. Hertfordshire and West Essex (HWE) ICB host the (PSRC) on behalf of Cambridgeshire and Peterborough ICB under a Memorandum of Understanding (i.e. opening new pharmacies and dispensing appliance contractor premises; or applications from current pharmaceutical providers to change their existing regulatory requirements and when pharmacy contractors apply to merge (consolidate) or relocate).

The Cambridgeshire and Peterborough PNA 2022 (as amended by the PNA Supplementary Statement January 2024) currently states: ***There is currently sufficient pharmaceutical service provision across Cambridgeshire and Peterborough. however there has been a reduction in the opening hours of many pharmacies, in addition the pharmacy consultation has raised concerns***

with staffing and recruitment, which may impact the ability of pharmacies to deliver a consistent service. No current or future gaps have been identified in the provision of necessary and other relevant service across Cambridgeshire and Peterborough.

The number of pharmaceutical service providers per 100,000 people is difficult to calculate due to the different types of pharmaceutical provision (Community Pharmacies, and Dispensing Practices) and the data collected for the number of providers has been collected at different times, and the data is available by ICB Clinical commissioning group area not by the Health and Wellbeing Board area, so comparison with other areas is not possible.

The findings of the Supplementary Statement Cambridgeshire and Peterborough conclude there is still has adequate geographic provision of essential services to meet the needs of the population by providing a service for the majority of the residents within 20 minutes of their home. There are some pockets in Cambridgeshire and Peterborough where it is necessary to drive more than 20 minutes by car to access a pharmacy or dispensing surgery. However, these areas are to a large extent uninhabited and/or may be served by pharmaceutical services in a neighbouring Health and Wellbeing Board Area. However, it is recognised that not everyone has access to a car, and that those unable to access a car may be among the more vulnerable in society. ***Analysis of opening hours and trading days shows that while there is still adequate provision of access to pharmaceutical services for essential services, Monday to Friday during usual opening hours, there has been a reduction in opening hours particularly at evenings and weekends. Since October 2022 there have been a number of pharmacies which have reduced their supplementary hours.***

In 2022 the average number of community pharmacies in Cambridgeshire and Peterborough ICB area was 18.7 per 100,000 residents which is similar to the East of England average (19.4) and the England Average.

As of March 2022, across Cambridgeshire and Peterborough there were:

- 148 pharmacies.
- 40 dispensing GP practices
- Three Dispensing Appliance Contractors

In terms of access to pharmaceutical services there are no areas that are located more than 20 minutes away by car from a pharmacy or dispensing surgery in Cambridgeshire, The majority of areas in Peterborough are accessible within 20 minutes by car, with a small number of exceptions towards the outer areas of the city, particularly in the east, but these localities may get their pharmacy services from outside the Health and Wellbeing Board area i.e. from pharmacies located in the Norfolk Health and Wellbeing Board area.

Further information on Pharmacy can be found at Cambridgeshire and Peterborough PNA 2022 and Cambridgeshire and Peterborough PNA Supplementary Statement 2024.

3.3.2. Primary Care, Optometry, Dentistry, Health Visitors

Data for Primary care usage, Optometry, Dentistry, and Health visiting was not available at the time of writing this JSNA.

4. Education

> *"We are confident that multiple sources of evidence show that a lack of schooling increases inequalities, reduces the life chances of children and can exacerbate physical and mental health issues. School improves health, learning, socialisation and opportunities throughout the life course including employment. It has not been possible to reduce societal inequalities through the provision of home-based education alone. School attendance is very important for children and young people."* - Chief Medical Officers and Deputy Chief Medical Officers of England, Scotland, Northern Ireland and Wales[35]

Education forms the cornerstone of a healthy start to life. The health benefits associated with school attendance range from the short-term (e.g., access to school nursing or educational psychology) through to the long-term (e.g., reduced risk of diabetes, heart disease, and overall mortality).[36] People with less education have higher risk of smoking, physical inactivity, obesity, and suffering from alcohol-related harm. Therefore, it is essential that high-quality educational opportunities are available for children and young people to give them the best start in life.[36]

4.1. Early years and childcare

The availability of childcare is an important component of a sustainable community in terms of service, social integration, employment and parental participation in the workforce. Its absence encourages unnecessary travel and presents a barrier to securing family livelihoods and the pursuit of chosen lifestyles. This is particularly true of wholly new neighbourhoods which tend to attract young families.

Under the Childcare Act (2006), upper tier authorities has a duty to secure sufficient and suitable childcare to enable parents to return to work to undertake education or training which could lead to employment. This includes an entitlement of 570 hours of free early education per year for eligible two-year-olds, starting the funding period following their second birthday and 570 hours of free early education for all three- and four-year-olds, starting the funding period following their third birthday (commonly referred to as the universal entitlement).

Since 2017, there has been an extension to the entitlement for children aged 3 and 4 from working families who are now entitled to an additional 570 hours of free

childcare (commonly referred to as the extended entitlement), subject to meeting the qualifying criteria set out by the Government. From April 2024 this will be extended to cover children aged 2 and, from September 2025, to cover children aged 9 months and above.

Whilst local authorities are not expected to provide childcare directly, they are expected to work with local private, voluntary and independent sector providers to meet local need and to ensure a suitable balance of provision including full day care and sessional providers, wraparound provision and childminders.

4.2.Restrictive covenants relating to childminders

Childminders make up an important part of childcare provision. It is childminders who can support families as the community becomes established, and prior to new early years settings being marketed for larger childcare provision.

However, some house builders place restrictive covenants on properties which prohibit residents living within them from running a business from home, including providing childcare. Whilst it is possible to have a covenant revoked, it is not guaranteed.

These restrictions are deterring childminders from setting up in some new developments. Information shows that these developments have fewer childminders per household than existing neighbouring settlements.

For example, on 16 May 2023 Cambridgeshire County Council at its Full Council meeting, passed a motion to request that District Councils throughout Cambridgeshire consider on strategic new developments, a planning condition that developers' covenants explicitly exempt childcare provision on domestic premises, where there is an identified need. In addition, it highlighted the importance of such changes with developers and house builders to ensure that they are aware of the barrier that these covenants can cause. Following this, motions were passed by Cambridge City Council on 20 July 2023 and South Cambridgeshire Council on 13 July 2023 agreeing to this request and to develop planning policies to support this.

4.3.Primary and secondary age provision including special educational needs and disability (SEND)

Local access to schools and the local provision of schools is an important component of a sustainable community. Its absence encourages unnecessary travel and impacts on community cohesion. New neighbourhoods tend to attract young families. Schools work closely with families and there are many inter-relationships with schools, families and other services.

Upper tier authorities have a duty, established under the Education Act 1996, to ensure sufficient school places for every child who is of statutory school age (5-16 years of age) and whose parents want their child educated in the state funded

sector. It also has a duty to promote diversity, parental choice and high standards and to ensure fair access to educational opportunity.

The Children and Families Act (2014) aims to ensure that all children, young people and their families can access the right support and provision to meet their needs. The Act outlines the Code of Practice for children and young people with SEND.

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