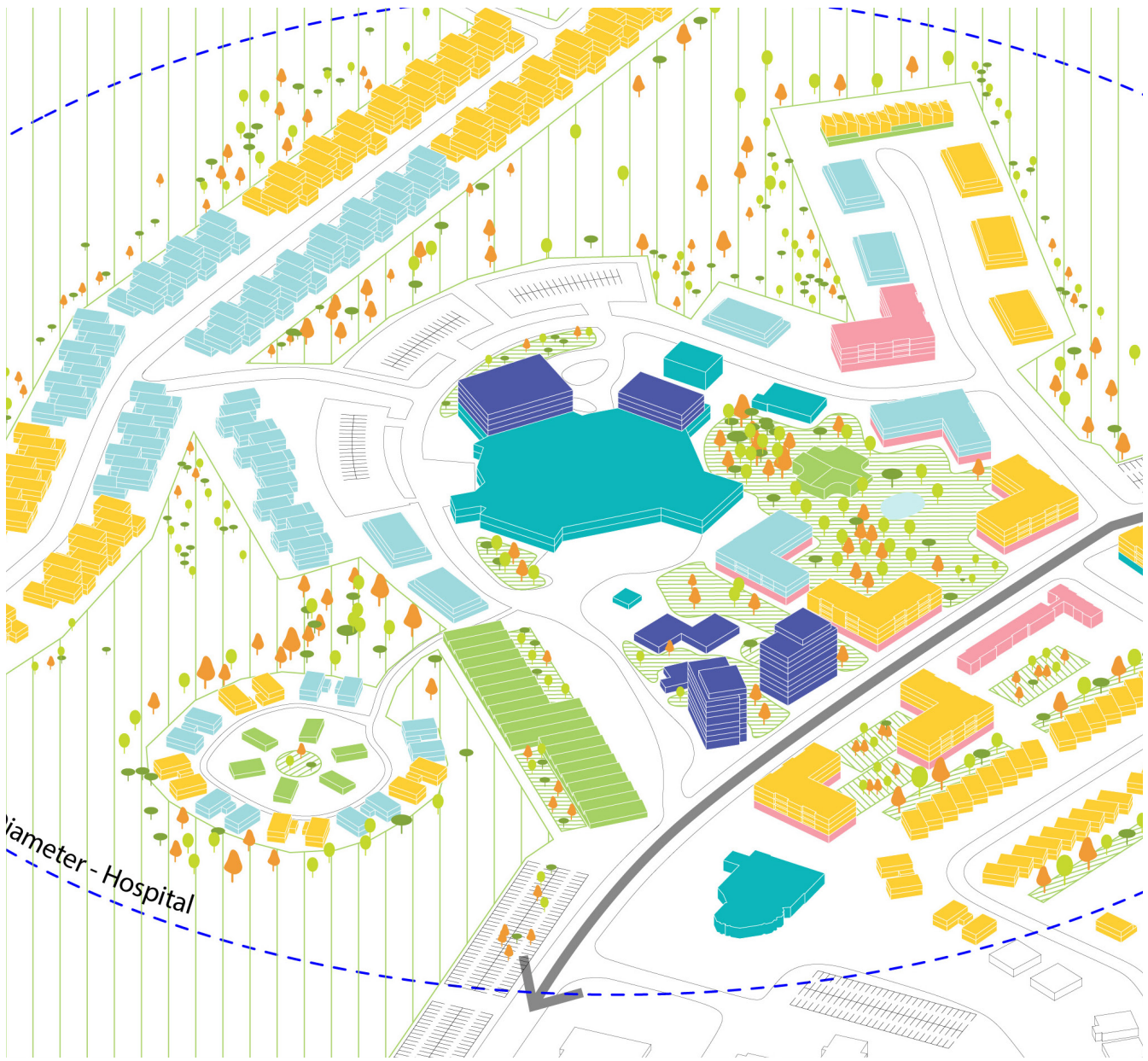


JUNE 2023

Healthcare-Oriented Communities Urban Design Guidelines



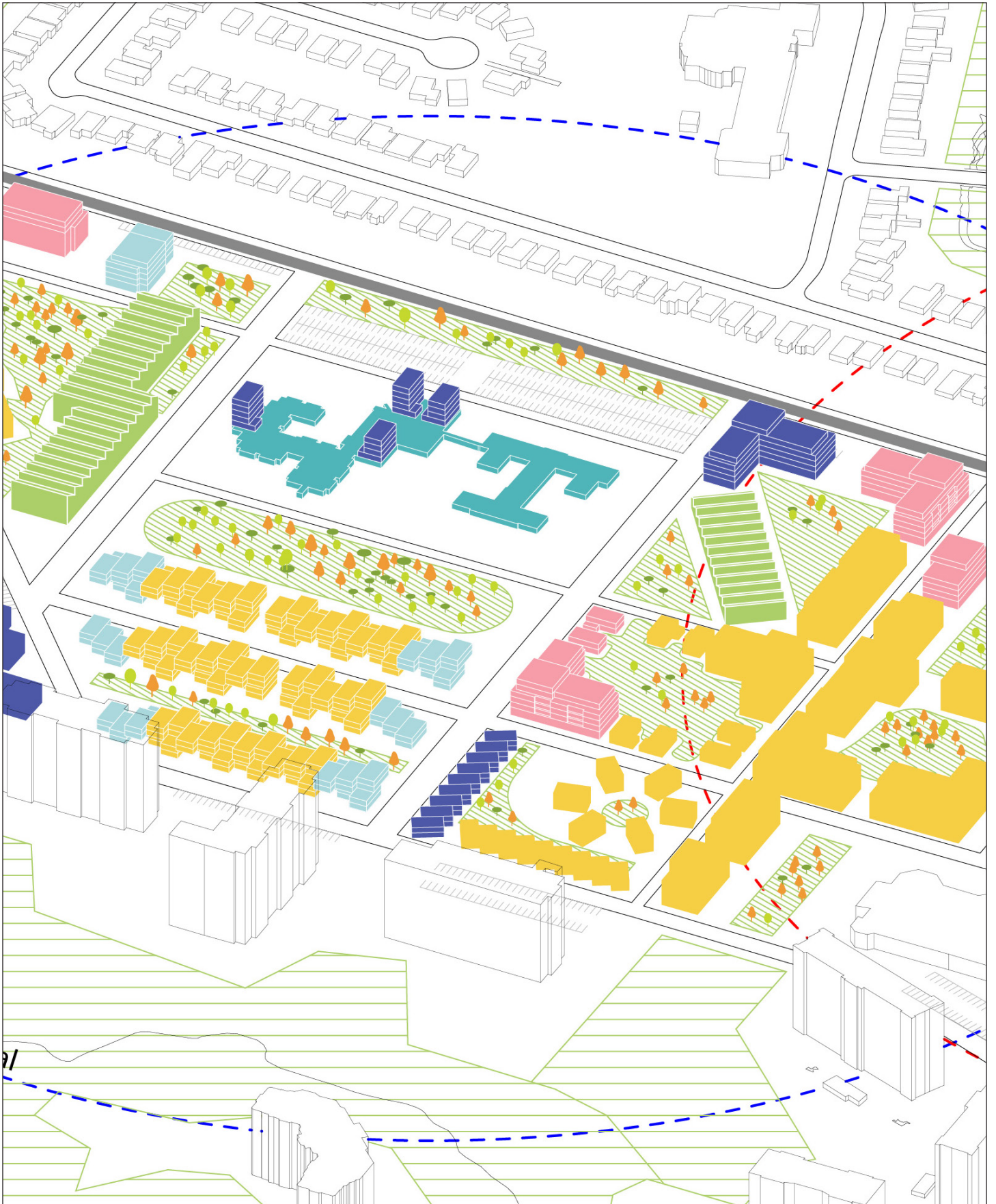
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ONTARIO



Contents

The HOC Vision	1
Guiding Principles	2
HOC Classifications	4
How to Use the Guidelines	6
Identifying Potential Sites to Build HOCs	7
Structure of Uses	10
Typology and Co-location	20
Public Realm	29
Connectivity and Accessibility	30
HOC Demonstrations	31
HOC Stakeholders	38
Next Steps	39
References	39



The HOC Vision

Purpose

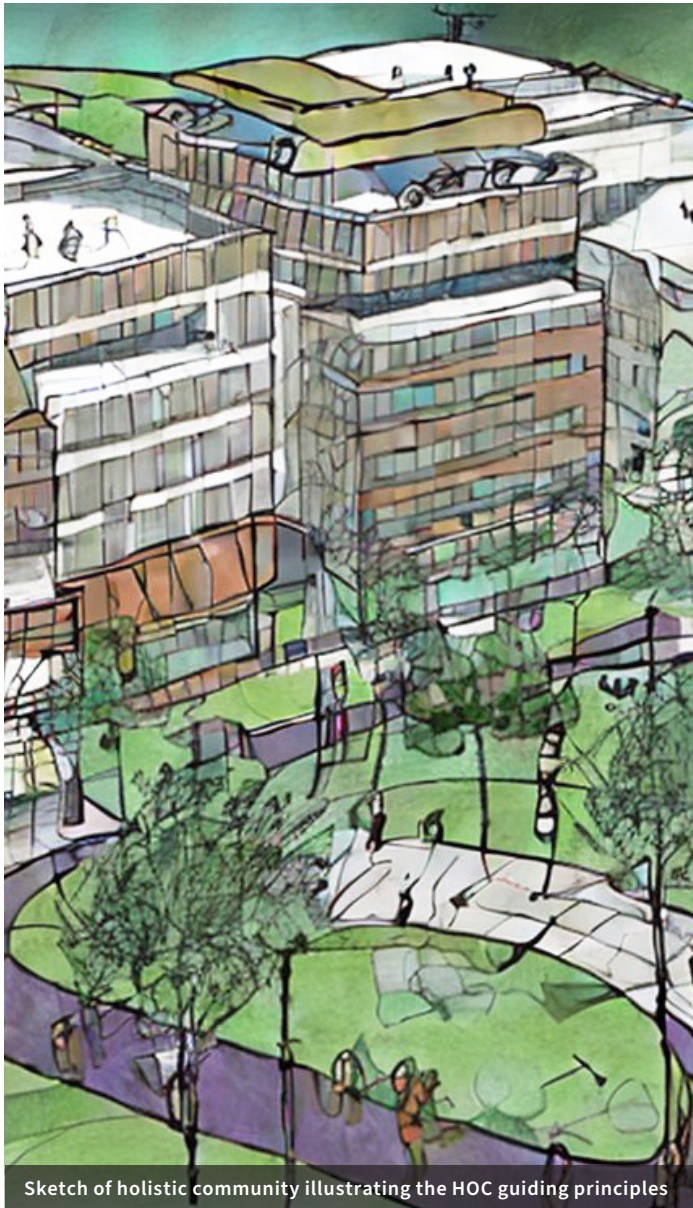
The following Urban Design Guidelines are both an aspirational vision as well as a practical planning and design direction for Healthcare-Oriented Communities (HOCs). They present at a high-level the development approach, typologies, connectivity principles, and favourable mix of uses that may support thriving HOCs and can be used as a reference during early planning stages. It also outlines strategic coordination between involved parties but is not meant to be prescriptive. The Urban Design Guidelines are the second part of the Healthcare-Oriented Communities Project, following a jurisdictional case study review.

What are Healthcare-Oriented Communities?

Healthcare-Oriented Communities (HOCs) are holistic communities centred around healthcare, where high-quality health services, housing, jobs, and amenities are highly accessible to residents. It is commonly anchored by a hospital that becomes the enabler and catalyst for growth and vitality. HOCs also catalyze complete communities through best practices in urban planning and design, taking into consideration public policy and initiatives, including those around growth, housing, and transit. Last, HOCs help maximize public investment into Ontario's healthcare system by targeting positive value capture, promoting a synergy of uses, and ensuring long-term sustainable operations. Public, private, and non-profit stakeholders are involved in various roles to successfully implement HOCs.

The HOC Urban Design Guidelines are the second phase of the Healthcare-Oriented Communities Research Project and captures many of the best practices found in the case studies of the first phase.

Guiding Principles



Sketch of holistic community illustrating the HOC guiding principles

The guidelines were built on preliminary data gathered in Ontario and across other jurisdictions and are ultimately based on the following principles:

- Provide accessible healthcare
- Build complete communities
- Optimize public resources
- Promote synergy of uses



Provide accessible healthcare

HOCs should be designed to ensure that health facilities, other care services, social supports, and community amenities are well-connected and accessible to residents, patients, and staff. Therefore, co-location of building and services becomes of paramount importance to facilitate a number social and financial benefits. For example, housing promotes aging in place for seniors and designated affordable worker housing is important in urban contexts.



Build complete communities

HOCs should aim to build complete communities that are liveable, vibrant, and can support healthy lifestyles. When possible, they should align with existing urban planning objectives at municipal and provincial levels, including areas anticipated for growth, transit-oriented development, housing delivery, and public realm enhancements. This may ensure that HOCs with a hospital as an anchor can drive planned communities as part of a coordinated government strategy for economic recovery or managing population growth.



Optimize public resources

HOCs should optimize public funds, land assets, time and other public resources invested by maximizing social and financial benefits through a variety of creative strategies. HOCs can increase their financial impact by entering development partnerships (with public or private organizations), which has been successful in accessing new service areas, improving financial feasibility, increasing capital stacking opportunities, housing affordability, and providing new public amenities.



Promote synergy of uses

HOC should create a synergy of uses by placing healthcare facilities, social services, and other spaces for medical practitioners nearby complementary uses. Adding non-healthcare uses to hospital sites increases cross-subsidization opportunities. Some common ones include residential (including long-term care, supportive housing, and market housing), post-secondary education, office, retail, and community amenities.

HOC Classifications

The HOC Urban Design Guidelines define three classification locations based on where the project is constructed: urban, suburban, and rural.

The three classifications are in principle based on the market segments determined by the Ministry of Long-Term Care's Funding Policy, 2020 and the types of population centres (POPCTR) defined by Statistics Canada (see Figure 1). They are geographic categories created to identify the distinction between highly populated, dense cities and less connected areas of the province.



Figure 1. Population Centres (POPCTR) categories of which the HOC classifications are generally based on. Image courtesy: Statistics Canada.

Note: While there are four market segments identified in the Funding Policy, 2020, the HOC guidelines only have three classifications. This is because there are limited differences in the design and development approach of the two larger market segment categories (Large Urban and Urban); both have been captured in the Urban HOC.

Urban HOC

Urban HOCs have the highest population and development density of the three HOC types and are usually found in the urban core of mid-sized and large cities. While they hold the largest potential to deliver significant development, they also face challenges of land scarcity, with much of the land mass already built-up. Urban HOCs are identified with the following characteristics:

- Comprises large urban population centres with populations of 100,000 or more
- Minimum population density of 400 people or more per square kilometre

Suburban HOC

Suburban HOC have less density in comparison to Urban HOCs and can typically found in the urban core of mid-sized cities and areas outside of the urban core in large cities. They may face challenges of land scarcity, but also hold the potential to drive significant development. Suburban HOCs are identified with the following characteristics:

- Comprises medium population centres with populations between 10,000 - 100,000
- Minimum population density of 40 people and a maximum of 400 people per square kilometre

Rural HOC

Rural HOCs are found in rural communities, where the population and development density is low. They have a set of challenges and opportunities most unique from the other two HOC types. The challenges include the shortage of hospitals, family doctors, and other medical support services, coupled by lack of efficient public transport. However, as rural communities do not face land scarcity, creating HOCs is prime opportunity to address these challenges. In addition to providing hospital services, they can provide a diversity of other needed healthcare services for those driving far distances to avoid multiple trips. Additionally, while there is provincial funding to help attract doctors to rural regions, the importance of a vibrant complete community should not be downplayed in its ability to attract healthcare providers. Rural HOCs are identified with the following characteristics:

- Comprises rural population centres with populations less than 10,000

How to Use the Guidelines

The guidelines provide a set of design direction and planning strategies, informed by best practices in the jurisdictional case study review with objectives of optimizing public land assets.

These guidelines could be considered a tool to be accessed when planning health care spaces, both new and existing. Each guideline section contains directions that apply to all HOCs in addition to unique considerations specific to each of the three HOC classifications when applicable.

The guidelines should be used in conjunction with other existing standards and planning processes, some of which are required by law, including but not limited to:

MANDATORY

- CSA Z8000 Canadian Healthcare Facilities National Standard
- Ontario Building Code
- Ontario Fire Code
- Accessibility for Ontarians with Disabilities Act

PLANNING FRAMEWORKS

- Hospital Capital Planning and Policy Manual (Ontario Health)
- Rural and Northern Healthcare Framework (Ministry of Health, Ministry of Long-Term Care)

DESIGN MANUALS AND GUIDELINES

- Long-Term Care Home Design Manual (Ministry of Long-Term Care)
- Facility Guidelines Institute (FGI) Guidelines: The Design and Construction of Hospitals; The Design and Construction of Residential Health, Care, and Facilities (industry standard)

OTHER RELEVANT POLICIES FOUND IN:

- Ministry of Health and Long-Term Care Act R.S.O. 1990 (MOHLTCA)
- Public Hospitals Act R.S.O. 1990 (PHA)
- Broader Public Sector (BPS) Accountability Act, 2010 and BPS Procurement Directive

Identifying Potential Sites to Build HOCs

Optimal Conditions for HOC Development

An Existing Hospital

Where hospitals already exist, new development can focus more directly on creating a synergy of uses that achieve the social and financial goals of HOCs. Funding and financial stacking can be leveraged towards constructing new complimentary buildings rather than the hospital itself, providing opportunities for creative, and possibly less expensive, HOC models.

Significant Amounts of Publicly Owned Land

The greater the amount of land under public ownership in a potential HOC site, the greater the level of control that the government has over how it is planned and delivered. While government-initiated HOCs have been shown to encourage complimentary privately owned development in an area, public ownership of sites in an HOC allows governments to develop the land for their preferred uses through public-private partnerships.

Suburban Contexts

Urban HOCs must often take the form of infill development on expensive and scarce parcels, while rural areas can lack the land values and population sizes necessary to make a robust HOC model possible. Suburban contexts, on the other hand, are optimal locations for developing new HOCs as they tend to possess substantial population sizes and larger amounts of available land. Therefore, suburban HOC development provides an opportunity to effectively plan for the future of gradually urbanizing areas through strategic densification.

Proximity to parkland, shared public spaces, or local amenities

Where it is intended that a new hospital or surrounding socially beneficial uses be cross-subsidized by non-medical ones, such as market rate housing, it is helpful that the HOC be situated in an appealing environment. While a goal of HOCs is to produce new liveable communities, existing natural and built amenities make the HOC an appealing place to live or visit which adds to the financial viability of a project.

An Aging Population

Seniors are certainly not the only demographic to benefit from HOCs, but retirement communities with hospital and other medical services on site are growing in popularity due to their complementarity. Developing an HOC in a region with an aging population is socially beneficial for local and nearby residents and can contribute significantly to the capital stack through the inclusion of senior-specific housing and private medical practices.

Urban HOC / Suburban HOC Considerations

Urban HOCs typically rise from already developed areas, where a key strategy to creating a cohesive healthcare community may require the consolidation of sites or implementing infill development. Similarly, both Urban HOCs and Suburban HOCs would benefit from identifying underutilized sites as high-potential sites for new development. These may include:

- Underutilized sites next to or nearby hospitals
- Underutilized portions of undeveloped hospital land
- Portions of undeveloped land in an existing long-term care home site or residential complex nearby a hospital
- Underutilized publicly owned sites in areas with fast-aging populations

In addition to sites that are currently underutilized, HOCs should consider areas that anticipate growth. These sites may have one or more of the following characteristics:

- Land within identified growth areas in municipal and provincial planning policy
- Land within a walkable distance to existing or future transit lines
- Land within a walkable distance to where a new hospital is planned

Underutilized sites can be defined as empty sites, portions of undeveloped land on a developed site, or sites holding low-rise buildings in areas anticipating growth. They may include surface parking, open space, unkempt parks, and sites needing brownfield remediation. Further feasibility studies will be needed to determine whether a site is truly underutilized and whether development is a viable outcome in support of the HOC vision.

Rural HOC Considerations

Rural contexts do not typically share the same challenges of land scarcity as Urban and Suburban HOCs. In contrast, the HOC should be master-planned to strategically attract new residents, including healthcare practitioners

Structure of Uses

HOCs are structured into a network of general and highly specialized facilities in a close-knit urban fabric. They can be anchored around a hospital or a hub of healthcare facilities as its focal point, ideally being contained within an 800m radius (10-minute walking distance).

The HOC should be designed to accommodate the service needs of the HOC population, with flexibility for future development and new modes of service delivery. As shown in Figure 2, it comprises two main components:



1. The **Anchor Healthcare Zone**, with the hub of the most specialized healthcare services in the HOC (quaternary, tertiary, and secondary care) typically taking the form of a hospital; and,
2. The **Community Zone**, where residents live and are accompanied by a mix of everyday healthcare services (primary and secondary care), amenities, retail, office, and parks

Major arterials that may run through the site are prime opportunities for co-location to occur as mixed-use, and co-location elsewhere can occur by the placement of uses in proximity to one another.

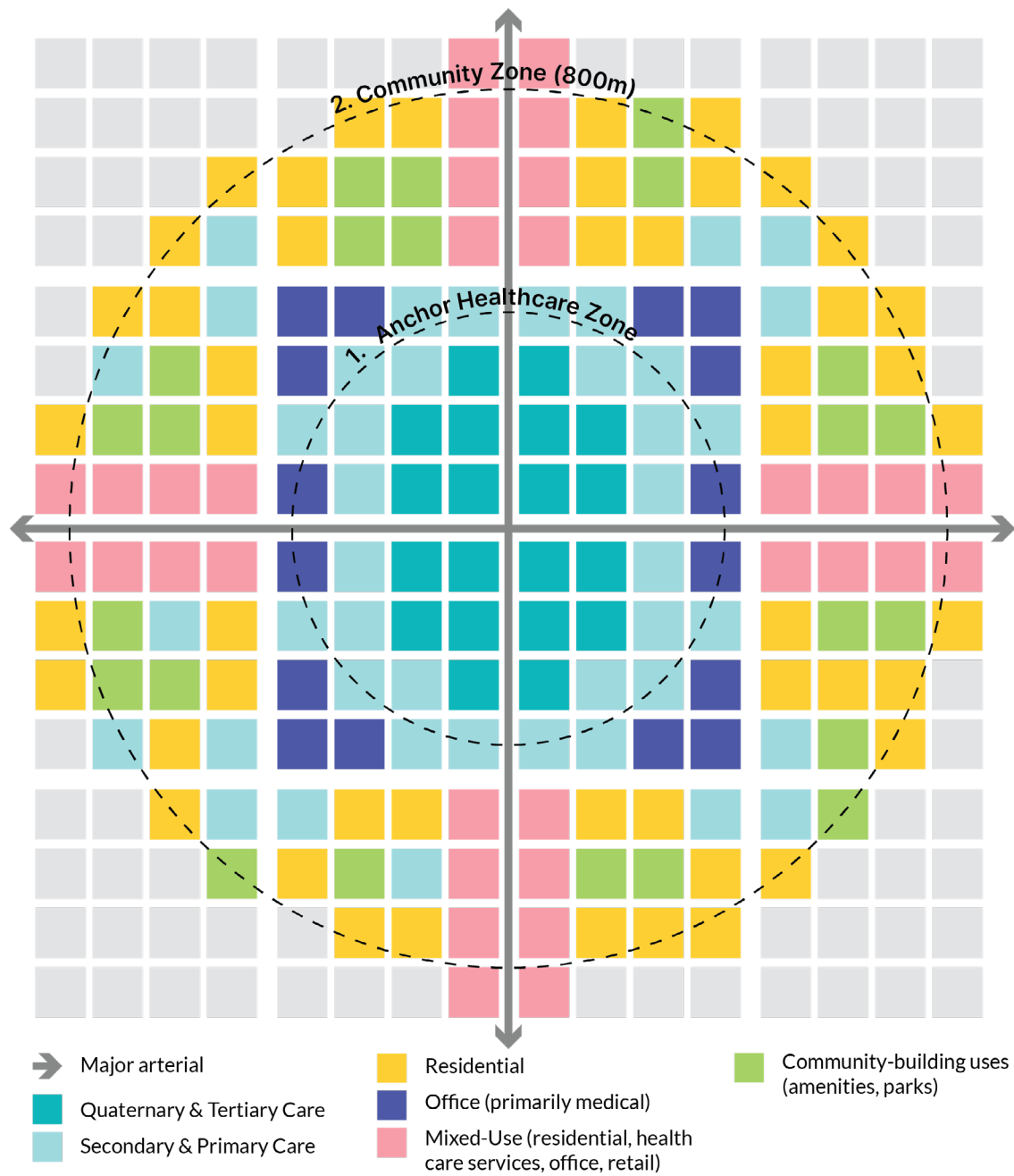


Figure 2. Structure of uses in a HOC

Hennick Bridgepoint Hospital - Image Courtesy: Jeff Hitchcock



1. Anchor Healthcare Zone

As a principle, the focal point of the HOC is the Anchor Healthcare Zone that has a facility with the most specialized services in the HOC. In most cases it will be a hospital, which is a large employment and economic driver that stimulates and supports its surrounding community.

The hospital may include a complementary mix of Quaternary, Tertiary, and Secondary Care services as determined by the integrated project team consisting of Infrastructure Ontario, the Ministry of Health, Ontario Health, and others (see Section HOC Stakeholders for more information on roles and responsibilities). As the centre of the HOC cares for the most vulnerable and sick, it must be able to function in isolation before beneficial synergies with other uses on nearby sites are considered. Please see section “Typology and Co-location” for more information on the mix of uses of HOC Healthcare facilities.

In addition to healthcare services, hospitals also generate demand for medical and other office space, some of which may be allocated to the anchor zone to reduce access time.

Tertiary Care Services:

Specialized Healthcare typically provided in a hospital requiring inpatients. These services require a referral from a primary or secondary care provider. Can include cancer management, intensive care units, and complex surgeries.

Quaternary Care Services:

Often considered an extension of tertiary care and includes an advanced level of care that is not widely accessible. Can include experimental medicine, treatment of rare medical conditions and uncommon surgical procedures.

Anchor Healthcare Zone Differences between Classifications

The anchor healthcare zone differs across the three classifications in the catalyst that sparks HOC development, its main mode of access, the degree in which it serves the wider community, and growth objectives identified in planning policy. The key considerations and differences have been identified below.

Anchor Healthcare Zone		
Urban HOC	Suburban HOC	Rural HOC
<ul style="list-style-type: none"> The strategy to build a HOC is to start with an existing hospital, where development occurs in built up areas around the hospital as its anchor. Renovation and expansion of a hospital may also spark significant development interest. The HOC faces more limitations in land availability, and development may consider creative land consolidation strategies, infill development, or land swaps through partnership arrangements to build the cohesive HOC vision. Any uses must also consider uses that complement the existing urban fabric. If a new hospital is planned, it should take into consideration flight paths and its impact on planning policy for areas targeted for growth. 	<ul style="list-style-type: none"> The strategy to build a HOC could start with an existing hospital, where development occurs in built up areas around the hospital as its anchor. Renovation and expansion of a hospital may also spark significant development interest. The strategy to build a HOC could also start with a new hospital that drives development around it in collaboration with the HOC stakeholders. While the Suburban HOC is envisioned to stand as a complete community, the anchor stands to serve the wider community who will access the services by multi-modal forms of transportation, including public transit and private vehicles. 	<ul style="list-style-type: none"> The strategy to build a HOC, either with an existing or a new healthcare facility, is to drive new development and economic activity in that area. The HOC can also serve to attract healthcare practitioners while providing for gaps in services in rural areas. While the HOC is envisioned to stand alone as a complete community, it also plays a role in serving the extended rural community, who mainly drive to access healthcare services. The HOC anchor should be planned, when possible, to meet the planning standards of the Provincial Rural and Northern Healthcare Framework, which includes: <ul style="list-style-type: none"> 90% of residents being able to receive primary care and emergency services within 30-min travel 90% of residents receiving inpatient hospital services within one hour of travel 90% of residents receiving specialty inpatient hospital services within four hours of travel

Table 1. Differences in the Anchor Healthcare Zone between the three classifications

Murdoch Square with a medi-hotel, retail, restaurants, and seniors care, is one example of a development that fulfills the vibrant placemaking goals in the Community Zone. Image courtesy: Aegis Health



2. Community Zone

To be effective, the HOC must have a compact walkable form and mix of diverse uses, characterizing the Community Zone beyond the hospital anchor. These lands are attractive areas to build communities with residents who may need to access the services at the anchor facility. The programming in the remainder of the HOC area provides the synergy of uses that create a vibrant, integrated, and efficient community in the HOC vision. This includes the integration of healthcare services, quality public space, social supports, and other community amenities within this area.

Development should abide by planning objectives at the municipal and provincial level, including direction on land use, growth areas, and special districts. General principles for the uses of the Community Zone have been summarized below. For guidance on the building form of these uses, please see the next section “Typology and Co-location”.

Healthcare services

Primary or Secondary Care services best complement the areas beyond the anchor healthcare facility, meeting residents’ general and specialized day-to-day healthcare needs. These services should be in accessible locations for residents living in the HOC with high visibility. The HOC could respond to diverse and unique demands of the HOC residents by providing boutique health services or supplementary health services that complement the public health care system.

Primary Care Services: first point of contact for most people accessing healthcare and provides the widest scope of services for a wide demographic range. They include, but are not limited to:

- Family physicians
- Nurse practitioners
- Physiotherapists
- Dietitians
- Occupational therapists
- Social workers

Secondary Care Services: specialists and other health professionals who do not have first contact with patients who are often sent here by a primary practitioner or other specialist. They include, but are not limited to:

- Rehabilitation centres
- Outpatient clinics
- Ambulatory care
- Acute Care
- Support services in Long-Term Care homes

Boutique Health and Alternative Medicines: – This could include, but are not limited to:

- Private clinics with specialized services
- Naturopathic doctors
- Alternative medicines

Residential

HOCs envision residents to live in complete communities with generally four types of housing based on the demographic served:



1. Long-term care (LTC) home

Long-term care homes are homes for seniors with a high-level of support with personal and nursing care funded by government. They can be either publicly or privately-owned, where privately-owned long-term care homes could be operated by non-profit or for-profit organizations



2. Retirement home

Retirement homes are privately-owned home for seniors typically with a lower level of care than a long-term care home but services may vary. Tenants pay for care and living costs.



3. Market housing

Market housing are privately-owned homes with no health supports.



4. Affordable housing

Affordable housing is publicly or privately-owned housing that range in the level of affordability and supports offered, including supports for specific demographics or illnesses.

In addition to these main residential types, there may be other complementary uses that provide dwelling units that may be reasonably integrated with the HOC. This includes medical hotels for short-term recovery or specialized rehabilitation centres. Housing for medical staff and healthcare technicians may also be considered.

Medical Offices

Hospitals also generate demand for nearby medical and other office space, proportional to the size of the hospital. While some offices may be in the Anchor Healthcare Zone, medical offices may also be allocated nearby the hospital in the Community Zone.

Community-building Uses: Amenities & Retail

HOCs consider uses that promote balanced lifestyles that increase social capital and contribute to holistic needs beyond physical health. There is much flexibility in the types of amenities that could be built, which depend on the demand and the threshold population needed to support certain businesses or uses. Amenities significantly contribute to vibrant communities and may sometimes be targeted towards specific demographics, including:

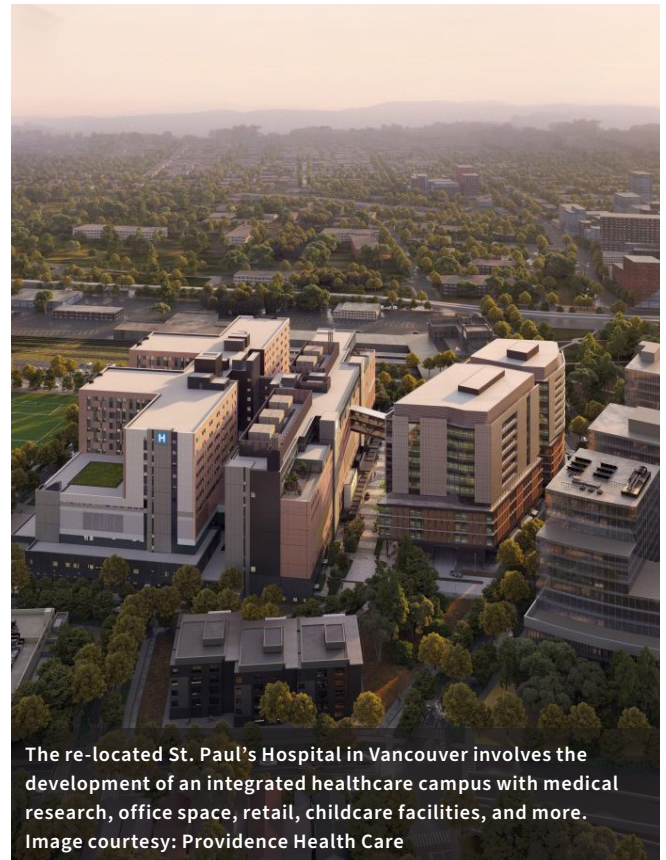
- Community Centres
- Social services
- Recreational facilities
- Multifaith spaces

HOCs may also provide retail uses that specialize in the specific needs of the demographic, including:

- Health food stores
- Specialty retailers
- Restaurants
- Pharmacies
- Medical supply stores

Community-building Uses: Public Parks & Open Spaces

HOCs will have high-quality public spaces accessible to residents, including public parks, community amenities, and vibrant streetscapes. The provision of parks and open spaces will meet, at a minimum, the requirements set by municipal by-laws for new development.



The re-located St. Paul's Hospital in Vancouver involves the development of an integrated healthcare campus with medical research, office space, retail, childcare facilities, and more. Image courtesy: Providence Health Care

Community Zone Differences between Classifications

The anchor healthcare zone differs across the three classifications in the catalyst that sparks HOC development, its main mode of access, the degree in which it serves the wider community, and growth objectives identified in planning policy. The key considerations and differences have been identified below.

Community Zone		
Urban HOC	Suburban HOC	Rural HOC
<ul style="list-style-type: none"> Development pressures are highest in the Urban HOC due to higher population demands. There is an opportunity to leverage development partnerships to deliver a wide range of housing, including long-term care homes, retirement homes, market housing, affordable housing, and community benefits. Development partnerships may be made between public and private partners, where development at a larger scale can provide opportunities to increase affordability, provide more public spaces, and optimize the financing stack. New HOC development in the community zone likely will comprise a mix of infill development, renovations, and new builds, taking into consideration the existing urban fabric. A higher population provides the threshold supports for specialized facilities, stores, and boutique services that may not be viable elsewhere. Urban HOCs may also face larger challenges of ensuring adequate green space for residents in comparison to the other two HOC classifications. 	<ul style="list-style-type: none"> Certain suburban HOCs will have stronger real estate development pressure, particularly if it is close to transit or growth areas. There is an opportunity to leverage development partnerships to deliver housing and community benefits, but development potential may face more limitations based on market demand. The Community Zone of a Suburban HOC has a prime opportunity to expand on home care models. This is due to the limited development potential in some suburban areas, but it also directly responds to the use of home care services as being higher in neighbourhoods with a larger proportion of seniors and low socioeconomic status suburban neighbourhoods (Statistics Canada, 2021). Limitations on the community-building uses, including amenities, retail, and public parks and open spaces will depend on threshold population needed to sustain business operations. 	<ul style="list-style-type: none"> Rural HOC can build on top of the established principles of Stage 1 of the Provincial Rural and Northern Healthcare Framework, that encourages the building of 'local hubs' that leverage the role of small healthcare facilities and their catchment areas to provide for additional healthcare services. Local hubs are encouraged to be created in collaboration with multiple rural communities forming a hub of health service activity and access beyond one's rural community. In the context of an HOC, these 'local hubs' can be integrated into the Community Zone, where creating a HOC is an opportunity to drive new housing by creating an attractive community for residents with accessible healthcare services, a strong social network, and amenities. A strong master-planned vision will be necessary to ensure that the available primary care, specialized services, amenities, retail, and other uses can thrive in the community zone beyond the anchor hospital.

Table 2. Differences in the Community Zone between the three classifications

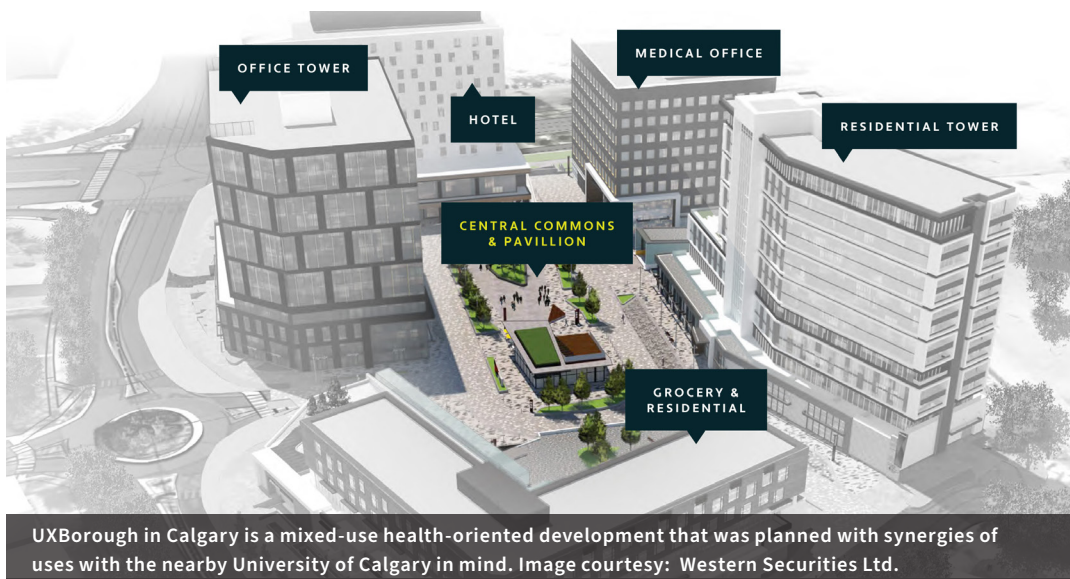
3. Unique Scenarios

HOC is near a major transit station

If the HOC falls within or overlaps with walkable areas around an existing or planned major transit station (800m radius from the station), the density and mix of uses should follow municipal policy direction and any existing TOD guideline. This typically includes the following:

- Increased density with a mix of uses, including residential, commercial, office, and institutional
- Mix of housing types, including market and affordable
- Ensure a direct interface with the transit station if possible or to provide direct routes between the station and hospital

The higher development potential in areas around transit have potential to be leveraged in development partnerships that help increase housing affordability, optimize development feasibility, and unlock community benefits for the overall HOC.



UXBorough in Calgary is a mixed-use health-oriented development that was planned with synergies of uses with the nearby University of Calgary in mind. Image courtesy: Western Securities Ltd.

HOC is near a post-secondary institution

In some cases, a HOC may be within a walkable distance (800m) to a post-secondary institution campus, opening opportunities to develop a campus-style HOC as an extension of the health campus of the post-secondary institution. In this scenario, the community zone may contain complementary uses, including research facilities, medical labs, offices, or university-led clinics or health services. Synergies may be held between the office-use generated by hospitals and educational offices and labs.

Unique Scenarios Differences between Classifications

Being located near major transit or a post-secondary institution are low-chance scenarios for Rural HOCs. In Urban and Suburban HOCs, there may be some differences in how the HOC is developed based on land availability. The key considerations and differences have been identified below.

HOC is near a major transit station		
Urban HOC	Suburban HOC	Rural HOC
<ul style="list-style-type: none"> The walkable distance around a major transit station (800m radius) is highly attractive for development. When located near a HOC in urban settings, there is an enormous opportunity to build the HOC with transit-oriented development principles and maximize the degree of housing affordability and community benefits. 	<ul style="list-style-type: none"> Major transit stations can be found in some suburban neighbourhoods, also allowing opportunities for the HOC to leverage high development-potential areas towards housing affordability and community benefits. Intentionally building a new hospital in suburban areas also have the potential to become destinations, extending existing transit and driving up development demand. 	<ul style="list-style-type: none"> There are no major transit stations in rural areas, leading to a lack of opportunity for transit-oriented development to be leveraged or considered as part of the HOC vision.
HOC is near a post-secondary institution		
Urban HOC	Suburban HOC	Rural HOC
<ul style="list-style-type: none"> Urban HOCs may face limitations in accessing land, but synergies between post-secondary institutions and HOCs can create strong educational and healthcare networks serving a large population (i.e. University Health Network in Toronto). Hospitals also benefit from being the recipient of the latest research and technology towards medical treatments. 	<ul style="list-style-type: none"> Suburban campuses of post-secondary institutions provide prime opportunities for collaboration to build new mixed-use development in a master-planned HOC project (i.e. St. Paul's Hospital in Vancouver, UXBorough in Calgary). 	<ul style="list-style-type: none"> There is a low chance of a post-secondary institution campus in rural areas.

Table 3. The impact of the unique scenarios on the three HOC classifications

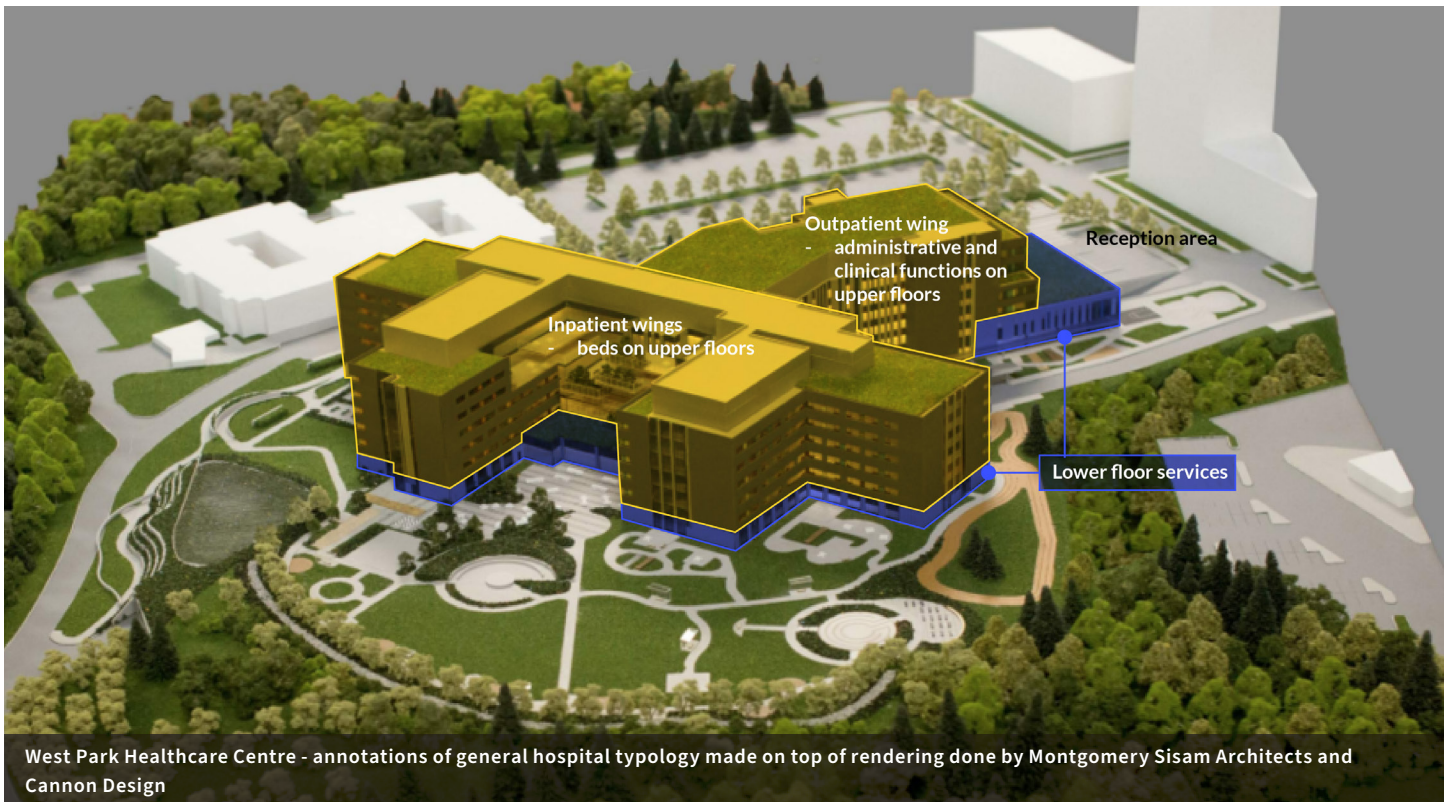
Typology and Co-location

The following section describes the common building and site typologies of hospital, residential, and other facilities found in the HOC while identifying co-location opportunities for development.

Hospitals

Hospitals have unique demands, with a front-facing end for patient intake and a lively 24-hour life. They typically locate the main operating rooms, medical services, reception, outpatient departments, imaging, and other services on lower levels, reserving the upper floors for inpatient beds. In principle, hospitals should adopt compact designs with short horizontal walk-way relationships and direct vertical connections between operating or service rooms to patients. The final size of the hospital is dependent on service needs, where a higher capacity and need for services will result in a higher density development. For full detailed requirements, please see the national standard CSA Z8000. The FGI also provides guidelines for hospital design widely adopted by the industry.

The province of Ontario has twenty-two classifications of hospitals based on services and number of beds that vary in size. However, large urban and suburban hospitals require large land areas, typically ranging from a minimum of 10-20 acres. To build in flexibility for future expansion, 3-5 acres should be considered for long-term expansion. This additional expansion area can take the form of parks and open space or built forms with the proper structural components in place for building expansion. In contrast, healthcare planning in rural areas comprise networks of smaller hospitals or local hubs. Centralized inpatient beds and specialty medical services are spread across a larger geographic area but should also consider expansion strategies though land availability is not a constraint.



Co-location Opportunity 1:

Locating hospital nearby residents needing regular care (seniors)

The primary benefit of building residential communities with primary care, secondary care, and other specialized facilities in proximity to hospitals is that it creates a one-stop shop for these services. When properly planned as a complete community with residential housing and amenities, hospitals become the anchor in a highly attractive area for residents who need regular care, either from the anchor hospital or from a combination of other healthcare services.

Specifically, Canada's aging population (ages 65 and up) are increasingly the population who need regular care and who, in 2021, accounted for 45% of all public-sector healthcare dollars spent in Canada while only comprising 18% of the population (Canadian Institute for Health Information, 2021). As the aging population grows, HOCs could provide an opportunity to optimize public dollars invested into healthcare through the co-location of hospitals with senior-catered residential types, including long-term care homes, retirement homes, and other supportive housing.

Co-location Opportunity 2: Multi-use healthcare

The primary benefit of building residential communities with primary care, secondary care, and other specialized facilities in proximity to hospitals is that it creates a one-stop shop for these services. When properly planned as a complete community with residential housing and amenities, hospitals become the anchor in a highly attractive area for residents who need regular care, either from the anchor hospital or from a combination of other healthcare services.

Specifically, Canada's aging population (ages 65 and up) are increasingly the population who need regular care and who, in 2021, accounted for 45% of all public-sector healthcare dollars spent in Canada while only comprising 18% of the population (Canadian Institute for Health Information, 2021). As the aging population grows, HOCs provide an opportunity to optimize public dollars invested into healthcare through the co-location of hospitals with senior-catered residential types, including long-term care homes, retirement homes, and other supportive housing.

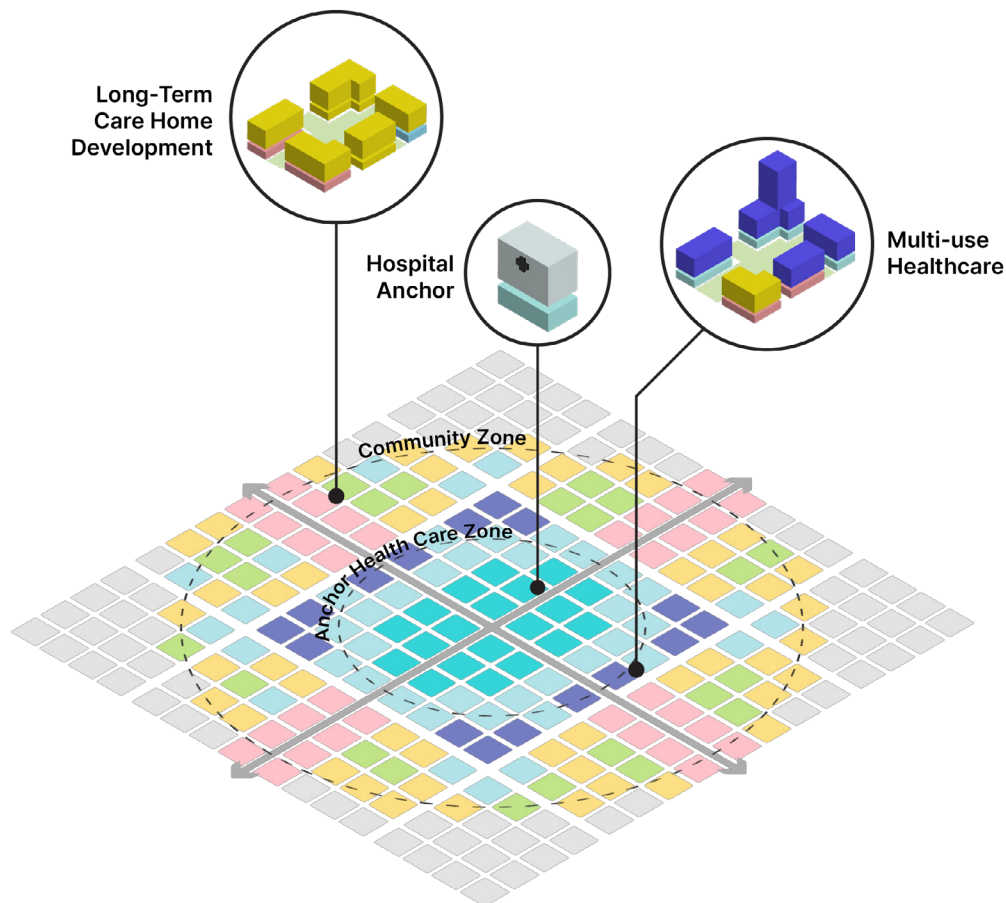


Figure 3. Prime co-location opportunities with the hospital anchor

Healthcare Services

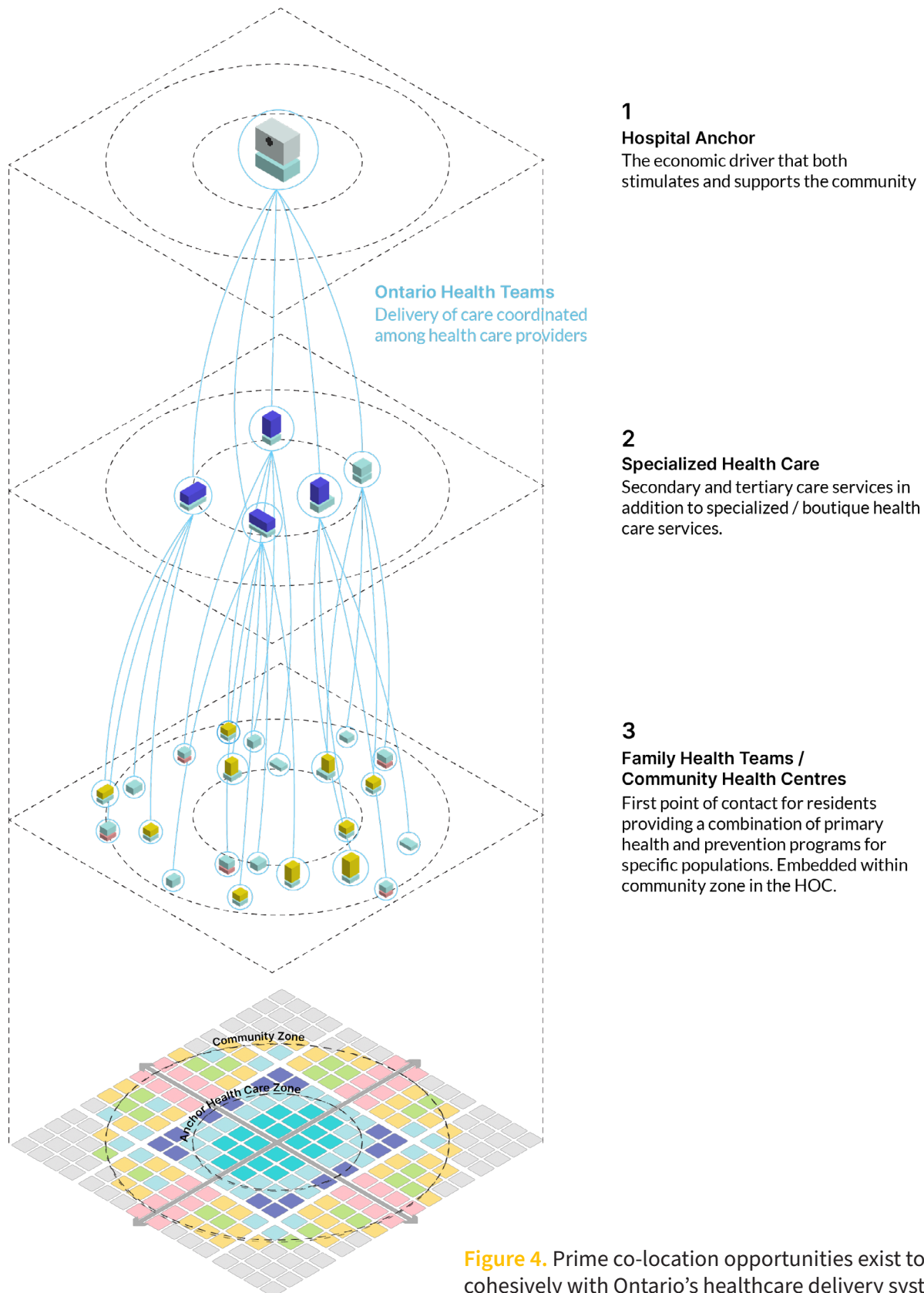
Outside of specialized healthcare services that are primarily delivered in a hospital, HOCs should integrate healthcare services in a manner that is accessible by residents. Facilities can take on a number of forms, including being built as free-standing facilities in areas with larger land availability (Suburban or Rural HOCs) or being integrated in larger complexes in areas with less land availability (Urban HOC). However, they should be designed to ensure primary care is prioritized as the first point of contact and principal source of continuing care for Ontario's widest patient demographic. Secondary care, offering more specialized services, may be integrated as needed by the population.

Co-location Opportunity 1: Strategic planning of collaborative healthcare teams

The Province of Ontario already has a number of programs and organizational models that brings together healthcare providers as one collaborative team. This includes:

- A **Family Health Team** is a team of family physicians, nurse practitioners, and other professionals who work together and pool resources to ensure a broad range of care needs can be supplied. They are community-centred primary care organizations and provide services geared towards the population groups served, including groups with specific health issues (i.e. mental health and addiction), ethnic groups (i.e. First Nations populations), or groups sharing a religious background.
- **Ontario Health Teams** are another program of organizing and delivering care that integrates multiple functions and as a result, is more connected to patients in their local communities. Providers are extremely diverse, including, but not limited to hospitals, doctors, home and community care providers, palliative care, health promotion and disease prevention services, social and community services, and others. All providers aim to work as one coordinated team in this model in order to provide continuity of care.
- A **Community Health Centre** is non-profit organization that provides primary health and health promotion programs. They work with individuals and communities to strengthen their capacity to take more responsibility for their health and wellbeing, with programs based on local needs.

These organization models are just some of the existing tools that the Provincial government has already established to build a connected healthcare system around patients, families, and caregivers. There is a prime opportunity to build on their success by the strategic planning of healthcare facilities in a HOC. In many instances, these organizations are formed in reaction to healthcare needs. In contrast, the HOC offers an opportunity to pro-actively plan for the facility space needs of these teams to from complete communities in the neighbourhoods they serve.



Co-location Opportunity 2: Mixed-use Facilities - healthcare services with complementary uses

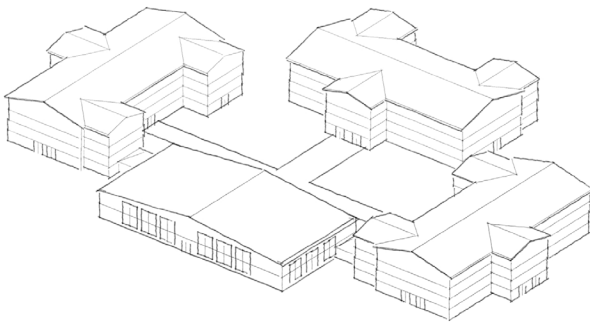
There is also the opportunity to build healthcare facilities co-located with complementary community uses in the same building. This includes recreational centres, libraries, fitness suites, and other spaces that promote physical and mental well-being.

Residential

The four residential types in the HOC (long-term care homes, retirement homes, market housing, and affordable housing) share similar forms with the main difference being the degree of support services offered. Long-term care homes have minimum spacing requirements for community amenities, residential units, and other programming, which have been identified in detail in the Ministry of Long-Term Care Homes' design guidelines.

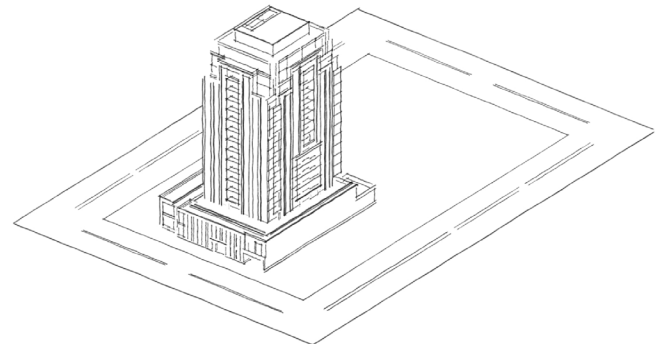
Typically, in supportive housing types, including long-term care homes, space can generally be categorized into two uses: living and community core spaces. The arrangement of these spaces in the building is dependent on the degree of development desired and site limitations among other physical elements. Some space arrangements include:

Residential buildings, particularly market housing, may also integrate other mixed-uses, including retail, other healthcare facilities, and public community spaces on the ground floors when appropriate.



Village Concept

1-4 storey buildings that are interconnected by sidewalks with a community core. Community spaces can be in separate buildings with interconnected links to all other buildings. This concept is most applicable to Suburban and Rural HOCs.



Urban Concept

Include mid or high-rise forms ideal for spaces where land is scarce and resident population is high. Community core amenities are located at lower levels and housing is on upper levels. The degree of services will depend on the level of care needed. This concept is applicable to Urban and some Suburban HOCs.

Co-location Opportunity 1: Mixed-income Housing

The co-location of the housing types (and their mixed-income demographic) present an enormous benefit by providing opportunities to increase development viability, increase affordability, and optimize operational efficiencies. Feasibility is determined on a case-by-case basis, however, the following practices help with the financing stack and cohesive design:

CONSOLIDATE / BUNDLE DEVELOPMENT SITES

Consolidating development sites can provide more housing delivered across multiple buildings in a cohesive manner with shared community spaces and amenities.

- In Urban and Suburban HOCs, these may mean privately-owned sites in the HOC being developed in partnership with public hospital lands
- Rural HOCs have the advantage of being able to create a master-plan without limitations of built-up areas

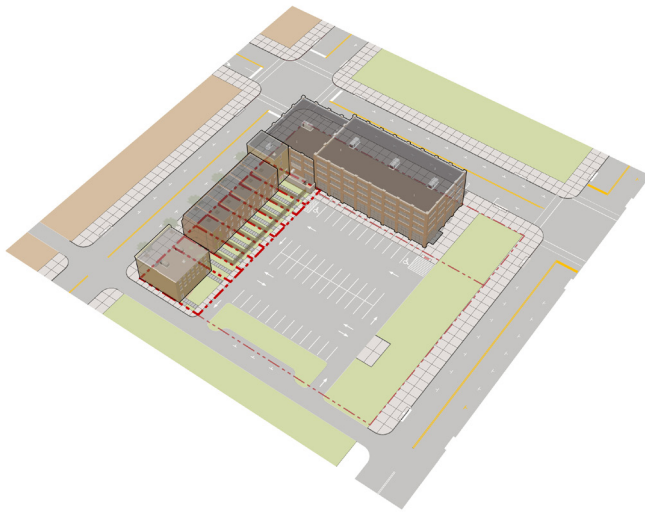
INCREASE VIABILITY WITH MARKET-RATE CO-DEVELOPMENT

Market housing, including retirement homes and condominiums, can help to finance long-term care home, increase housing affordability, and help realize public realm improvements, and other community benefits.

- The larger the development project, the more opportunity there is to subsidize or finance additional housing units at below-market rates and community services and benefits
- Co-development could be delivered by private or non-profit organizations

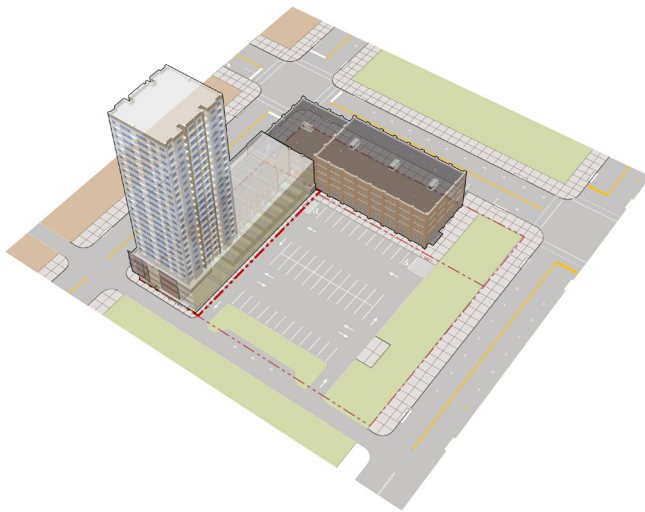
LEVERAGE PUBLICLY HELD LANDS

In areas with a strong development market, publicly held lands, such as a portion of hospital lands, could be leveraged in development partnerships. One common way is for the land, or a portion of land, to be sold and proceeds are reinvested either to needed renovations or the development of supportive/affordable housing.



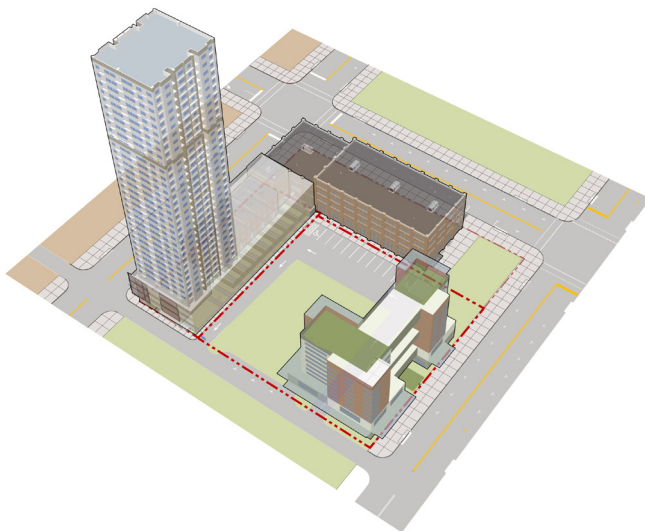
Existing Site

The site of interest contains small and fragmented parcels with underutilized surface parking.



Strategy: Consolidate Sites

The small parcels are consolidated to achieve a larger development opportunity in the HOC.



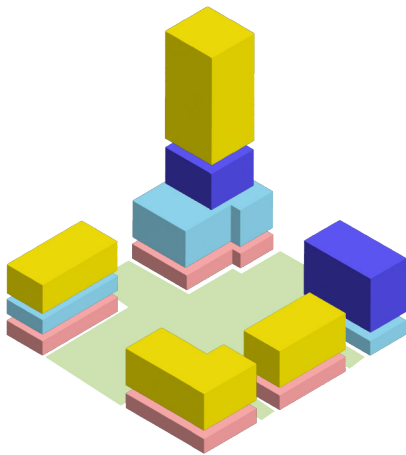
Strategy: Consolidate & Leverage Site

In addition to consolidating the smaller parcels, additional density bonusing could be leveraged to build in supportive housing (i.e. long-term care home)

Figure 5. Strategies to optimize development opportunity using complementary HOC uses

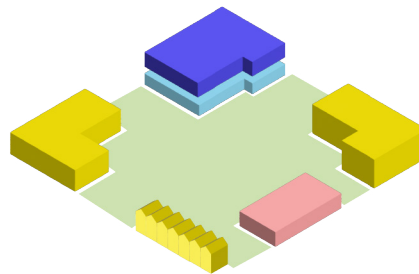
Typology and Co-location Differences in Classifications

The building form will largely be impacted by land availability and growth objectives and policies in addition to spacing requirements of the interior programming. Larger degrees of vertical co-location will likely occur in Urban HOCs and Suburban HOCs due to scarcity of land availability, while Rural HOCs have the capacity for uses to be mixed horizontally.



Urban / Suburban HOC

Higher degree of vertical co-location of uses typically due to land constraints



Rural HOC

Horizontal co-location of uses more common with building forms framing public open spaces

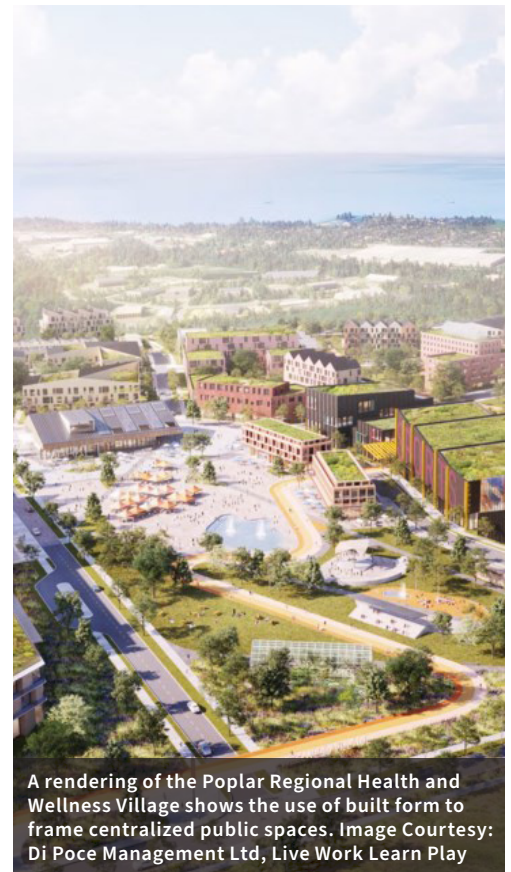
Figure 6. Co-location differences between the HOC classifications

Public Realm

Parks, open spaces, and streetscapes play an integral role in ensuring HOCs are vibrant, walkable complete communities. In many instances, hospitals and healthcare facilities benefit from being adjacent to green open spaces and parks, which have demonstrably been able to aid in general health and patient recovery.

The ability to form quality public spaces increases with the scale of the development proposal, as multiple development sites can allow for pooled financial and land resources towards the creation of parks or open spaces. It also brings the opportunity to plan for public spaces in accessible locations to its residents. When possible, the following principles should be employed to form high quality public spaces and promote walkability:

- Active Frontages:** The built-form interface between residents and healthcare services needs to be well-defined to encourage walkability. It should promote active street frontages along major arterials when possible, locating community-serving uses (public or resident-serving only), retail uses, and healthcare services on the ground floor to promote activity on the street. Active streets facilitate interactions between pedestrians and places, contributing to a vibrant pedestrian environment for residents in the HOC and establishing the HOC as an attractive destination.
- Framing of Parks and Open Spaces:** Built form should also consider the ways in which it frames open spaces and parks, giving definition to central public spaces.
- Provide Views of Nature for Patients:** In addition to patient satisfaction, views of nature have been linked to reduced length of stay at hospitals, lowered needs of pain medication, and improved self-reported claims of mental-health (Milhandoust et al, 2021). When building facilities with inpatient beds or supportive housing, high quality community spaces, whether it be parks, public open spaces, or untouched natural areas, should be highly visible to residents.
- Walkability to Public Spaces:** The greater the amount and the closer the public open space, the greater the benefit to residents and patients. High quality public spaces, including parks, parkettes, public plazas, and other open spaces, should be within a 2-minute walk of any dwelling with beds.



A rendering of the Poplar Regional Health and Wellness Village shows the use of built form to frame centralized public spaces. Image Courtesy: Di Poce Management Ltd, Live Work Learn Play

Connectivity and Accessibility

Healthcare-Oriented Communities have two kinds of connectivity:

1. External Connectivity

While the HOC is a complete community, it also serves the broader population with a diversity of healthcare services. The anchor healthcare facility, likely a hospital, should be planned cohesively within Ontario's healthcare service delivery network. In suburban and rural areas, a significant proportion of residents outside of the immediate HOC will likely access the healthcare services by private vehicles. While walkability is encouraged inside the HOC, attention should be given to ensuring access for the broader demographic served. This may include strategic areas for surface parking and locating the HOC near major roads.

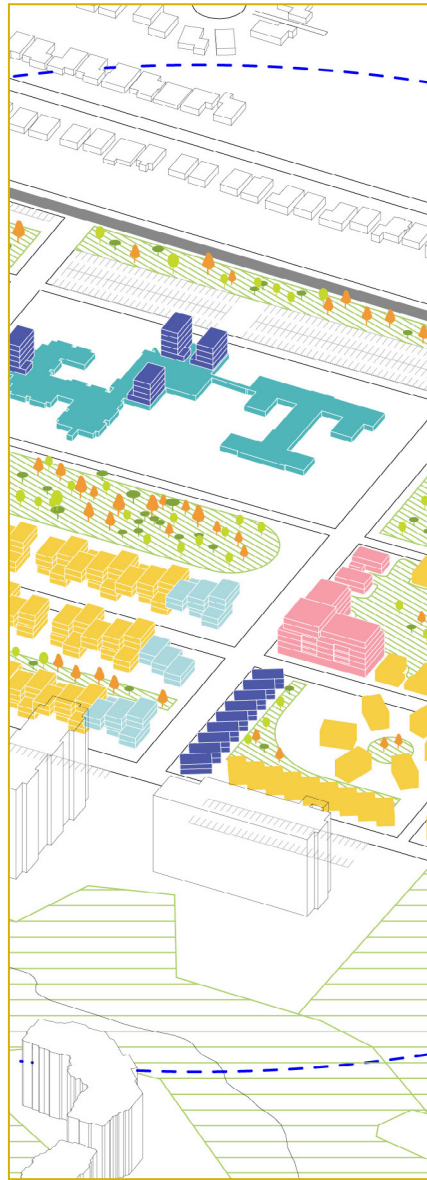
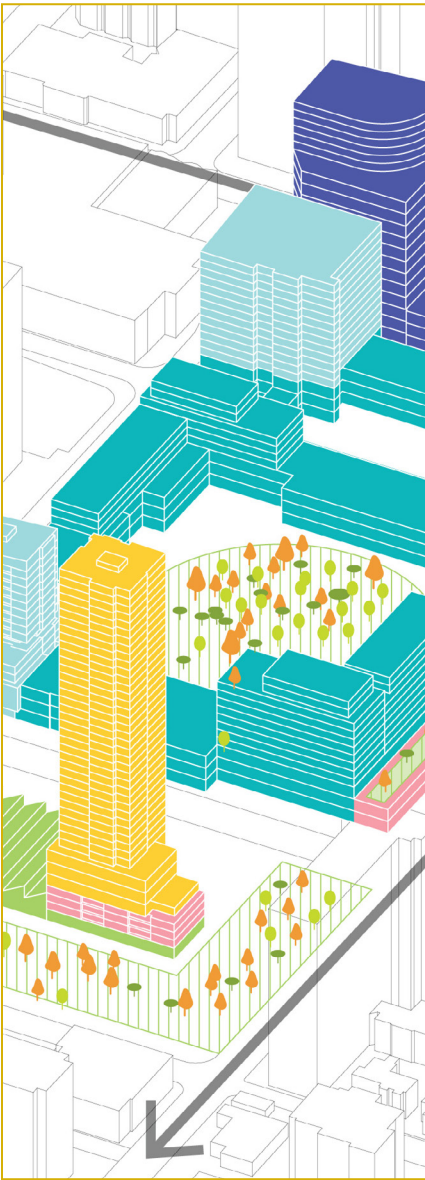
2. Internal Connectivity

The HOC is a complete community contained approximately within a 800m radius from the anchor. It should provide residents with multi-modal ways of getting to the healthcare services, amenities, retail, and other destinations within the HOC.

Additional Considerations

HOCs should adopt urban forms that encourage healthy, active lifestyles with the following considerations:

- The healthcare services and amenities in the HOC will be well-connected to residents, accessed by more than one multi-modal form of transportation when possible.
- Block sizes should encourage walkability, with the short-edge between 60-80m and the long-edge being between 100m-200m.
- Mid-block connections are encouraged to provide direct pedestrian and bike connections to areas with public services and amenities; in cases of large blocks that cannot be subdivided, mid-block connections should be used to ensure walkability.
- In new subdivisions, new roads should extend off from existing right-of-ways into the HOC when possible.
- Existing hospitals and proposed hospitals are not always located near transit, but should be as integrated as possible with public transit.

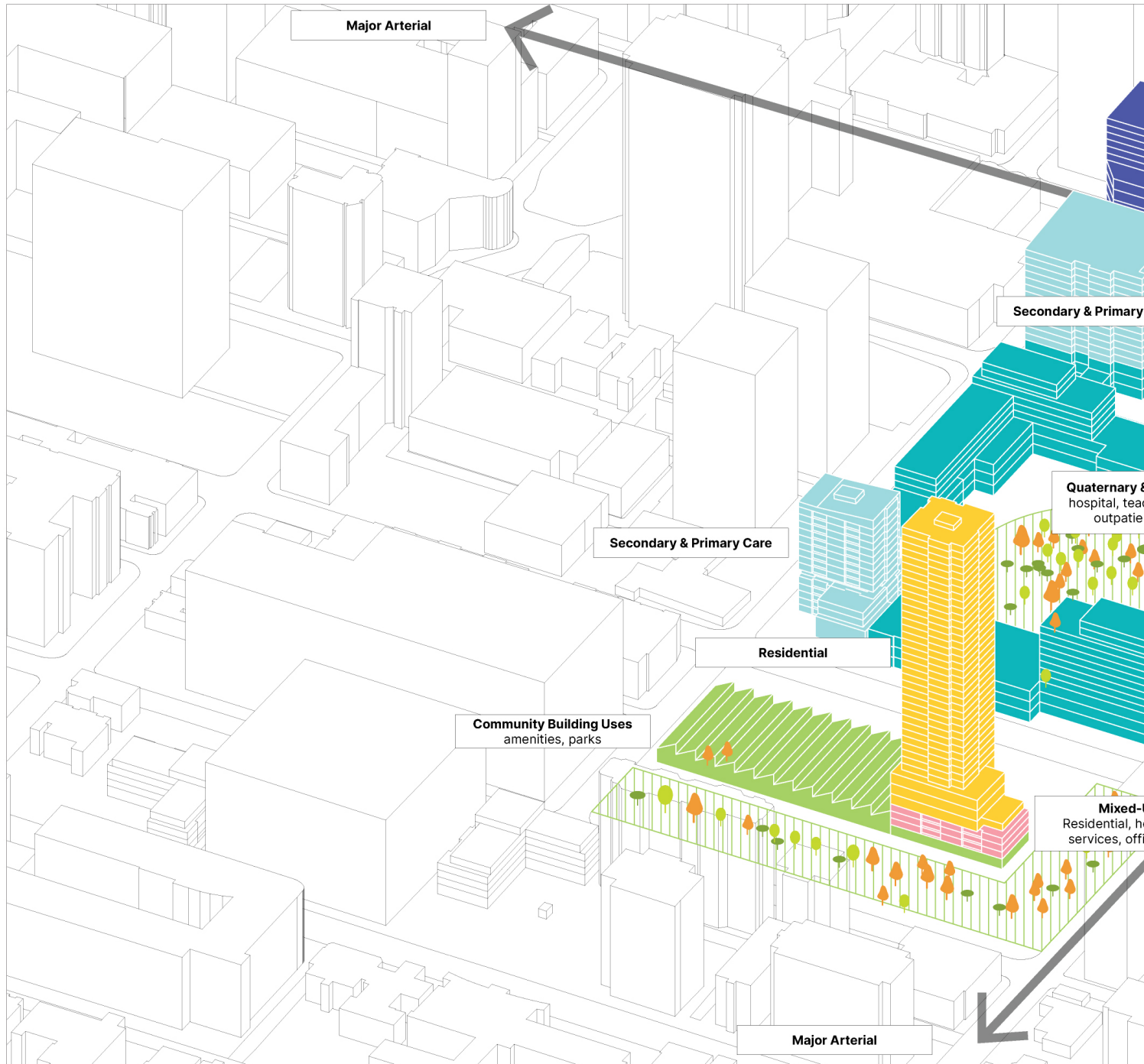


HOC Demonstrations

The following illustrations are demonstration concepts of Healthcare-Oriented Communities for each of the three classifications. They have been created with the guideline principles.

Urban HOC

Populations of 100,000 or more

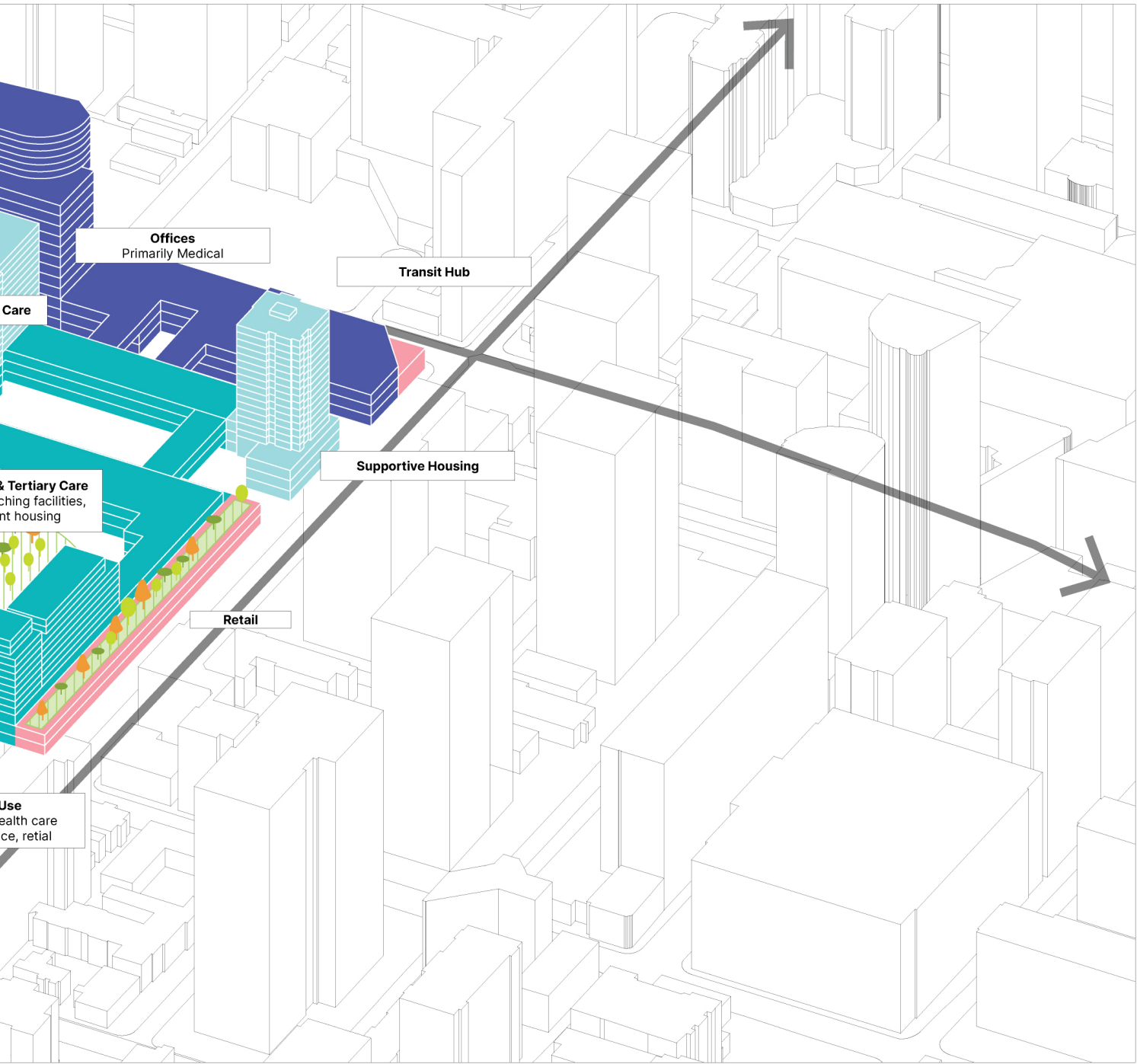


Land Use (primary)

- Quaternary & Tertiary Care
- Secondary & Primary Care
- Residential
- Office (primarily medical)

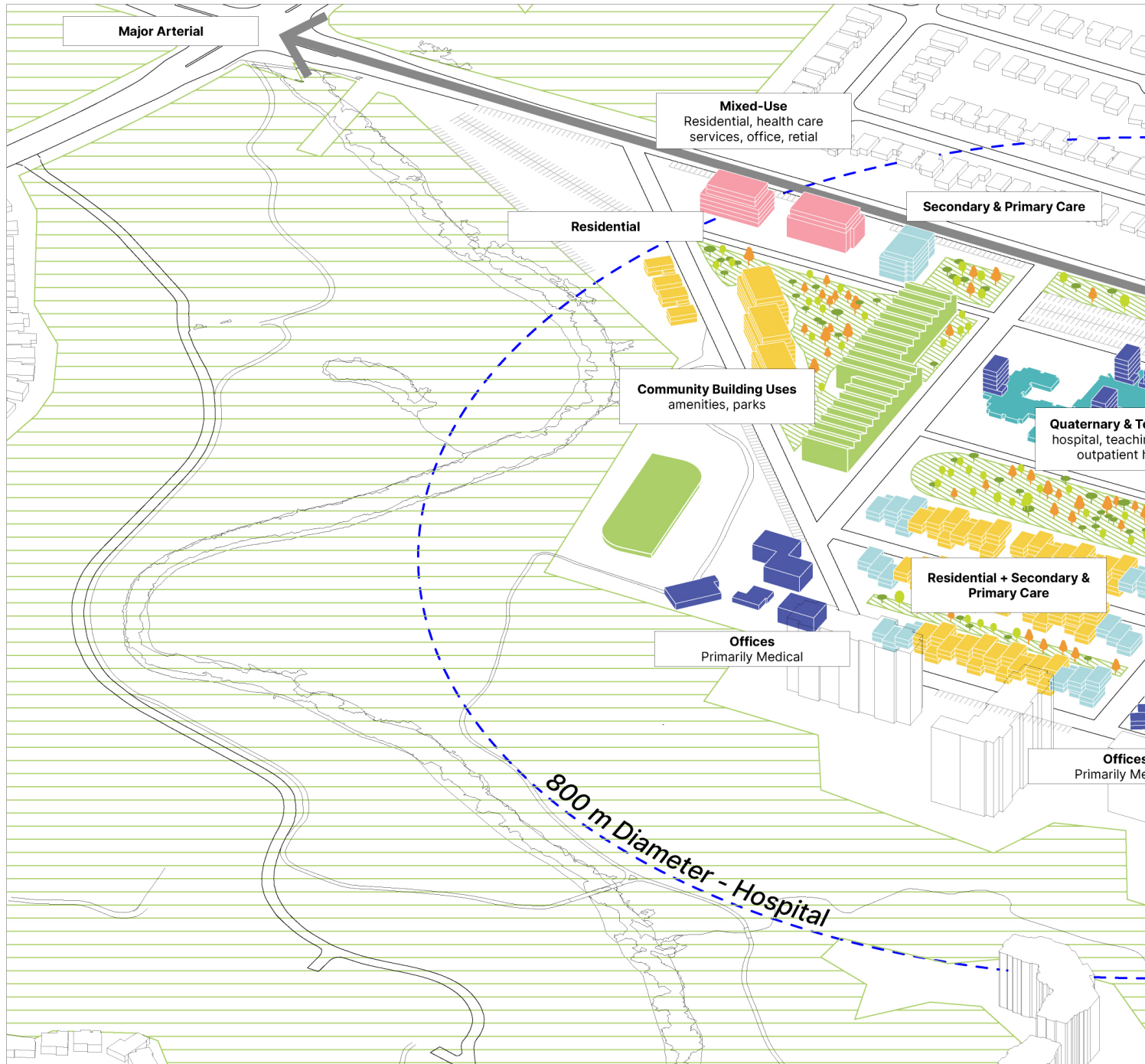
- Mixed-Use (residential, health care services, office, retail)
- Community-building uses (amenities, parks)

➔ Major arterial



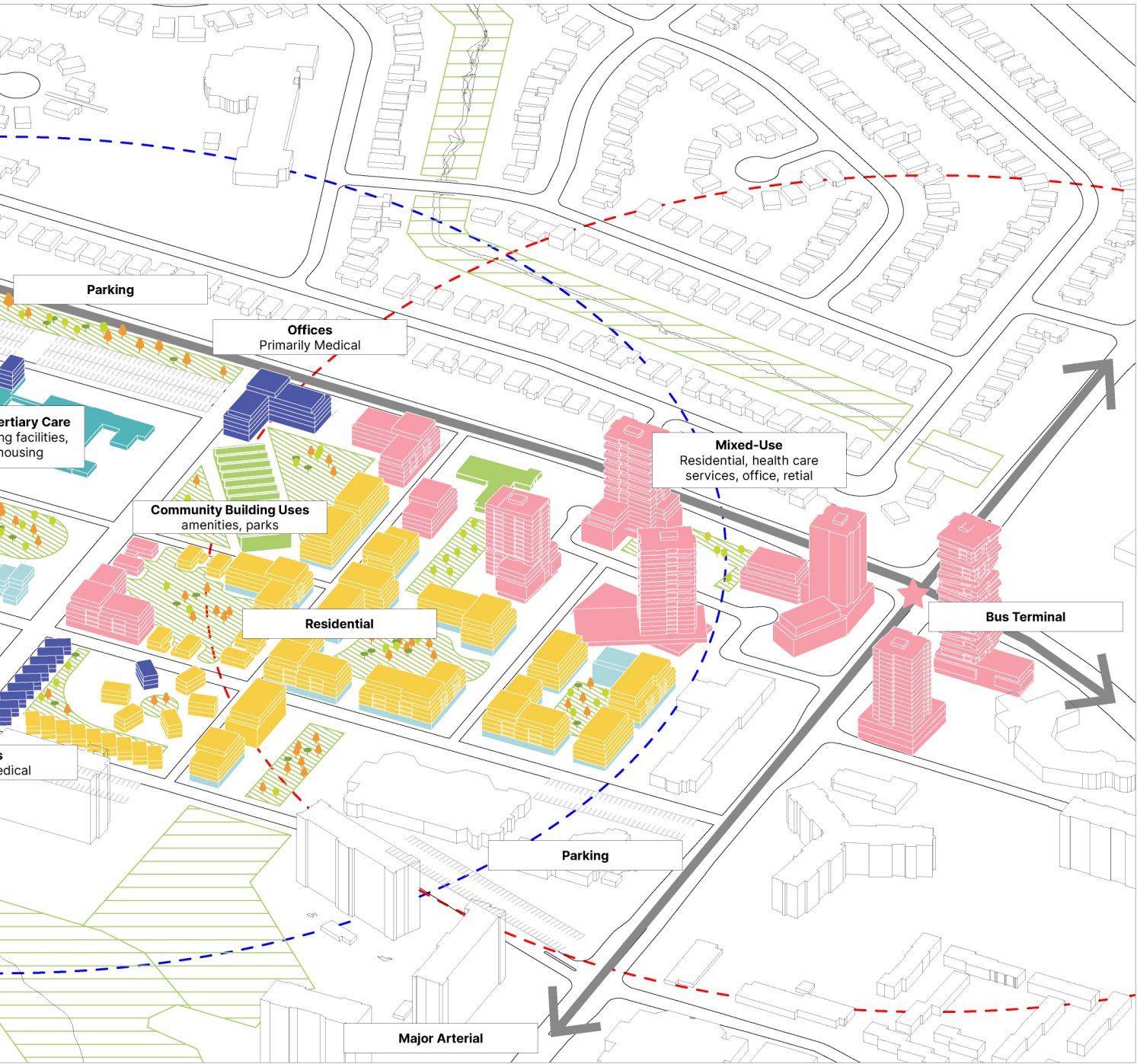
Suburban HOC

Populations between 10,000 - 100,000



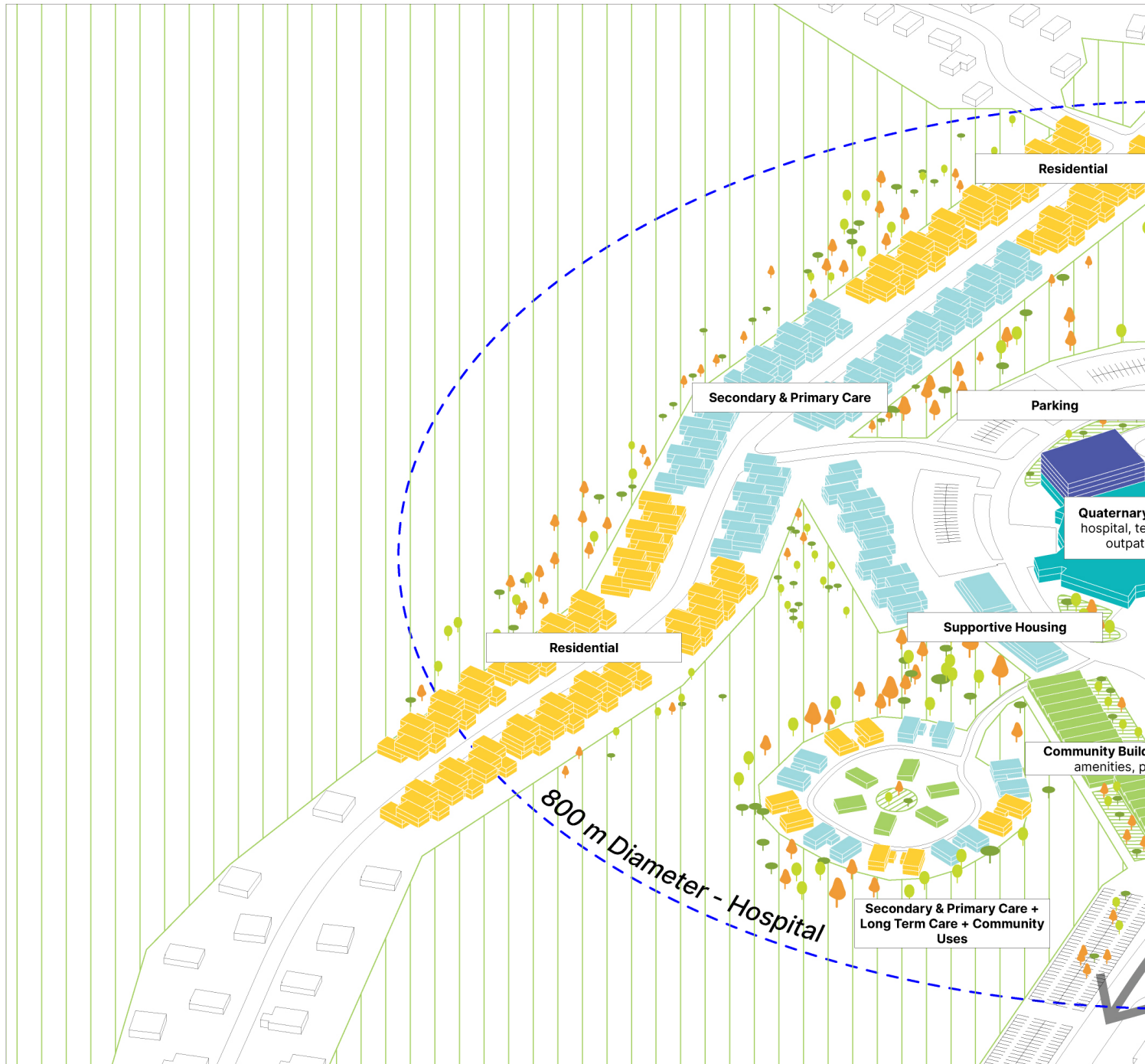
Land Use (primary)

- | | | |
|--|---|--|
| Quaternary & Tertiary Care | Mixed-Use (residential, health care services, office, retail) | Major arterial |
| Secondary & Primary Care | Community-building uses (amenities, parks) | |
| Residential | | |
| Office (primarily medical) | | |



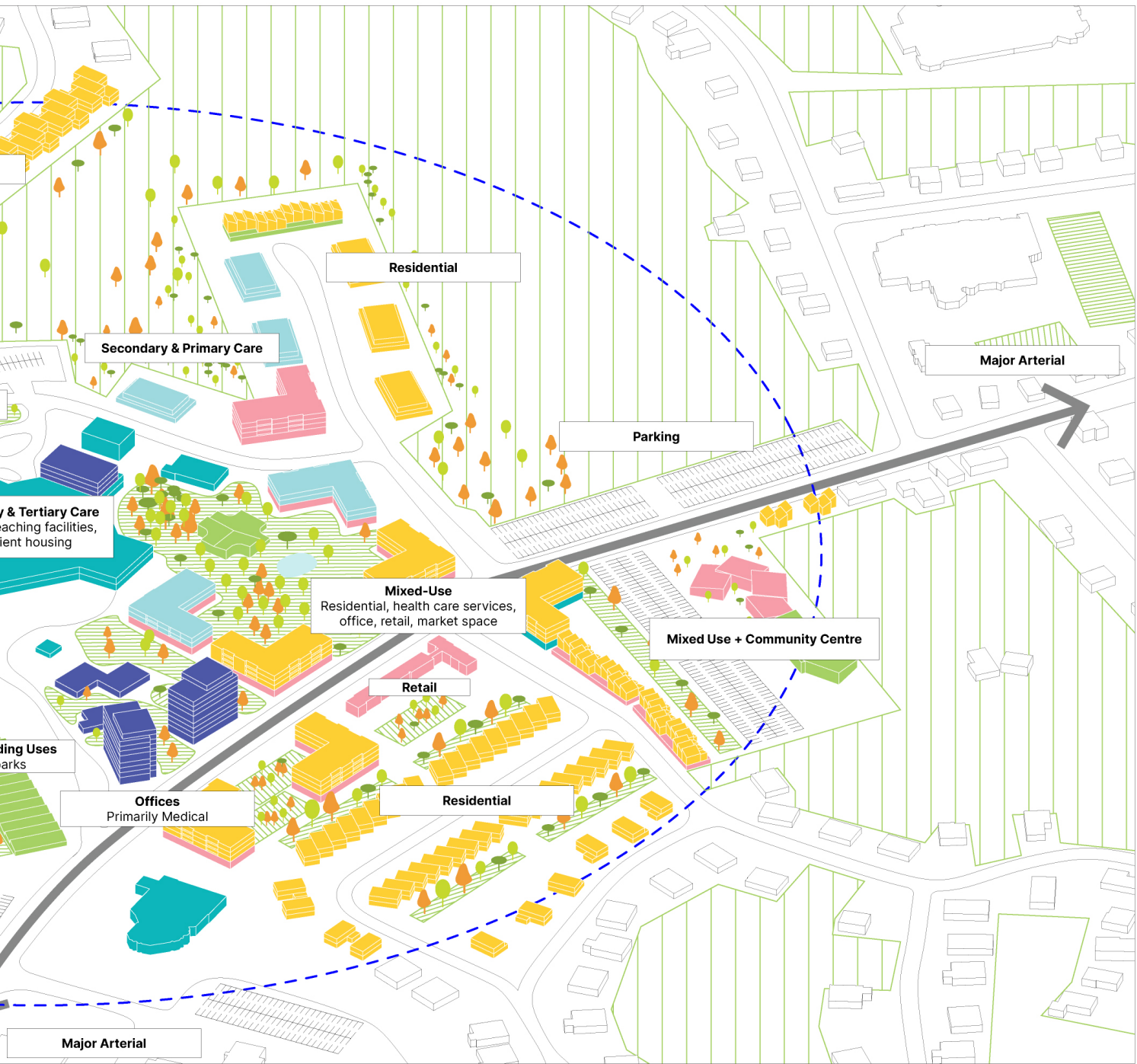
Rural HOC

Populations of less than 10,000



Land Use (primary)

- | | | |
|---|--|---|
| Quaternary & Tertiary Care | Mixed-Use (residential, health care services, office, retail) | Major arterial |
| Secondary & Primary Care | Community-building uses (amenities, parks) | |
| Residential | | |
| Office (primarily medical) | | |



HOC Stakeholders

Implementing HOCs will require collaborative work between public, private, and non-profit sectors. The anticipated major stakeholders and their roles have been outlined below.

Provincial Government

Infrastructure Ontario (IO): IO's role in the HOC is to create value out of the Province's public assets and to take on the role of delivering major capital projects with hospitals and the ministry. This includes identifying the development opportunity, justifying the business case, and entering development partnerships.

Ontario Health: Ontario Health is the centralized agency that oversees key areas of the healthcare system. Their role is to ensure the proposed HOC meets program and service needs of the local, regional, and provincial health system. There is also an opportunity for them to carefully inform how the Home and Community Care Support Services are distributed within the HOC.

Ministry of Health: The Ministry of Health's role is to establish the overarching policy framework for health-related capital expenditures in Ontario, including those in HOCs. Their role can be to implement policy frameworks that consolidate Ontario's wealth of programs with a HOC vision. They also can create incentives that would promote collaboration, particularly among healthcare practitioners, in the HOC.

Ministry of Long-Term Care: The Ministry of Long-Term Care is responsible for the building of new homes and upgrading of outdated homes, including providing funding for development and operations. They also set the regulations and policies that all homes must follow, where there is an opportunity to modify them to reflect the HOC vision.

Other Stakeholders

Hospitals: Hospitals are independent corporations run by their own board of directors and are responsible for the day-to-day operational decisions on how to allocate the public funding they receive. They will identify the present or future service delivery model and space requirements, potentially in joint planning efforts with Ontario Health and in any capital planning project that would happen in the HOC.

Healthcare Providers: There is a large variety of healthcare practitioners, from family doctors to private clinics and specialized services that can enhance quality of life for residents. In HOCs, practitioners have the opportunity work collaboratively in proximity to residents to optimize resources and benefit from synergies.

Municipalities: Successful HOCs align with municipal planning objectives, which may benefit from existing initiatives, particularly those around affordable housing delivery, leveraging public land of aging facilities toward development, and community space needs. Municipal governments often also play important roles in the healthcare system, including co-funding it, delivering services, and employing vital healthcare professionals in public health, paramedic services, and long-term care homes.

Development Partners: HOCs can be pursued in development partnerships with the private or non-profit sector to deliver housing, including retirement homes and affordable housing, create job opportunities, and provide public realm improvements.

Next Steps

A fully-developed HOC builds vibrant communities that integrate needed health services into neighbourhoods with mutually supportive uses. While the guidelines outline strategic planning and design directions towards the vision of a HOC, the successful implementation of an HOC will be dependent on a supportive policy context at all levels of government, including policies and tools that would encourage HOC development.

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