Cranbrook – a healthy new town: health and wellbeing strategy 2016 - 2028

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Summary

Cranbrook has been selected as one of NHS England's ten Healthy New Towns. This programme provides a unique opportunity to create healthy, vibrant, attractive and sustainable town with a rich urban fabric that imaginatively anticipates the changing needs of 21st Century lifestyles.

The aim of this strategy is to work collaboratively with the community to enable health and wellbeing and minimise chronic disease through designing Cranbrook's built environment, planning innovative delivery of health and care services and by harnessing technology.

This strategy describes Cranbrook's development to-date and projected to 2028 and summarises the current and projected population profiles.

It provides background evidence supporting the strategy, with an overview of some key principles and theories.

To achieve the vision, themed groups of strategic priorities have been identified.

Next steps for implementing the strategy are proposed, which include communicating with stakeholders, devising an action plan, monitoring and reporting progress.

1. Why this strategy

1.1 Introduction

> *"Neighbourhoods and communities are the building blocks of people's lives... The impacts of the material and social world directly on our physical and mental health are profound"* Professor Mike Kelly, Director, Public Health Excellence Centre, National Institute for Health and Clinical Excellence

Developing a new town offers the rare opportunity to design-in health from the outset. There are economic imperatives to build neighbourhoods which support health; namely decreased costs of illness, enhanced sustainability and reduced health inequalities[1] . Designed in the right way, Cranbrook's built environment, health, care and wellbeing services, can collectively make it the norm for people to lead healthy, connected and sustainable lives. This is the opportunity which should be grasped by all concerned, to realise the mutual goal of adding life into years at a community level, helping people stay independent and well for longer. Achieving this goal will be a success for residents and all those working to meet their needs.

This strategy has been developed by the three commissioning organisations for healthcare and wellbeing in Cranbrook – Devon County Council's Public Health Department, NEW Devon Clinical Commissioning Group and East Devon District Council in partnership with other agencies across a range of sectors.

1.2 Why a health and wellbeing strategy is needed

This strategy aims to achieve high quality health care and wellbeing for the benefit of all residents, taking a systematic approach to improving population health across services and sectors. It focuses on people – their health and wellbeing and seeks to attain an environment which enables residents to 'pursue the life they value'[2] . The strategy draws upon current health, environment and planning evidence to inform decision making at an early stage and aims to influence Cranbrook's development broadly, from how the town is built, to how health and wellbeing services can innovate to proactively meet peoples changing needs. In sum, this strategy aims to achieve a vision for Cranbrook as a cutting-edge pioneer among new town developments. This approach will provide a test-bed model for future innovation within Cranbrook and for planned developments further afield.

The NHS Five Year Forward View [3]places the emphasis on place based models across the health and care sector bringing about an important shift in the way health and care organisations work, with increasing emphasis on community engagement and empowerment in shaping their own health and wellbeing. The aim is to apply

[1] Barton H, Grant M & Guise R (2010) Shaping neighbourhoods. Abingdon: Routledge

[2] Marmot M (2010) *Fair society healthy lives. The Marmot Review. Strategic review of health inequalities in england post-2010*

[3] NHS England (2014) *NHS Five Year Forward View*

the best of this strategic thinking and planning by establishing a health, wellbeing and care strategy for Cranbrook that creates an innovative place-based community. Starting at a high level this strategy sets the scene for co-production of the detail with the community as it develops as one of England's Healthy New Towns.

1.3 Vision

Our aspiration is for Cranbrook to develop into a healthy, vibrant, attractive and sustainable town with a rich urban fabric that imaginatively anticipates the changing needs of 21st Century lifestyles. The focus must be on using all the assets available to enable people to stay as well as possible for as long as possible and for communities to develop into strong, supportive and thriving networks. This means setting out a model that adopts a pro-active approach to health and wellbeing; one which designs in health, creates the conditions for communities to take a leading role and tackles health issues at an early stage; one which maximises the benefits of innovation and collaboration and delivers clinically, socially and financially sustainable care in the most appropriate location where this is required.

This strategy sets out to support the development of a town where:

- Children and young people have a healthy start in life
- People of all ages have access to healthy lifestyles
- Health, wellbeing and care needs are met early on
- People can access care and support in the right setting at the time when needed.

1.4 Audience

> *"Planning and design are critical elements ... ensuring that health, social inclusion, economic vitality, and sustainable use of resources are fully integrated."* Jonathon Porritt, Director of Forum for the Future [4]

This strategy is aimed primarily at colleagues working in professional disciplines ranging from town planning to healthcare delivery. It will support Cranbrook's master-planning processes and consideration of future planning applications by providing sufficient detail to guide negotiations. It aims to galvanise and inspire those responsible for commissioning, providing and influencing health, wellbeing and care services including NHS organisations, community groups and third-sector bodies. It also offers a starting point for public engagement with the community of Cranbrook now and in the future, in influencing their own health and wellbeing and accessing appropriate healthcare interventions when needed.

[4] Barton, H (2015) Planning for health and well-being: the time for action. Ch 1 *The Routledge Handbook of Planning for Health and Well-being* (Barton, H, Thompson, S, Burgess, S and Grant M, Eds)

To achieve the outcomes and address the challenges there is an opportunity for all community partners to work together in a different way. The benefits of shared awareness and ambition not only of identified health and care agencies but of leisure, arts and culture to overall community health could be immense. It is therefore not intended that this strategy can be delivered by health and care agencies alone but in this wider partnership from the outset.

2. Description of Cranbrook

2.1 The developing town

Cranbrook is a new town being developed in East Devon, with close proximity to the city of Exeter to the west and Exeter airport to the south. Subject to ongoing planning application, its total anticipated size is a predicted housing stock of approximately 8,000, accommodating 20,000 – 25,000 residents by 2028 (figures depending upon calculating occupancy rate at 2.2 – 2.8).The rate at which new homes are being built in Cranbrook is one of the highest in the South West.

***Figure 1: Build-out rate and completion date**:*

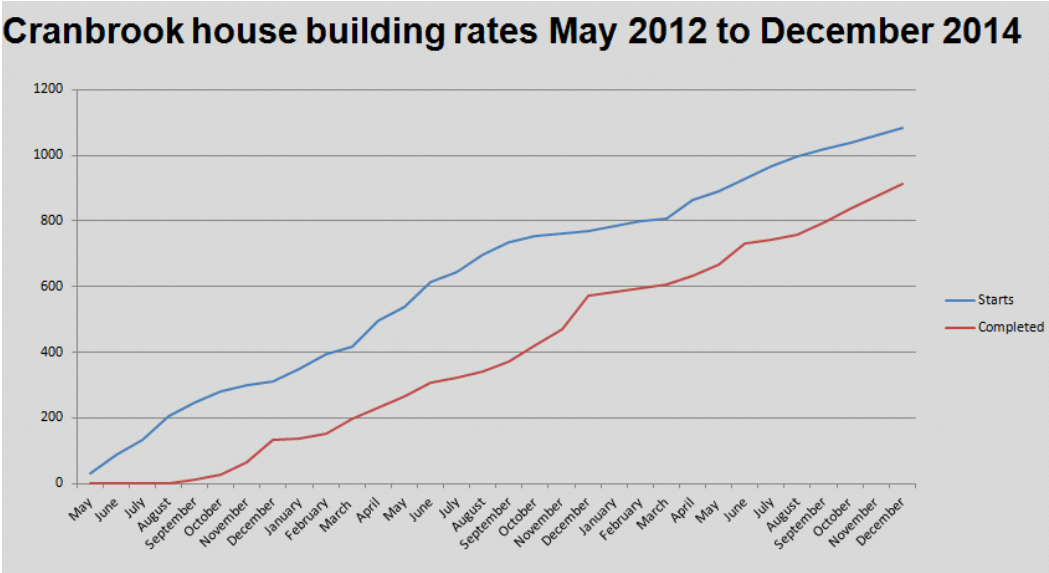
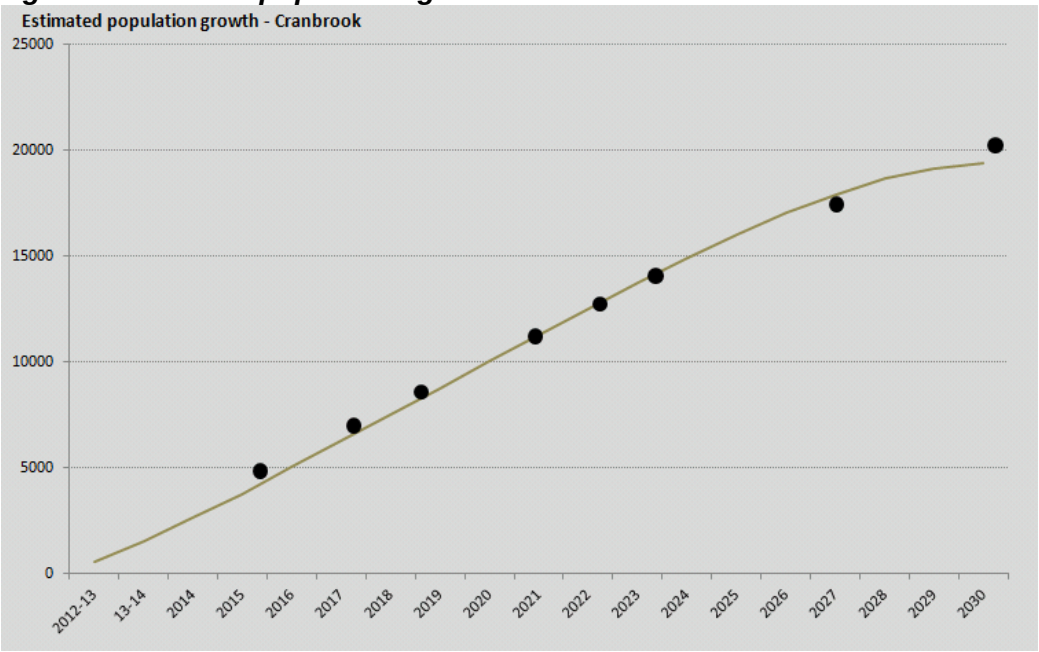
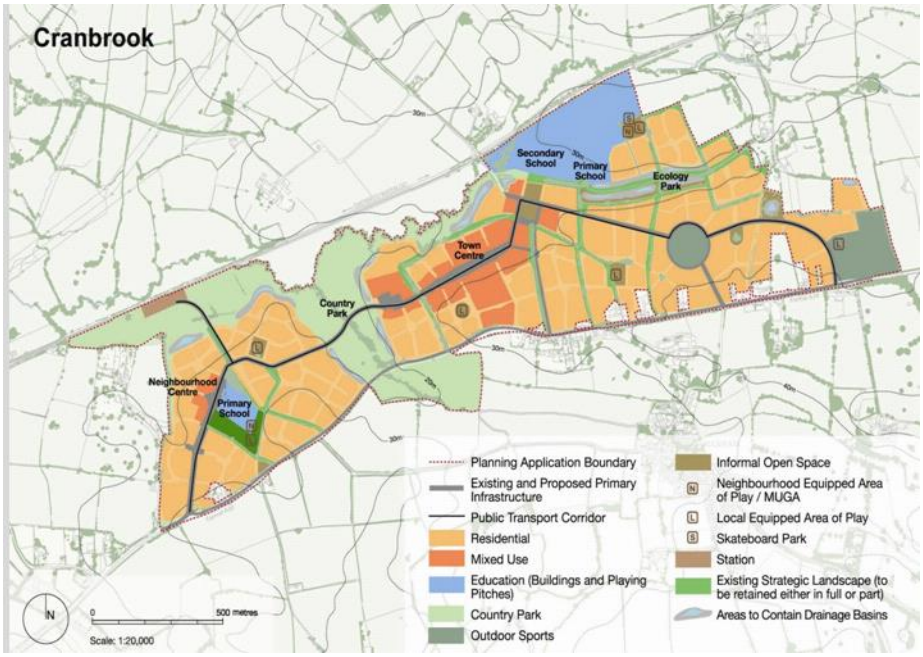


Figure 2: Estimate population growth:



Cranbrook is already a sizeable settlement with over 1,000 homes complete and occupied by around 2,500 residents in Phase 1. Approximately 35% of the homes built in phase 1 are designated as affordable local homes for local people. About 49% of the residents have moved in from Exeter, only 7% from outside Devon, while the others have moved from elsewhere within Devon. The new homes along with associated infrastructure, commercial and community developments will form a major new town in Devon, popularly depicted as equalling the size of Barnstaple.

Figure 3: Potential land-use (pending newer version):



Cranbrook's delivery is led by East Devon District Council in partnership with the Developer Consortium (Hallam Land Management, Taylor Wimpey, Bovis Homes, Persimmon Homes and Charles Church), the New Community Partners (NCP), Devon County Council, the Exeter and East Devon Growth Point Team and the Homes and Communities Agency (HCA).

2.2 Understanding the population's needs and assets

2.2.1 Profiling activities for Cranbrook

Profiling activities undertaken to inform developments so far include:

1. 2015 Brief Needs Assessment (Devon County Council) to establish population structure and characteristics, emerging health and care needs and to predict future population growth and health and care needs (see Appendix 3)
2. 2006 Health Impact Assessment (Ben Cave Associates) written in preparation for the development. This study assumed Cranbrook would reflect similar

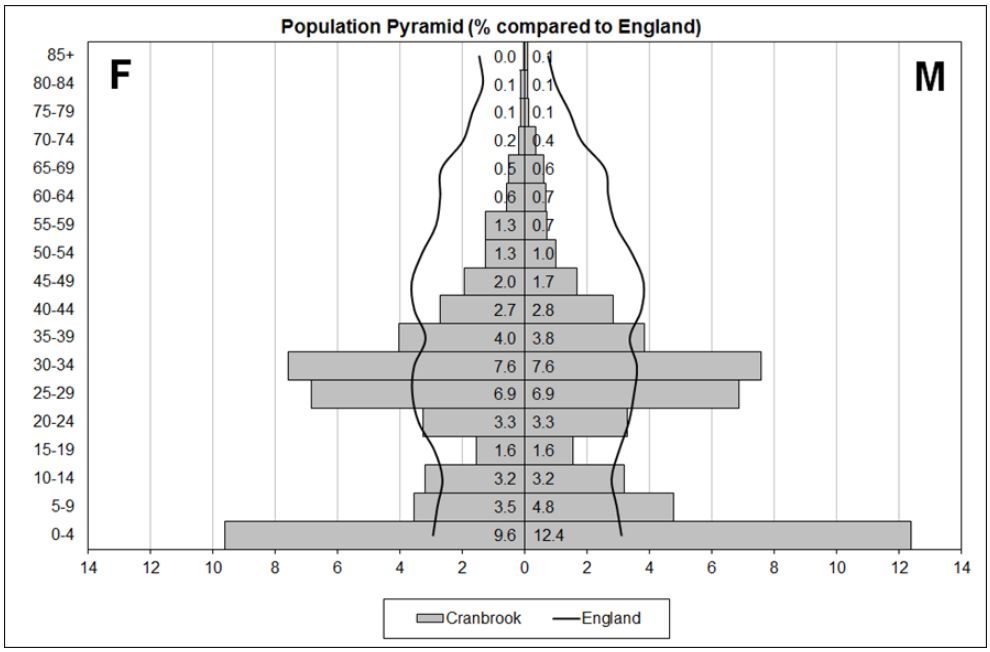
characteristics to Exeter or wards within the city with slightly above average levels of social deprivation e.g. Whipton.

2.2.2 Current population

In mid-2015 there were around 1,070 occupied dwellings in Cranbrook with an estimated population of 2,500. The current population structure is unlike any other community in Devon, with an unusually extreme profile:

- high proportion of adults aged 25 to 34
- very high proportion of children aged under four
- above national average proportion of children aged between five and 14
- small proportion are aged 45 and over
- very few above retirement age.

Figure 4: Cranbrook population pyramid



Source: Mid-2015 Cranbrook population estimate produced by Devon Public Health Intelligence Team, 2015

There are strong similarities to the town of Cambourne in Cambridgeshire, which is around 12 years ahead of Cranbrook in terms of development.

2.2.3 Social and economic characteristics

- Deprivation indices are unlikely to be available for some time, but initial research suggests levels of socio-economic deprivation marginally above the Exeter and national averages
- The current housing tenure of Cranbrook is 60% private, 20% social rented, 10% shared ownership and 10% 'low cost' rented
- The relatively high proportion of affordable housing is most similar to the Mincinglake area of Exeter

- As the community develops and expands the future tenure mix is likely to resemble Crediton or Cullompton
- Jobseekers Allowance rates are consistent with the East Devon average
- Benefit claimant levels are relatively low
- Car ownership is very high, with the majority travelling to work by car; Exeter is the main destination for work.

Surveys indicate that most residents consider Cranbrook a good place to live with relatively low crime rates and no major environmental health concerns.

2.2.4 Population projections

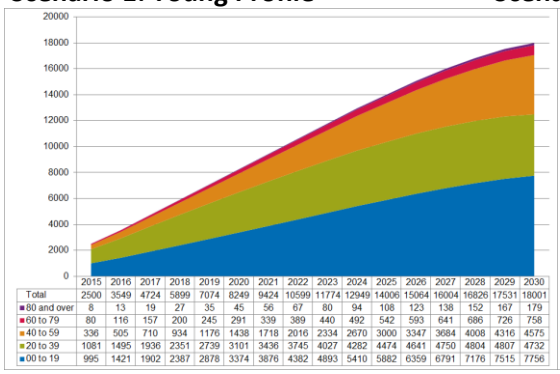
To inform the 2015 Needs Assessment for Cranbrook, two alternative models of population growth were created, based on Cranbrook's current population structure and planned housing developments between 2015 and 2030:

1. Predicted growth based on only slight population ageing, and based on patterns of population change seen in Cambourne, suggests a 2030 population of around 18,000 of which 70% would be under the age of 40
2. Based on movement to the England population profile over the 15 year period, a smaller 2030 population of less than 17,000 is predicted of which 48% would be under the age of 40.

The first model is the most likely scenario without proactive intervention, with the 'England profile' projection unlikely even with considerable intervention.

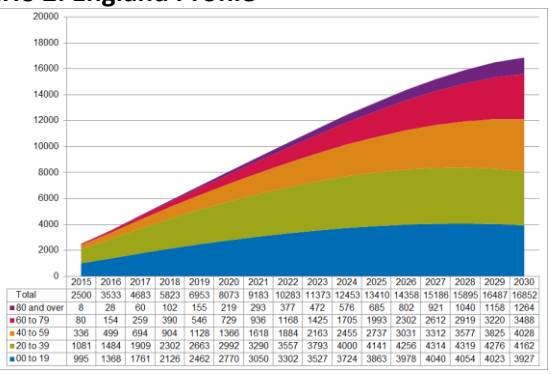
Figure 5: Modelled scenarios for the population of Cranbrook 2015-2030

Scenario 1: Young Profile



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total	2500	3549	4724	5899	7074	8249	9424	10599	11774	12949	14006	15064	16004	16826	17531	18001
80 and over	8	13	19	27	35	45	56	67	80	94	108	123	138	152	167	179
60 to 79	80	116	157	200	245	291	339	389	440	492	542	593	641	686	726	758
40 to 59	336	505	710	934	1176	1438	1718	2016	2334	2670	3000	3347	3684	4008	4316	4575
20 to 39	1081	1495	1936	2351	2739	3101	3436	3745	4027	4282	4474	4641	4750	4804	4807	4732
00 to 19	995	1421	1902	2387	2878	3374	3876	4382	4893	5410	5882	6359	6791	7176	7515	7756

Scenario 2: England Profile



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total	2500	3533	4683	5823	6953	8073	9183	10283	11373	12453	13410	14358	15186	15895	16487	16852
80 and over	8	28	60	102	155	219	293	377	472	576	685	802	921	1040	1158	1264
60 to 79	80	154	259	390	546	729	936	1168	1425	1705	1993	2302	2612	2919	3220	3488
40 to 59	336	499	694	904	1128	1366	1618	1884	2163	2455	2737	3031	3312	3577	3825	4028
20 to 39	1081	1484	1909	2302	2663	2992	3290	3557	3793	4000	4141	4256	4314	4319	4276	4162
00 to 19	995	1368	1761	2126	2462	2770	3050	3302	3527	3724	3863	3978	4040	4054	4023	3927

Source: Cranbrook population projections 2015 to 2030, produced by Devon Public Health Intelligence Team, 2015

2.2.5 Emerging health and care needs

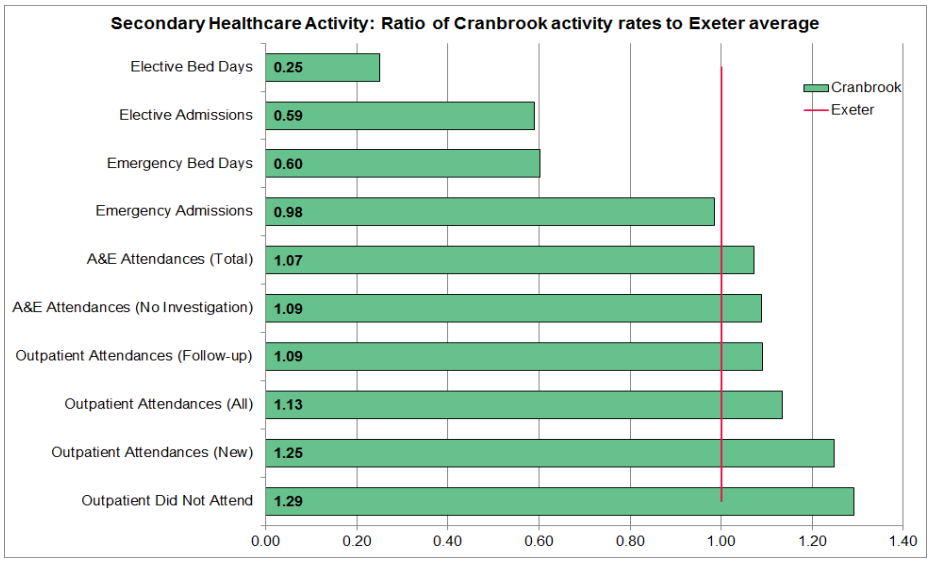
Health and care needs are strongly influenced by the age and socio-economic profile of the area:

- Very low levels of long-term conditions and use of community-based social services
- Relatively high levels of smoking prevalence

General health and care needs of the population relate to this age profile, with a focus on mental health and wellbeing, health-related behaviours such as smoking and sexual health, with considerable scope for interventions targeted on the primary prevention of disease and injury.

An age standardised analysis of secondary health care activity rate highlights relatively high levels of 'front door' activity such as outpatient and A&E attendance, but relatively low levels of higher intensity admitted patient care, particularly in relation to planned (elective) and low levels of bed days

Figure 6: Secondary Healthcare Activity for Cranbrook Residents compared to Exeter Average



Source: Royal Devon and Exeter NHS Foundation Trust, 2015

2.2.6 Future health, care and service needs

The future age structure of Cranbrook will be a major influence on the population's health, care and service needs. However, the substantial population increase seen under either scenario above will mean that all conditions will increase substantially over the next 15 years.

The leading health conditions and health-related behaviours per scenario are summarised below:

1. Under the more likely 'young profile' scenario (S1) needs will relate to mental health, sexual health, health-related behaviours and conditions affecting younger people or affecting people uniformly across the life course such as learning disabilities, autistic spectrum disorders, asthma and epilepsy.

2. Under the less likely ‘England profile’ scenario (S2) needs would be more focused on long-term conditions such as diabetes, COPD, CHD, stroke, along with hearing and vision impairments and dementia.

In summary the population structure of Cranbrook signals specific health and wellbeing activities including:

- Creating nurturing and positive environments for very young children and families to enable the best start in life.
- Support for vulnerable families.
- Supporting and promoting wellbeing in young people with emotional and physical health needs.
- Supporting adults (including parents) with mental health needs.
- Promoting optimal lifestyle conditions in a growing and changing population to prevent ill health, including an emphasis on tobacco control, smoking cessation and sexual health as a reflection of the age profile and physical activity, healthy weight and sensible drinking as a general approach to wellbeing.

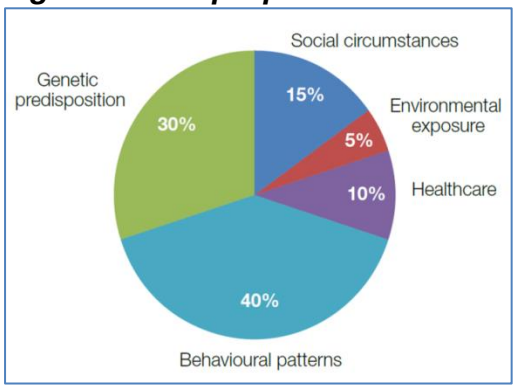
3. Background to the vision

3.1 Determinants of health and wellbeing

In response to Marmot’s Fair Society, Healthy Lives Report2, the Government’s 2010 White Paper Healthy Lives, Healthy People: Our strategy for public health in England[5] adopted Marmot’s life-course framework for tackling the wider social determinants of health, and outlined commitment to protecting the population from serious health threats; helping people live longer, healthier and more fulfilling lives; and improving the health of the poorest, fastest

Many determinants influence people’s health and wellbeing. Some (age, gender and hereditary factors) are non-modifiable, while others including lifestyle factors and wider environmental factors are modifiable. Figure 7 shows that 70% of premature deaths can be attributed to a combination of social circumstances, environment, access to health care and behavioural patterns, suggesting there is substantial scope to prevent much ill health and premature death.

Figure 7: The proportional contribution to premature death.

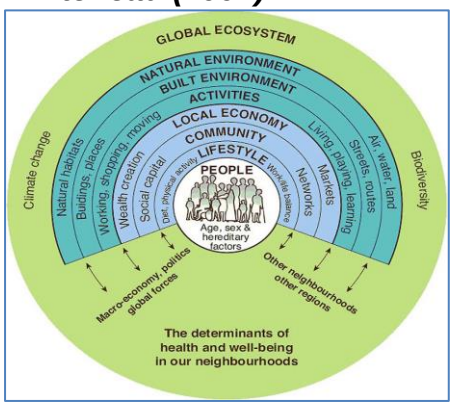


Source: Lancet

[5] HM Government (2010) *Healthy Lives, Healthy People: Our strategy for public health*. Cm 7985

Barton's settlement health map depicts the determinants of health and wellbeing with people at its heart. The model emphasises that the health and wellbeing of the individual is influenced by many factors and that consideration should be given to the connections between these when aiming to provide a healthy, integrated human settlement[6]

Figure 8: The Settlement Health Map, Barton and Grant (2006) Dahlgren and Whitehead (1991)[7]



3.2 Principles and underpinning theories

This Strategy and the partnership initiated through East Devon District Council's bid in 2015 to NHS England for healthy new town status, builds on Cranbrook's Health Impact Assessment[8] and draws on principles articulated in the 2010 Marmot review, Fair Society Healthy Lives, the NHS England Five Year Forward View 3 and the vision of the "fully engaged scenario" first articulated in 2002 by Derek Wanless[9].

In this report Derek Wanless proposed that to gain the best long term future for the NHS, everyone would need to become more engaged in their own care, new technologies would need to be harnessed and prevention of long term conditions prioritised:

> "Levels of public engagement in relation to their health are high: life expectancy increases beyond current forecasts, health status improves dramatically and people are confident in the health system and demand high quality care. The health service is responsive with high rates of technology uptake, particularly in relation to disease prevention." (Wanless, 2002) [9].

Echoing Wanless9, the NHS Five Year Forward View3 sets out how health services need to change and argues for a new relationship with patients and communities, proposing the need for New Models of Care to creatively meet need. Both nationally and locally the recent focus has been on the integration of health and social care and

[6] Barton, H (2015) Planning for health and well-being: the time for action. Ch 1 In *Routledge Handbook,*
[7] Dahlgren G, Whitehead M. (1991) *Polices and strategies to promote social equity in health. Strategy Paper.* Stockholm, Sweden: WHO
[8] Devon County Council (2007) *A sustainable new community at Cranbrook: health impact assessment* http://www.devonhealthandwellbeing.org.uk/library/hia/
[9] Wanless D (2002) *Securing Our Future Health: Taking a Long-Term View*

on prevention. The Care Act, 2014[10] introduced a wider duty to consider physical, mental and emotional wellbeing of individuals needing care and a duty to provide services to prevent reduce and delay needs. Public Health England's strategy, from evidence into Action[11], calls for place-based approaches that develop local solutions, integrating public services and also building resilience of communities.

4. Achieving the vision: strategic priorities for action

This strategy is relevant to people of all ages, whilst it is also tailored to the most likely population scenarios for Cranbrook. It spans prevention, early intervention, and a range of healthcare services from primary care, maternity services, support for children and young people, general and mental health care, at home, in local care settings as well as addressing the needs of people requiring hospital or specialist care. Already in Devon a range of strategies are in place e.g. mental health, dementia, children and young people, health and wellbeing, carers and learning disabilities and their core messages are applicable to Cranbrook and set the foundations for this strategy.

The intention for this strategy is to ensure Cranbrook benefits from the latest thinking in health and healthcare. In a report entitled Population health systems: going beyond integrated care[12], the Kings Fund describe the 'Population Health Systems' approach. Population health systems include, and extend far beyond, the focus of integrated care in England to date. While interventions focused on individuals and integrating care services for key population groups are important, the 'populations systems' approach integrates these as part of a broader focus on promoting health and reducing health inequalities across whole populations.

[10] Legislation.gov.uk. (2014). *Care Act 2014*. [online] Available at: http://www.legislation.gov.uk/ukpga/2014/23/contents/enacted

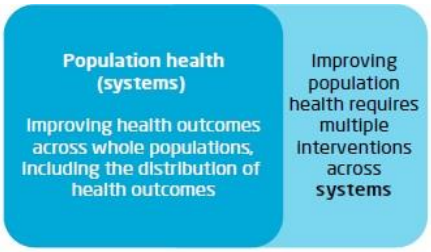
[11] Public Health England (2014) *From evidence into action: opportunities to protect and improve the nation's health*

[12] Kings Fund (2015) *Population health systems: going beyond integrated care*

This 'Population Health Systems' model is used here as a framework for this strategy to realise the vision for Cranbrook by addressing each quadrant in turn:

1. Population health
2. Making every contact count
3. Individual care management
4. Integrated care models.

4.1 Population health



This strategy aims to secure optimal and equally distributed health outcomes for residents of Cranbrook. This will require multiple interventions across systems, including education, employment, housing, transport, and the economy. The goal is one where long term conditions are prevented and residents live happy, fulfilling and sustainable lives.

The places where people live have significant effects on the quality of their lives and consequently their health. In building a new town, there is a unique opportunity to ensure that the built environment enables rather than hinders wellbeing and that the infrastructure delivered provides the foundation for future health and prosperity. Modern, vibrant designs and services should be adopted, creating an appealing built environment in which residents feel ownership and pride.

Two frameworks are used to prioritise activities around Cranbrook's built environment which will support health and wellbeing; Steps to Healthy Planning:

Proposals for Action[13] and Active Design: Planning for health and wellbeing through sport and physical activity[14].

4.1.1 Street layout, connectivity and active travel

Why is this important for health and wellbeing?
The wider benefits to society associated with increased use of walking and cycling instead of cars for short trips (under 5 miles) are multifarious (economic, health, environmentally sustainable). From a health and wellbeing perspective, the evidence supporting the prioritisation of active models of travel over car use is compelling.

Physical activity and social cohesion are two factors strongly associated with improved health:

- Low levels of social integration and loneliness have been shown to significantly increase mortality. Those who are socially isolated are between two and five times more likely to die prematurely than those who have strong social ties[15]
- Regular physical activity can help to prevent a number of diseases affecting people at an earlier age. They include cancer and diabetes, and conditions like obesity, hypertension and depression. Physical inactivity directly contributes to one in six deaths in the UK.[16]

What is the contribution to the issue from the built environment?
In his evidence review submitted as a supporting technical document (see appendix 4), Dr Adrian Davis demonstrates how the right infrastructure will support increases in physical activity and social cohesion through active travel. In addition, more journeys made via active modes resulting in less traffic will also reduce carbon and particulate emissions and road traffic accidents, two more issues that increasingly damage population health in Devon.

What will this look like in Cranbrook?
To maximise population health and wellbeing in Cranbrook, active travel (walking and cycling) should be prioritised over other modes of transport, with the aim of making it the mode of choice or most the 'normal' choice for short journeys. Evidence suggests that people are more likely to adopt behaviour when they feel that 'everybody else' is doing it too.

To achieve this goal, all destinations should be connected by a direct, legible and integrated network of walking and cycling routes. Routes should be safe, well lit, overlooked, welcoming, well-maintained, durable and clearly signposted. There should be wide separated paths for cycle users which take them direct from A to B

[13] Spatial Planning and Health Group (2011) *Steps to Healthy Planning: Proposals for Action*
[14] Sport England and Public Health England (2015) *Active Design: Planning for health and wellbeing through sport and physical activity*
[15] Bennett KM (2002) Low level social engagement as a precursor of mortality among people in later life. *Age and Ageing* 31: 165-168.
[16] Lee I-M, et al. (2012) Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. The Lancet 380: 219–29

across town, with short-cuts through the estates. This is critical, particularly in enabling women,[17] children and older people to feel confident to cycle regularly. In new developments there is often sufficient space to provide for 3.5 metre minimum width cycle paths grade separated from motor traffic.[18]

Frequent way marking will help people find direct routes and shortcuts and reinforce the time-saving aspects of walking and cycling, compared with driving for short journeys. Seating placed at regular intervals will enable those with limited mobility and younger citizens to break their journeys and socialise.

Accessible and secure bicycle, buggy and scooter storage inside or outside homes, along with covered parking in shopping areas, work and education facilities, will enable easy access and use in all weathers. Prominent covered storage at transport hubs will also encourage the linking of active modes with public transport. Modern, appealing Bus shelters where people feel safe, sheltered and happy to be seen will encourage and support bus users, who are likely to walk to make the connection between home, bus and destination.

Built-in traffic calming, 20mph speed limits, and priority to pedestrians crossing side roads, through speed tables at junctions (road raised to level of pavement) are aspects of highway design associated with increased likelihood of walking and cycling.

The addition of grass verges and trees will improve air quality as well as making routes feel more attractive and welcoming.

The built environment for health and healthcare

In addition to a healthy town environment it is necessary to plan for appropriate environments for health and care services when these are needed. Although the primary principle must always be to support people in their own home or appropriate community environments where this is possible and appropriate, there is also a need to plan innovative health and care access. The NHS Five Year Forward View[3] emphases the need to integrate services within sustainable and robust units.

Feedback from local engagement carried out over the past 3 years has also drawn out the need for community focal points with a multispecialty and intergenerational approach with a level of flexibility for adaption to the changing needs of the community.

Designing what is right is complex and challenging however the principles are:

- Physical infrastructure must be able to promote integration of services within it, for example primary care integrated and collocated with other health and wellbeing services.
- Flexibility of space is a key priority to ensure a dynamic use of the facility which can be utilised to maximum capacity.

[17] Jarrard, J., Rose, G., Kai Lo, S. 2008 Promoting transportation cycling for women: The role of bicycle infrastructure, *Preventive Medicine*: 46(1): 55-59.

[18] London Cycle Design Standards, 2005 Transport for London http://content.tfl.gov.uk/lcds-chapter4-cyclelanesandtracks.pdf accessed

- A modular approach may be required to adapt to the changing demands of the local population.
- Aligning wellbeing with leisure and education with a focus on prevention of ill health and a pro-active approach to health and wellbeing.
- A flexible health and wellbeing zone to feature within the planned leisure centre, this would provide opportunity for many health promotional activities with a focus on connecting health with wellness.
- Physically connecting health and wellbeing through social opportunities such as a healthy café.
- Infrastructure provision will need to reflect the population mix; it should include a suitable environment for health and wellbeing activities, urgent care services and outpatient clinics.
- Infrastructure is likely to draw on a wider population than that of Cranbrook and therefore travel, parking and footfall across other services need to be considered.

Checks and balances will be needed e.g. access to clinical appointments with enough space to drive and park, safe clinical spaces to meet standards etc.

4.1.2 Facilitating balanced communities

Why is this important for health and wellbeing?

In 2006, the DCLG published a report entitled Transferable Lessons from the New Towns[19]. The report reviewed over 2000 articles, books, and other published sources specifically referring to the 21 English New Towns built to that point. The aim was to identify, where possible, evidence-based findings and draw out key lessons that might be transferable to the Growth Areas initiative.

The report found evidence from the literature to suggest that the limited mix of housing in some New Towns, in particular the lack of housing for elderly people prevented truly 'integrated communities' from being created. Findings suggested that 'cohesive community' requires a balanced age profile.

The report also pointed out that the women living in the earlier New Towns were much more likely than today to take the role of home-maker and child-carer and as such contribute to creating community networks and 'community building' activities. The fact that women play a very different role in society today than in the 1950s and '60s, underlines the need to try to attract those who may be more available to contribute to community activities such as volunteering.

What will this look like in Cranbrook?

It will be important to provide a mix of housing stock, in terms of tenures and providers. The requirements of those likely to be unrepresented in a new town, such as elderly residents, single people, people with protected characteristics, gypsy and travelling communities and people from ethnic minorities, should be established and the appropriate facilities and services provided. Imaginative, flexible, future-proof and

[19] Department of Communities and Local Government (2006) *Transferable Lessons from the New Towns*

varied designs including extra care housing and 'life-time' homes will meet varying needs and will add visual interest, thereby helping to create a strong sense of place.

4.1.3 Neighbourhood and community spaces

Why is this important for health and wellbeing?

Social cohesion is strongly associated with improved health (see above)

What is the contribution to the issue from the built environment?

The provision of shared, flexible spaces and community facilities (such as meeting places, performance spaces, sports venues, cultural buildings, public houses and places of worship) enables opportunities for residents to socialise, connect, create and share experiences.

What will this look like in Cranbrook?

Spaces flexible enough to accommodate a wide range of community-defined and cultural uses (e.g.: for local festivals, bonfires, car boot sales) should be delivered as early as possible to utilise the evident enthusiasm of newcomers and enable social cohesion at an early stage. These amenities should celebrate local identity and help to create a unique, desirable place to be. They need to be attractive in design, well managed, safe and accessible all year round.

Traffic speeds and noise should be limited where possible to make neighbourhood street environments safer and more pleasant for walking, cycling, playing and community interaction. Steady flows of traffic should be confined to main routes to avoid preventing communal use of the street on streets where people live.

4.1.4 Co-location of facilities

Why is this important for health and wellbeing?

Physical activity, air quality and social cohesion are three factors strongly associated with improved health (see above).

What is the contribution to the issue from the built environment?

Homes, schools, shops, community facilities, workplaces, play spaces, open spaces and sports facilities within easy reach of each other create multiple reasons to visit a destination, increase the chances of social interaction and minimise the number and length of trips. It also facilitates a holistic approach, recognising the co-dependencies of physical, mental and social wellbeing. People walk more in places with mixed land uses, higher population densities and highly connected street layouts. These urban forms are associated with between 25% and 100% greater likelihood of walking.[20]

What will this look like in Cranbrook?

By co-locating health care, education, employment, leisure, sport, social and cultural amenities wherever possible and delivering highly connected streets in all parts of the town, improved access will be facilitated for all. Consideration should be given to

[20] Sinnett, D, et al. (2012 "Creating built environments that promote walking and health: A review of international evidence." *Journal of Planning and Architecture*): 38.

linking buildings with a health and wellbeing theme through design, incorporating arts and culture to help to communicate the shared contribution to health and wellbeing; for example the health and wellbeing hub and leisure facilities.

4.1.5 Active buildings and infrastructure

Why is this important for health and wellbeing?

Participation in sport and recreational pursuits promotes health through increased levels of physical activity participation and social interaction. Physical activity and social cohesion are two factors strongly associated with improved health (see above).

What is the contribution to the issue from the built environment?

Prominent and accessible facilities for a wide range of sports and activities can provide multiple opportunities for community members to participate in sport, activity and recreation and will help to normalise participation. Design of buildings and public realm can encourage people to linger and socialise and be more active by making certain features, such as stairways, more attractive and noticeable.

What will this look like in Cranbrook?

With reference to the current and future predicted age profile of the town, facilities to support sport and recreation for early years, children, young people and their families should be particularly well resourced. Supporting infrastructure for sport and recreational pursuits (such as changing areas, toilets) to enable all members of society to take part should be provided across all contexts, including workplaces, sports facilities and public space. Networked routes for active travel inking residential areas with these key facilities should be provided.

To further promote and normalise active lifestyles, the internal and external layout, design and use of buildings built within Cranbrook should promote opportunities for physical activity and social interaction. Staircases need to be positioned prominently and be attractive to look at and use. Incorporating the arts into the design of facilities should also be considered wherever possible, to maximise the opportunity to create both relaxing and stimulating environments. Outdoor and public space, including roofs, terraces and areas immediately adjacent to buildings should be designed in such a way to encourage higher levels of activity.

4.1.6 Food production and access

Why is this important for health and wellbeing?

Poor diet and obesity are leading risk factors for non-communicable diseases including cardiovascular disease and cancer. In 2007, the Foresight report[21] highlighted that while people had not altered biologically by comparison to previous generations, the way people live, including work patterns, travel, transportation, food production and the way food is purchased, have changed radically over the past five decades, resulting in an “obesogenic environment”.

[21] Government Office for Science and Department of Health (2007) *Tackling obesities: future choices: Foresight report*

'Food poverty' is defined by the Department of Health in 2005[22] as 'the inability to afford or have reasonable access to food which provides a healthy diet'. On average, foods high in salt, sugar and fat are cheaper to buy than healthier foods.

Research shows that multiple and accessible opportunities for growing food locally such as allotments and community gardens, can increase both social interaction and the consumption of affordable, healthy food. Growing food in allotments also promotes physical activity and is associated with improved mental health.

What is the contribution to the issue from the built environment?

The built environment has the potential to either provide or constrain opportunities for producing and accessing healthy food. The food environment includes any opportunity obtain food and so encompasses a mixture of shops and supermarkets where food is bought for the home, cafes, takeaways, restaurants, vending machines and also opportunities for growing food. The relative cost of foods and how foods are promoted are also relevant in describing the food environment.

Preventing exposure to unhealthy options has been attempted in established towns and cities, who have responded to research demonstrating a link between fast-food availability and obesity in older children[23]. Interventions such as exclusion zones within 400 m of a primary or secondary school, restricting clustering by allowing no more than 5% of units as takeaways within retail centres and ensuring that no more than two are located adjacent to one another have been detailed in planning policy adopted by the London Borough of Dagenham.

What will this look like in Cranbrook?

A similar approach to the policy adopted by the London Borough of Dagenham should be adopted within Cranbrook at this early stage, to limit the proximity of takeaways to schools and design-in healthy habits from the earliest possible opportunity.

As emphasised in East Devon District Council's Sports, Leisure and Recreation at Cranbrook [24]report growing spaces, such as allotments and community gardens should be available within walking distance to all Cranbrook residents and so provided in small, localised groups rather than a single block of allotments.

Additionally, access to healthy food could be further achieved by making maximum use of 'outdoor' space, on roofs, terraces and areas immediately adjacent to buildings. Healthy food can be designed-in as universal and pervasive, rather than the proviso of the few.

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[22] Department of Health (2005) *Choosing a better diet: a food and health action plan.* London: Department of Health

[23] Smith, D et al (2013) *Does the local food environment around schools affect diet? Longitudinal associations in adolescents attending secondary schools in East London* BioMed Central Public Health **13**:70

[24] East Devon District Council (2015) *Sports, Leisure and Recreation at Cranbrook*

4.1.7 Open and green space

Why is this important for health and wellbeing?

Research suggests that there are benefits to mental and physical health from living in areas with good access to green space. Benefits to health may include reduced stress, anxiety and depression and better overall mental health and wellbeing. In addition, open and green space attracts people out of their homes and into the environment for physical and social activity and informal play, thus promoting cardiovascular health and promoting social interaction. Social cohesion is further developed and reinforced through community gatherings, celebrations and events, utilising the spaces available.

"Natural Devon", Devon's Local Nature Partnership has an overarching purpose statement which identifies and links the natural environment with quality of life. Two out of seven priority themes recognise the need for people to reconnect with the natural environment to improve their health and wellbeing and a programme of work has been outlined to achieve this vision. The two most pertinent themes are as follows:

- Everyone in Devon has the opportunity, and the confidence, to be 'naturally active' in order to improve their health and wellbeing.
- Devon is known as a great place to live, work and to do business, because high quality Green Infrastructure is integrated into, and connects, all housing and commercial developments.

What is the contribution to the issue from the built environment?

Green spaces including parks, playing fields, woodlands, wetlands, allotments, community gardens, cycle routes and footpaths all provide access to the natural environment and opportunities for people to be naturally active. Other benefits of Green Infrastructure (GI), include natural flood alleviation services, wildlife habitat and climate regulation. Attractive environments also bring in economic investment and provide places where people want to work and live.

In Healthy Play for All Ages in Public Open Spaces[25], Mahdjoubi and Spencer (2015) propose a framework of design principles and how they can be realised to support informal play in open space for all. The framework outlines how to create spaces where people "want to spend time, where they feel safe and relaxed, where there is interest, excitement and physical features that can be used at different times, in varied ways and by different people."

What will this look like in Cranbrook?

To maximise health and wellbeing, Cranbrook should therefore feature a network of prominent, multifunctional open space and green infrastructure, which can support a range of informal recreation, play and physical activity for all ages. Sufficient open space which can accommodate social events needs to be available all year around.

[25] Mahdjoubi and Spencer (2015) *Healthy Play for All Ages in Public Open Spaces*

Co-location of parks and play areas with retail and other everyday amenities will enable the linking of utility tasks such as shopping with building in play and relaxation time for parents and young children alike. Accessible and overlooked green space will enable older children to gain the added health benefits associated with unaccompanied play, while helping parents feel that they are safe enough to do so. Facilities such as seating, lighting and open public toilets will enable residents both young and old to feel safe and enjoy the benefits of these spaces.

Where possible, buildings themselves should be environmentally benign. The integration of green roofs, planted areas and living walls, could increase the sustainability of buildings, while increasing the density and proximity of green space within the urban fabric of the town. These enhancements would secure extra exposure to green space and shade for building residents or office workers particularly if views of green space are incorporated in design.

Routes promoting easy access to green and open space in the broader locality, such as the National Trust Killerton Estate, The Exe Estuary, seaside and moors should be clearly marked and promoted.

4.1.8 Affordable, flexible and energy efficient housing across the social gradient

Why is this important for health and wellbeing?

The standard of housing is a major contributory factor in attaining and maintaining good health. Conversely, poor housing can precipitate a range of physical and mental health conditions. Excess cold and damp is closely linked to circulatory and respiratory diseases.

Circulatory diseases are responsible for around 40% of excess winter deaths nationally and accounted for around 160 excess winter deaths each year in Devon between 2004 – 2013 Respiratory illnesses cause around 33% of excess winter deaths, which accounts for around 140 excess winter deaths each year in Devon. In recognition of these links, the Devon Joint Health and Wellbeing Strategy identifies improving the quality of housing stock as a priority for the county.

Fuel poverty, currently measured using the Low Income High Costs indicator, is a serious social problem that has direct and measureable effects of health. Levels of fuel poverty increased between 2011 and 2012 in Devon but fell in many other areas of the country. Fuel poverty is more common in groups with lower household incomes; including pensioners, people receiving benefits and working families with below average earnings. Fuel poverty exacerbates health inequalities since the poorest people generally live in many of the least energy efficient homes and struggle to pay heating bills.

What is the contribution to the issue from the built environment?

Energy efficient, warm homes can design-out the structural aspects of fuel poverty. Homes can be built to reflect zero-carbon standards and consider practical ongoing issues such as ventilation and drying of laundry, to avoid people living in damp and mouldy conditions.

What will this look like in Cranbrook?

A new town, with homes built to the most recent specifications should provide energy efficient, warm homes and design-out the structural aspects of fuel poverty. Furthermore, it should aim to reduce energy use and integrate practices and/or technologies that are low-carbon or carbon neutral. High quality, affordable homes should be distributed throughout the town, rather than concentrated in one or two areas.

4.1.9 Access to education, training and employment

Why is this important for health and wellbeing?

Access to high quality education and employment are important determinants of health and wellbeing. Consequently, two of the six policy objectives highlighted in the Marmot Review Fair Society, Healthy Lives2 were to enable all children young people and adults to maximise their capabilities and have control over their lives (through high quality lifelong learning) and create fair employment and good work for all. To achieve equity from the start, investment in the early years is crucial. Investing in the early years, thereby improving early cognitive and non-cognitive development and children's readiness for school is vital for later educational outcomes. Successive academic and economic reviews have demonstrated the economic and social value of prevention and early intervention programmes in pregnancy and the early years. 80% of brain development takes place in pregnancy and the first two years – what happens during this period is crucial to individual outcomes.

The interaction between family background, neighbourhood and relationships with peers, as well as what goes on in schools work together to influence educational attainment. Once at school, it is important that children and young people are able to develop skills for life and for work as well as attain qualifications. Closer links between schools, the family, and the local community are important steps to this achievement.

In parts of Devon skill levels are low and rates of long term youth unemployment are high. The proportion of children gaining five or more GCSEs in Devon is rising and in line with the South West average. However there is a significant gap in attainment for looked after children and other disadvantaged groups including those with a statement of Special Educational Needs, of which Devon has a higher proportion than similar areas. To support this, The Devon Children, Young People and Families Alliance have specified in their Plan 'My Life, My Journey' (2015-2020) [26] an ambition that children and families have high skills and plenty of opportunities to lead a fulfilling and prosperous life in Devon, and have set key targets of:

- No child or young person will be 'Not in Education, Employment or Training' (NEET) for over 9 months
- No. of children with 5 good GCSEs 10% above national average.
- NVQ3 skills above national average
- No attainment gaps for disadvantaged children including those in care

[26] Devon Children Young People Families Alliance Plan 2015 www.devonchildrensalliance.org.uk/the-plan-2015-2020/

- Higher attendance, fewer exclusions.

Jobs need to be sustainable and offer a minimum level of quality, to include not only a decent living wage, but also opportunities for in-work development, the flexibility to enable people to balance work and family life, and protection from adverse working conditions that can damage health.

In Devon, the 2012 Economic Assessment highlighted the following critical issues:

1. Devon's economy is performing poorly in terms of productivity
2. Devon has a relatively skilled workforce, however this masks significant differences at a district level
3. Earnings are lower than average in most of Devon and link to housing affordability and relative poverty
4. Devon has an opportunity to better exploit the assets it has for high value economic growth
5. Devon's towns and rural communities in more peripheral areas are falling behind
6. Devon's population is ageing rapidly
7. Devon's resilience to face environment changes is being challenged.

What will this look like in Cranbrook?

To maximise health and wellbeing, Cranbrook needs to provide high quality early years education, childcare and schools, with access for training and development for those parents and carers who need it.

The development of Cranbrook should create employment and training opportunities for the growing local community. Cranbrook needs to exploit it's younger age profile and improve access to good jobs, reduce long-term unemployment and develop employment skills, particularly targeting vulnerable groups. This is likely to involve the support for technical and cultural innovation, start-ups and flexible units, making it easier for people who are disadvantaged in the labour market to obtain and keep work.

Construction methods should protect the community from detrimental effects of noise, smoke and dust and should be carbon neutral. Clean, green industries should be encouraged.

4.1.10 Air quality

Why is this important for health and wellbeing?

Poor air quality negatively affects human respiratory and cardiovascular systems and is strongly linked to asthma and respiratory and cardiovascular illness. Particulate matter air (PM) pollution caused by human activity (anthropogenic) is thought to result in 29,000 early deaths per year in the UK, with an associated loss of population life of 340,000 life years lost.

The dominant source of anthropogenic PM and NO2 in the UK is motorised road transport. The UK is currently subject to legal proceedings for failing to meet European Limit Values for NO2. Public Health England has made reducing the impact of poor air quality a high-level objective within the National Public Health Outcomes Framework.

What is the contribution to the issue from the built environment?

General traffic management, using layout and traffic engineering, can restrict access and flow of traffic to prevent 'canyoning' effect from congested traffic that builds up and moves slowly through residential areas. Maintaining good spatial separation of industrial processes and activity from residential areas also helps to improve air quality.

What will this look like in Cranbrook?

Maintain the diversion of major transport routes and restricted access to the residential areas of Cranbrook, especially by heavy goods vehicles.

Ensure that forward planning and development process effectively scrutinise development applications to consider impact on air quality either from traffic or industrial activity and to ensure that all reasonable steps have been taken to reduce impact on health.

4.1.11 Noise

Why is this important for health and wellbeing?

Depending on the context, exposure to noise can impact significantly on both quality of life and physical and mental health. Impact of neighbour and neighbourhood noise on quality of life is well documented but research continues about the effects of environmental noise on health and wellbeing.

What is the contribution to the issue from the built environment?

Sustainable development requires the built environment to contribute to the effective management of environmental, neighbour and neighbourhood noise. This is achieved by the reduction of noise exposure by the design, layout and orientation of the settlement to maintain effective distance from noise sources and by ensuring good building design and construction throughout the development phase.

What will this look like in Cranbrook?

- Ensure that forward planning and development processes effectively scrutinise development applications to consider impact on the acoustic environment of Cranbrook from traffic or industrial activity and ensure that all reasonable steps have been taken to reduce impact on health.
- Identify and protect areas of tranquillity in and around Cranbrook.

4.2 Making every contact count

4.2.1 Health and care contacts

Why is this important for health and wellbeing?

Many long-term diseases affecting our population are closely linked to known behavioural risk factors, with 40% of the UK's disability adjusted life years lost being attributable to tobacco, hypertension, alcohol, being overweight or being physically inactive.

People come into contact with health and care services many times in the course of their lives. Whilst these contacts may have a core purpose of assessment, diagnosis or treatment when a person is experiencing a health or care issue, they are also tremedous opportunities to guide and support people towards better health.

Making Every Contact Count (MECC) is an approach that utilises the millions of day-to-day interactions that organisations and people have with other people to support them in making positive changes to their behavioural risk factors and improve their physical and mental health and wellbeing. It provides staff with the skills and confidence to make the most of these interactions and provide consistent and concise healthy lifestyle information through conversations with clients within their existing daily practice. Evidence suggests that the broad adoption of the MECC approach by people and organisations across health and care could potentially have a significant impact on the health of our population

What is the contribution to the issue?

The present healthcare system across Devon is reliant on crisis and urgent responses, care and treatment when people are already ill. There is a need to rebalance the system through more proactive approaches that can prevent future crisis or enable a person to manage them better. In addition there is a need to ensure people understand and use their own power to be and remain as well as possible for as long as possible.

- for organisations, MECC means providing their staff with the leadership, environment, training and information that they need to deliver the MECC approach
- for staff, MECC means having the competence and confidence to deliver healthy lifestyle messages, to help encourage people to change their behaviour and to direct them to local services that can support them
- for individuals, MECC means seeking support and taking action to improve their own lifestyle by eating well, maintaining a healthy weight, drinking alcohol sensibly, exercising regularly, not smoking and looking after their wellbeing and mental health.

What will this look like in Cranbrook?

This strategy aims to achieve wellness for the population of Cranbrook through:

- Early engagement across the health, care and the wider workforce in Cranbrook to plan how MECC can be achieved, what best practice would look like and the information and training professionals will need to be able to do this as effectively as possible

- Running a pilot programme in Cranbrook whilst the population is small to develop an effective model; to benefit both the growing future community in Cranbrook and to inform practice across the wider Devon geography.

4.2.2 A wider health contacts network

Why is this important for health and wellbeing?

People come into contact with a range of professionals who are not part of the health care system but which have a key role to play for example in schools, colleges and youth services . These contacts are highly important in early advice and support, early detection of problems and signposting to care.

What is the contribution to the issue?

By creating a better environment for engagement through developing wider professional networks, , it is possible to ensure early help with greater opportunities for individuals and familiesto be directed to the right help first time. There are already schemes across Devon which take multi agency approaches, such as Early Help 4 Mental Health to support emotional health and wellbeing in schools

What will this look like in Cranbrook?

This strategy will establish an ethos in Cranbrook that health and wellbeing is everyone's business. Professionals across agencies in Cranbrook will work together to develop core knowledge to make every contact count towards health and wellbeing. A training programme across agencies will be established to ensure consistent concise healthy lifestyle information is shared in conversations at every opportunity, in addition to promoting named points of contact for advice and support.

4.3 Individual care management

Healthcare spans a range of services from:

- Public health interventions for example smoking cessation support and public health nursing
- Primary care through general practice, pharmacy, optometry and dentistry
- Community general and mental healthcare including Community nursing and therapy services, children's services, midwifery as well as community located clinic and care services
- Hospital care such as planned and urgent services in acute hospitals or mental health facilities or emergency services
- Other specialised services.

The future health of millions of children, the sustainability of the NHS, and the economic prosperity of Britain all now depend on a radical upgrade in prevention and public health.

The NHS Five Year Forward View3 sets out a clear direction for the NHS showing why change is needed and what it will look like. Some of what is needed can be brought about by the NHS itself. Other actions require new partnerships with local communities, local authorities and employers.

The NHS needs take decisive steps to break down the barriers in how care is provided between family doctors and hospitals, between physical and mental health, between health and social care. The future will see far more care delivered locally.

A new option will be introduced permitting groups of GPs to combine with nurses, other community health services, hospital specialists and perhaps mental health and social care to create integrated out-of-hospital care.

The NHS shared planning guidance 16/17 – 20/21[27] outlines a new approach to help ensure that health and care services are built around the needs of local populations. To do this, every health and care system in England will produce a multi-year Sustainability and Transformation Plan (STP), showing how local services will evolve and become sustainable over the next five years – ultimately delivering the Five Year Forward View vision of better health, better patient care and improved NHS efficiency. Cranbrook is within the DEVON, Torbay and Plymouth STP footprint.

What will this look like in Cranbrook?

In this strategy the initial focus is on the out of hospital services in primary care, public health and community services. Access to hospital and more specialised forms of care is already covered in wider commissioning strategies as set out earlier in this document, which would apply to Cranbrook as well as other areas of Devon.

The health and care system should start to consider the current differences in boundaries of various services that are provided to different parts of the population, for example children's services boundary differs from that of core clinical services such as nursing boundaries. Cranbrook provides the ideal opportunity to start to integrate boundaries and create the environment for all organisations to share the same footprint.

Given the current and expected population of Cranbrook the most likely a 'young' scenario, there is a need to design a service model that will meet the health and care needs of such a population:

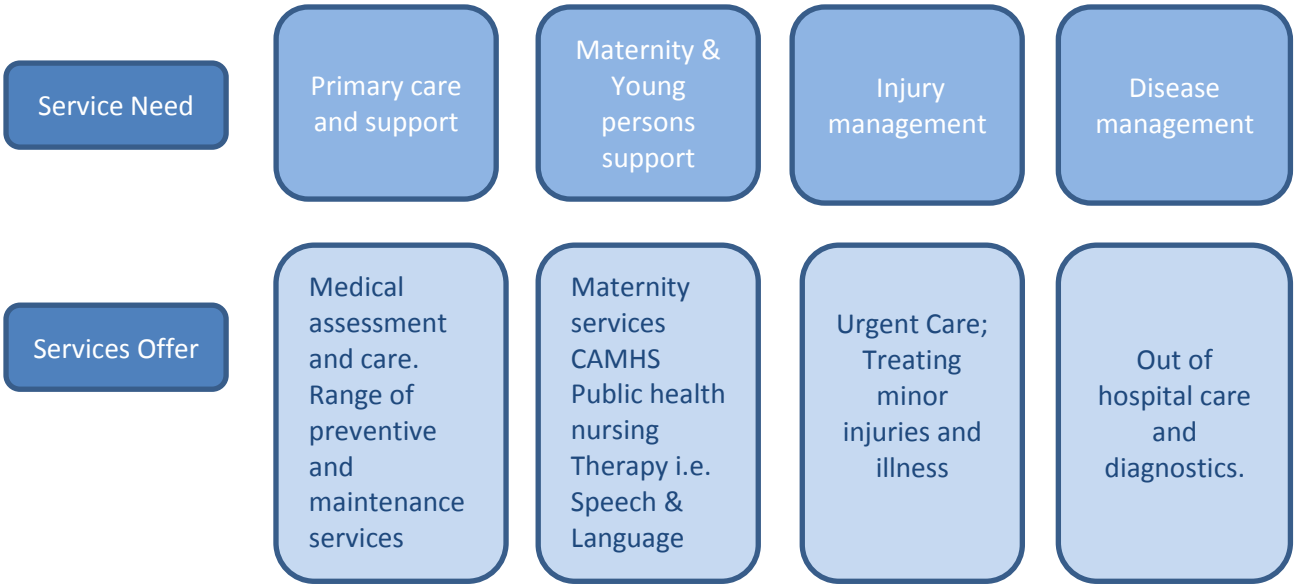
- Public health nursing, primary care, clinical and social care services targeted at babies, young people and families should integrate approaches. This should include a close connection to midwifery services.
- This population will require access to pharmacy, dentistry and optometry services.
- Accessibility of services should be tailored around population need, for example access out of hours to primary care.

[27] https://www.england.nhs.uk/wp-content/uploads/2015/12/planning-guid-16-17-20-21.pdf

Planning these services now will need to take a phased approach to account for the increasing demand over the coming years.

Strategic Approach

Meeting individual needs:



The strategic approach for each of these areas is set out below:

As set out in the CCG strategy - Integrated, personal and sustainable community services for the 21st century and the CCG Eastern Devon Commissioning Intentions – Pathways for the Future [28]

4.3.1 Primary care in general practice

The Call to Action highlights the emerging role of GP practices as an 'organising unit' for care in the future, emphasising the importance of comprehensive local arrangements. This is now being advanced through the planned co-commissioning of primary care by CCGs and NHS England.

GP practices are increasingly encouraged to work more closely together to provide extended services beyond the scope of their normal contract and help overcome ongoing recruitment problems for both GPs and nurses.

What will this look like in Cranbrook?

The vision locally for primary medical care is for patients to access their GP from 8am – 8pm on weekdays and 8am – 1pm on a Saturday from a community hub.

GPs providing these appointments are supported by a full team of primary care nurses and healthcare assistants and on Saturdays by a courier service to take blood samples and other specimens to the local laboratory.

[28] *file://newdccg/Users/Home/ivesc/Downloads/Eastern%20Commissioning%20Intentions%20FINAL.pdf*

New models of consultation (Skype, web access and e-mail) will also be trialed and evaluated alongside these new services by local academic university departments to evidence the impact, safety and value for money of these initiatives and most importantly to see if they reduce the demand on conventional GP, out of hours, minor injury units and A&E services.

4.3.2 Prevention and wellbeing services

It is important that the public and patients are encouraged to take responsibility for their own health by providing the right resources in the community to do this. This will need to:

1) Recognise the importance of well-being and social engagement as crucial factors in health
2) Bring together primary care, social care, mental health services, the voluntary sector and community services more readily
3) Utilise the arts and cultural activities to help improve wellbeing and social cohesion at all stages of the life course.
4) Empower communities to evolve services aligned to local needs
5) Ensure that all patients (including those in very rural areas) have the ability to access high quality inpatient and urgent care services not too far from where they live
6) Commission services around the needs of the individual/s.

What will this look like in Cranbrook?

The vision for Cranbrook is to engage with the community at an early stage to develop a holistic approach to health and wellbeing through the development of a shared action plan. The aspiration is that voluntary and community groups and charities will work together in the community supported by health and care services, to ensure the right resources and support is available for everyone to take a more active role in their own health.

Traditional primary care services and out of hospital services will be co-located with broader health and wellbeing services including creative, cultural, social and physical activities; to demonstrate and model the importance of staying well in body and mind.

4.3.3 Urgent care services

Urgent care in community settings needs to be a high quality, consistent, and resilient service which can be and is used as a first choice for routine urgent care. As part of a wider network of expertise it needs to be designed so that the majority of patients can be seen, treated and their care completed in a single attendance. It also needs to be designed so that patients understand which part of the system they access depending on their health needs.

Current commissioning proposals aim to ensure that urgent care services are aligned with other out of hours services such as ambulance services, out of hours GP services and rapid response services. Proposals are in line with the Keogh report and aim:

1. To provide better support for self-care.
2. To help people with urgent care needs get the right advice in the right place, first time.
3. To provide highly responsive urgent care services outside of hospital, so people no longer choose to queue in A&E.
4. To ensure that those people with serious or life-threatening emergency care needs receive treatment in centres with the right facilities and expertise in order to maximise chances of survival and a good recovery.
5. To connect all urgent and emergency care services together so the overall system becomes more than just the sum of its parts.

What will this look like in Cranbrook?

The vision locally for access to minor injuries services for patients should mirror that of the primary care GP service from 8am – 8pm on weekdays and 8am – 1pm on a Saturday from a community hub. There is recognition that patients will access urgent care services outside of these hours and are likely to travel to either Honiton MIU (Minor Injury Unit), Exmouth MIU or the A&E (Accident & Emergency) service at the R, D &E in Exeter city centre.
The ideal scenario for Cranbrook is for urgent care services to sit alongside and be integrated with primary care services, there will be a number of stages to move through in order to reach this point in line with population growth and demands. Good communication and promotional activity will be required to encourage the local population to access local urgent care services appropriate for meeting their needs.

4.3.4 Adults with complex needs services

All communities would have access to a high quality, sustainable adults with complex need service that will integrate with the community and other services and will support patients and all members of the community with their health needs. These services will run 24 hours a day, 7 days a week. Patients will have access to a named senior clinician and have personal care plans. Patients will be supported to remain independent and at home if they choose.

What will this look like in Cranbrook?

The majority of adults with complex needs services are made up of community nursing, physiotherapy, occupational health and some specialist services such as geriatric medicine. These services should have a building from which to base themselves within Cranbrook, where they can integrate with other clinical and non-clinical services. These services will be provided in patients homes wherever possible.
Cranbrook also has an opportunity to provide a day service for those people living with dementia, which would provide respite for carers and families. This service would be developed in line with local need and integrated with other core clinical and non-clinical services.

4.3.5 Children and young people

Children and young people who feel good about themselves and are confident and optimistic about their future will be more resilient to deal with the stresses that life will inevitably bring. It is known there are links between poor mental health and social exclusion, leading to reduced education and employment opportunities, and financial, social and health inequalities in later life.

The CCG Transformation Plan for Child and Adolescent Mental Health Services[29] sets out the commissioning strategy, priorities and plans to transform the support and services offered to children and young people over a five year period, commencing this year. It has been developed by the CCG working with partners and providers and taking into account the views of children and young people.

Working against a backdrop of rising demand for services and significant financial challenges in the public sector, through service redesign and use of the additional national investment the CCG will:

- Achieve a comprehensive offer that promotes emotional resilience and better mental health and wellbeing in children and young people;
- Break down historical barriers and design support services around children and young people and based on need;
- Shift the focus towards earlier and evidence based interventions and reduce demand on targeted services to achieve best value for children and young people

What will this look like in Cranbrook?

Close location and easy access will facilitate and foster good relationships between both professionals and families, enabling early identification and assessment of any arising issues. The adoption of a more hoslistic approach will facilitate early help interventions before problems and issues become exacerbated or entrenched.

4.3.6 Maternity care

The strategy for Maternity services [30]sets out the South West Peninsula shared vision for maternity services, where all maternity related services work closely together to promote pregnancy and childbirth as an event of social and emotional significance where women and their families are treated with dignity, respect and compassion. For every mother, wherever they live and whatever their circumstances, pregnancy and childbirth will be a safe and positive experience so that mothers and their partners can begin parenting feeling confident, capable, well supported and able to give their child a secure start to life.

The maternity pathway will involve all relevant disciplines in order that the best outcomes are achieved for parents and babies. Commissioners will:

- Work with GPs to identify, clarify and discuss the role of primary care.

[29] https://www.newdevonccg.nhs.uk/your-ccg/mental-health/child-and-adolescent-mental-health-services-camhs-transformation-plan-201516--202021/101881

[30] file://newdccg/Users/Home/ivesc/Downloads/Mat.Strat%20%20final%2029.10.14.pdf

- Ensure that GPs are involved in line with local and national guidance
- Work with all our partners to develop a strategic approach to children's centres,
- Ensure that the services provided focus on reducing health inequalities and promote health.

What will this look like in Cranbrook?

Health visitors in Cranbrook will link with midwifery services in the antenatal and postnatal periods to provide additional and on-going support to families as part of a seamless pathway which will contribute to early help. GPs in Cranbrook will be well placed to know individual patients and their families. They may be managing women for certain clinical conditions such as diabetes and high blood pressure, which could have a significant impact on pregnancy. They may also choose to provide shared care with the midwives. GPs are also in a key position to identify those women who may be socially isolated or vulnerable. GPs may also be involved in:

- Pre-conceptual care (e.g. staying healthy, folic acid supplement, obesity, smoking, rubella, amniotic fluid screening, genetic counselling, provision of flu vaccine, etc.)
- Some antenatal care (e.g. sharing of relevant medical history, continuity of ongoing medical aspects of care especially for those women with complex medical conditions / family history)
- Some aspects of postnatal care.

Early Years Services (commissioned by County Councils) also provide support to prospective parents /carers during pregnancy and beyond.

4.3.7 Mental health

The mental health commissioning strategy for NEW Devon CCG (in partnership with Devon County Council, Plymouth City Council, South Devon and Torbay CCG and Torbay Council) identified 6 priority areas for development:

- Prevention
- Personalisation
- Integration
- Improving Health and Well-being
- Supporting Recovery
- Improving Access

The strategy is predicated on the effective involvement of people with lived experience of mental ill health and reflects a wide range of views across the community. The future for mental health services is predicated on:

- Prevention – with emphasis on early interventions especially with young people
- Integration of mental health services with other health services, especially primary care, and social care

- Improved access, especially to crisis services (24 hour) and evidence-based therapy
- Choice and control being given to people in order to set their own treatment and support arrangements
- Sustained recovery being the key outcome of treatment.

What will this look like in Cranbrook?

The foundation of good mental health is a good home, meaningful occupation a place in a healthy community and a supportive family life. It is a challenge for the development of a new community to include these foundational blocks into the fabric of any new environment but it is fundamental to the successful future of Cranbrook.

Cranbrook will need accessible services within the community, a commitment to families to address the root causes of mental ill health and emphasis being given to people's right to choose and control their care. The ultimate indicator of success will be feedback from people with lived experience reporting both good outcomes and a positive experience of the service.

4.3.8 Carers

The profile of carers in Cranbrook is likely to differ from that of carers in other localities, with higher levels of:

- carers of people with mental health problems
- parent carers of children with additional needs
- carers of older relatives and relatives with Dementia living at some distance in other parts of Devon
- possibly higher relative levels of carers of people with substance misuse problems

and at least initially:

- lower levels of carers of people with long term conditions (but this may change over time;
- lower levels of carers of older people and people living with Dementia (but this may change over time).

What will this look like in Cranbrook?

The development of Cranbrook offers an ideal opportunity to develop a "carer friendly community", which is the direction of travel of national and local strategy [31]

How this is developed will be a matter for active local consideration but is likely to include:

- "Lifetime streetscapes" – e.g. step free access and dropped curbs
- Accessible (e.g. wheelchair accessible) toilets available to the public
- Seating at key places
- Encouragement of public services and commercial outlets to be carer aware and welcoming, welcoming of people with all disabilities and conditions
- Easy access to facilities such as Post Offices, Shops etc.
- Appropriate parking for "Blue Badge" holders

The development of a new primary care facility enables the incorporation of carers support into this from the beginning – carers tell us this is really important for them. The commissioned carers' service must demonstrate that it will provide:-

[31] http://www.newdevonccg.nhs.uk//your-ccg/carers/carers-in-devon-joint-strategy-201419/100859.

- Carer awareness training for staff
- Carer advice sessions within or close to the GP practice
- Carer Health and Wellbeing Checks/Carer Assessments in or close to the GP practice.

4.3.9 Learning disability

The Living Well with a Learning Disability in Devon strategy[32] sets out key areas of work that will be undertaken to improve the lives and wellbeing of adults who have a learning disability, although some of the work starts with young people before they reach age 18, as they approach adulthood. The following outlines the key values that underpin the strategy;

- People with learning disabilities should have the same rights and choices as everyone else.
- People with learning disabilities have the right to choice and control and to be treated with dignity and respect.
- People with learning disabilities should have the same chances and responsibilities as everyone else. Family carers and families of people with learning disabilities have the right to the same hopes and choices as other families

What will this look like in Cranbrook?

All services provided within Cranbrook will have awareness that those patients and families living with a learning disability require the same level of choice and control as any others accessing their service. There will be a culture of continuous engagement and learning through working with the local community to ensure services meet the standards set out in the strategy outlined in this strategy.

4.4 Integrated care

In society today, people are living longer but in poorer emotional and physical health. For young people in Devon, mental health and wellbeing is their top health concern. For people of working age, particularly from lower socio-economic groups multiple comorbidities is a reality. In the older age group complex health needs and frailty are significant factors. Across all ages, where people have multiple or complex needs, the value of integrated responses is well recognised at national policy level as well as locally.

4.4.1 Integrated experiences

Why is this important for health and wellbeing?

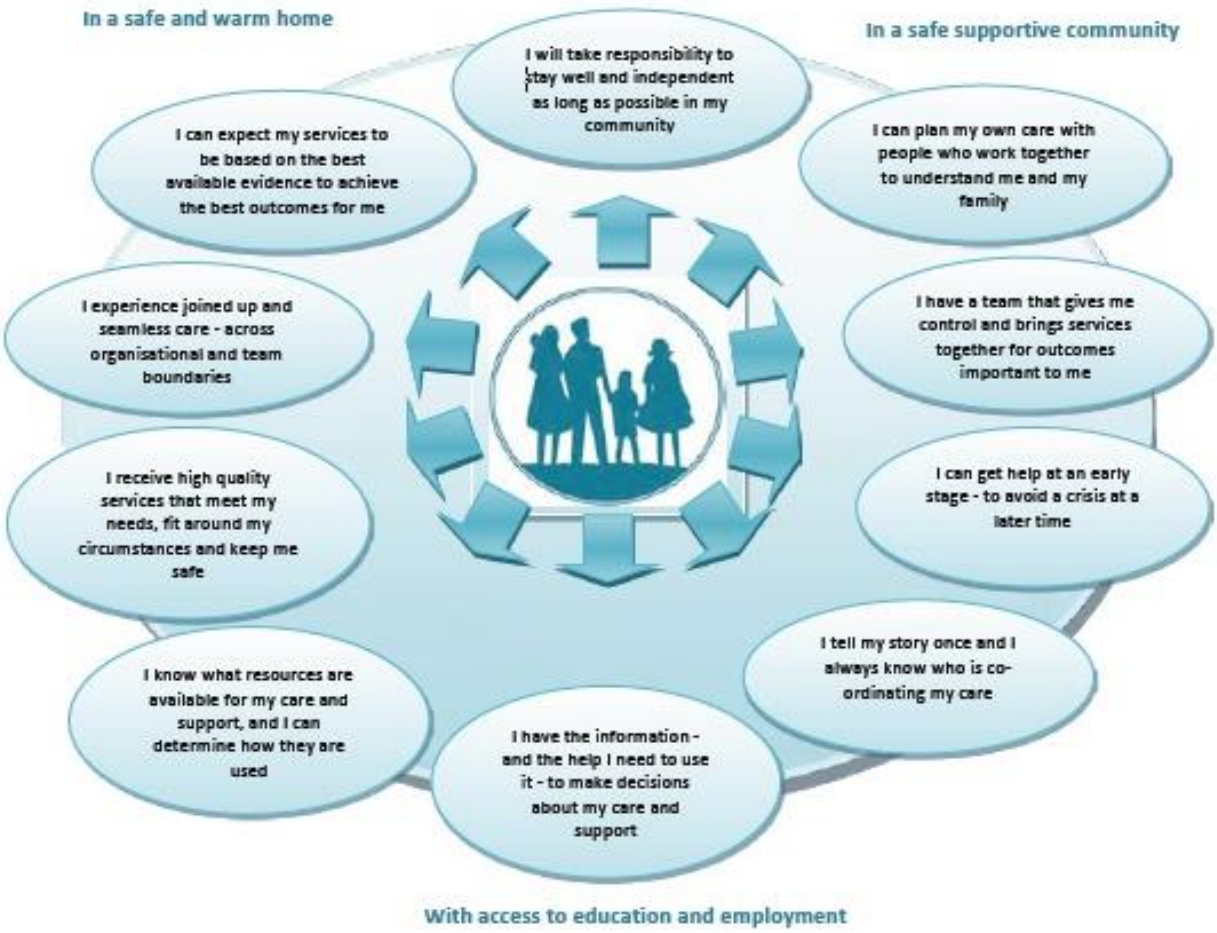
Health systems are complex often with a range of organisations or teams involved in a person's care. During extensive engagement across Devon in 2013/14 people said that experiences of care were still too fragmented and a key strategic priority is to achieve co-ordinated and joined up care and support designed around the person so that services are easy to use, navigate and that the support is right for the person. Joined up care can improve individual experiences and also save money by reducing duplication and hand-offs in care.

[32] file://newdccg/Users/Home/ivesc/Downloads/LD%20strategy.pdf

What is the contribution to the issue?

The strategy needs to identify how patient expectations will be balanced with the need for sustainable healthcare. In 2014, the CCG developed set of principles for integrated, personal and sustainable care. Working with commissioners in Devon County Council and Southern Devon and Torbay CCG, these principles were developed into a series of 'I' statements to set out what individuals should be able to expect from integrated care.

The 'I' statements



What will this look like in Cranbrook?

As health and integrated health and social care services develop in the community it will be important to have a shared focus on achieving joined up care whether a person uses primary care, community services, public health services, and other Cranbrook based health and care services. In addition it will be necessary to ensure this joined up approach flows into secondary and specialist care when this is needed. In particular care will need to be taken to ensure co-ordination in transitions from children to adult services or between types of care.

4.4.2 Connected care

Why this is important?

The term connected care is used here to describe how the different parts of the health system can work to give maximum opportunity for integration as described

above. There is evidence that co-location brings benefits; this must be extended to include shared training, shared data, shared plans and shared approaches to delivery so that Cranbrook becomes a place- based leader in integrated care to give children the best start in life, and integrated, personal and sustainable services through life.

As set out in The Forward View Into Action: Paper-free at the Point of Care - Preparing to Develop Local Digital Roadmaps[33] the government wants all patients and care records to be digital, interoperable and real time by 2020.

What is the contribution to the issue?

Health systems are complex often with a range of organisations or teams involved in a person's care. During extensive engagement across Devon in 2013/14 people told us time and again that experiences of care were still too fragmented and a key strategic priority is to achieve co-ordinated and joined up care and support designed around the person so that services are easy to use, navigate and that the support is right for the person. Joined up care can improve individual experiences and also save money by reducing duplication and hand-offs in care.

What will this look like in Cranbrook?

Already work is underway to recognise the mix of services and connections that need to be established in Cranbrook. There is a unique opportunity of co-location in planning the buildings and services and the use of technology to achieve:

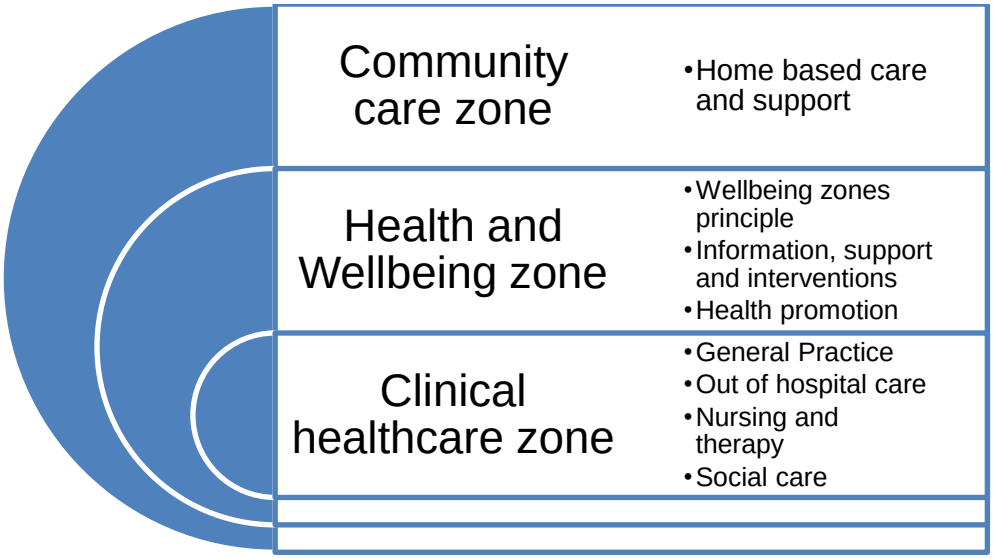
- Clinical integration through a facility that is targeted to a range of clinical care including General Practice, visiting clinical services linked to out of hospital care and other linked services e.g. social care. This would create a 'place to be seen' in the community for planned and urgent care and support that meets the standards required and becomes a true health and wellbeing hub in the community.

- Health and Wellbeing integration through achieving a health and wellbeing zone in a key community facility that people use such as the leisure centre, or in the heart of the town centre, that offers information, a range of group and cultural activities, health improvement interventions, and health care activities that do not require complex equipment. The principle would be to join up health and wellbeing with day to day life.

- Community integration through integrated approaches to supporting people in their own homes of sharing of records, use of digital solutions, and care practices that identify care co-ordinators to champion joined up care for people who need this. The model is home care where possible and this must underpin care services in Cranbrook.

To achieve this, three zones for integrated care will be established in Cranbrook:

[33] *https://www.england.nhs.uk/digitaltechnology/wp-content/uploads/sites/31/2015/09/digi-roadmaps-guid.pdf*



- Co-ordination of care services for defined groups of people (eg, older people, mental health, those with complex needs, transition from children to adult services 14-25)

- Co-location of services, staff, sharing of data and multi-agency training
  Give every child the best start in life

- Midwifery and public health services, shared clinical space in health settings and community settings for (antenatal) parenting programmes, speech and language, community paediatric nursing and therapists

- Parenting support – early years (children's centres) and public health nursing.
  High quality early years education and childcare. Enable all children, young people and adults to maximise their capabilities and have control over their lives.

- Modern information systems that bring together all of the relevant information available; from diagnostic tests and clinical notes, case histories, to records of personal preferences. Digital solutions will be explored, tested and promoted across service provision as innovations and new modern technologies develop.

- To make 'every contact count', embedding preventive and personalised support into day-to-day activity.

- Health improvement through complimenting core clinical services with access to citizens advice, job seeking support and training as well as access to other

- Strengthen the role and impact of ill-health prevention (primary prevention).

5. Next steps

5.1 Sharing the vision: communications, engagement and local champions

The NHS Five Year Forward View emphasises the need to focus on community engagement and empowerment in shaping people's own health and wellbeing. Barriers to community participation and action need to be removed or minimised to enable full involvement of the community in achieving a healthy Cranbrook. Physical measures need to be matched by community and stakeholder ambition, leadership and engagement.

A strategy that is meaningful to the community needs engagement of the community. Over the coming months partners working within Cranbrook will talk to key stakeholders and communities to develop how this framework for the future will be delivered. Activities will include:

- Set up a local partnership for health and wellbeing, in line with the Healthy New Towns programme
- Following public engagement on the strategy plans will be agreed that will delivery integration of health and wellbeing services in Cranbrook
- Local people and partners will be involved in an ongoing review and development of this strategy and in the plans that fall out of this strategy
- Consideration must be given to serving hard-to-reach groups.

5.2 Implementing, monitoring, evaluating and reporting the vision

This strategic framework sets out the aspirations for the design of a healthy new town and delivery of community health and wellbeing services in Cranbrook. It is a live document which will continue to reflect the rapid pace of development in health and social care.

Organisations responsible for planning, transport, housing, environmental and health systems aspire to work in an integrated way to address the determinants of health over time in Cranbrook. Staff will be needed to deliver the strategy; there may be training and/or capacity issues to resolve.

Work is needed to develop an action plan with strategic targets to implement and deliver this strategy. One of the first activities will be to plan the proposed physical infrastructure for health and wellbeing facilities.

Innovative use of digital technology is seen as instrumental to meet the raising demands on healthcare. Work is needed to plan and deliver this with key population groups.

A high standard of management, maintenance, monitoring and evaluation will be essential to ensure the long-term desired functionality of all spaces and infrastructure. In order to continually improve the effectiveness of service delivery, an

evaluation model will be developed to understand the impact of implantation of plans.

Profiling will be needed to monitor progress for the community after one year, five years and fifteen years. Modelling of specific questions raised by the strategic priorities will give an indication of progress. For example By using every contact with services in a pro-active and positive way based on today's population in Cranbrook, additional wellbeing opportunities will be created. Modelling could give future projections to estimate the minumum contacts that could have an impact. Opportunities abound for research projects working with Cranbrook's community in the short, medium and long term to study progress over time. Various models are available, including those where community researchers themselves have a role. An advisory group to co-ordinate evalusation and research would ensure community involvement in setting principles, ethics and skills development throughout the process.

5.3 What will success look like?

As part of NHS England's healthy new towns programme, Cranbrook's development can be benchmarked against other new developments, while local population profiling will provide data to indicate progress over time.

Cranbrook will develop into a healthy, vibrant, attractive and sustainable town where people are enabled to stay as well as possible for as long as possible and where communities develop into strong, supportive and thriving networks. Overarching indicators will be that:

- Children and young people have a healthy start in life
- People of all ages have access to healthy lifestyles
- Health, wellbeing and care needs are met early on
- People can access care and support in the right setting at the time when needed.

Cranbrook will be an active town, with well-used green spaces; residents will enjoy strong social networks and places to meet. There will be a strong economy, with residents benefiting from local education, training and employment opportunities. There will be low levels of harmful drinking, high fruit and vegetable consumption and low smoking-prevalence particularly for young people. Specific indicators of success could include health outcomes such as:

- Co-commissioning of services
- Increased levels of self-care among residents
- Reduced use of A&E services
- Delivery of person-centred coordinated care
- Reductions of health inequalities
- Improvements to mental health and emotional wellbeing indicators
- Lower than national average rates of childhood obesity
- Lower than national average rates of adult obesity
- Increased use of active modes of transport for short journeys.

Conclusion

Cranbrook's development offers a unique opportunity to innovate, redesign, support and contribute to both a health enhancing built environment and a community in which New Models of Care can be introduced with a young population, without the constraints experienced in established urban areas. Implementing these goals will require collaboration between local authorities, NHS organisations, voluntary and community sector organisations, community leaders and most importantly, the community itself. Cranbrook presents a unique opportunity to work in this more joined up way and realise the potential to create one of England's Healthiest New Towns. Working as 'population health systems', collaborators would prioritise prevention, early intervention and innovation to achieve the shared goal of securing optimal health and wellbeing for all.

Appendix 1: Supplementary documentation and supporting activities

Future planning of the scope of health and healthcare will take into account a range of existing strategies and polices which align with this programme of work including:

- JSNA
- NHS Sustainability and Transformation Plan
- Success Regime
- Devon's Early Help for Mental Health service by prioritising mental health and wellbeing
- Devon's move more live well collaboration
- Cranbrook's population-profiling work and draft health and wellbeing strategy
- Enabling the vision of Cranbrook as the exemplar of sustainable travel in a new town
- National Childhood Measurement programme
- East Devon Public Health Plan
- Master Plan for Cranbrook
- Cranbrook's issues and options document
- Children and Young People
- Maternity
- Mental health strategy
- Carers strategy
- Learning disability Strategy
- Digital Roadmap.

And strategies from organisations including:

- South West Ambulance Trust
- Devon Partnership (mental health) Trust

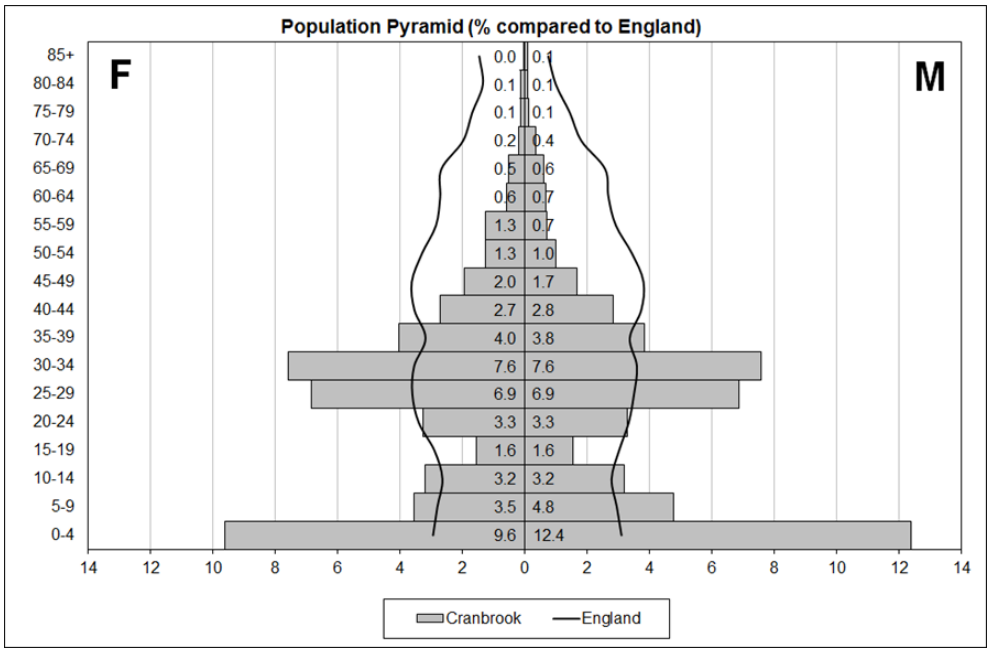
Appendix 2: Cranbrook: Understanding the Population Needs and Assets

Cranbrook: Understanding the Population Needs and Assets

In 2015 a needs assessment for Cranbrook was undertaken. This exercise was designed to establish the population structure and characteristics of the town, the emerging health and care needs and to predict future population growth and health and care needs. A Health Impact Assessment was produced in 2006 before development began, which assumed a community with similar characteristics to Exeter or wards within the city with slightly above average levels of social deprivation, such as Whipton, and this has proved to be broadly accurate to date.

Current Population

In mid-2015 there were around 1,070 occupied dwellings in Cranbrook with an estimated population of 2,500. The population structure, as illustrated in the population pyramid below is very young, with a high proportion of adults in the 25 to 34 year old age group, and a very high proportion of children under the age of four. The proportion of children aged between five and 14 is also above the national average and is likely to grow as the primary and secondary schools develop and expand. Only a small proportion are aged 45 and over, with very few above retirement age.



Source: Mid-2015 Cranbrook population estimate produced by Devon Public Health Intelligence Team, 2015

This structure is unlike any other community in Devon, including new developments, which whilst younger tend to be less extreme in profile. It does have strong similarities to the town of Cambourne in Cambridgeshire, a town seven miles outside of Cambridge which was initially developed in the 2000s and is around 12 years ahead of Cranbrook in relation to the phasing of development. The Cranbrook population is largely drawn from Devon, with around half coming from Exeter, a quarter from East Devon, with only around 5-10% of residents previously residing outside of Devon.

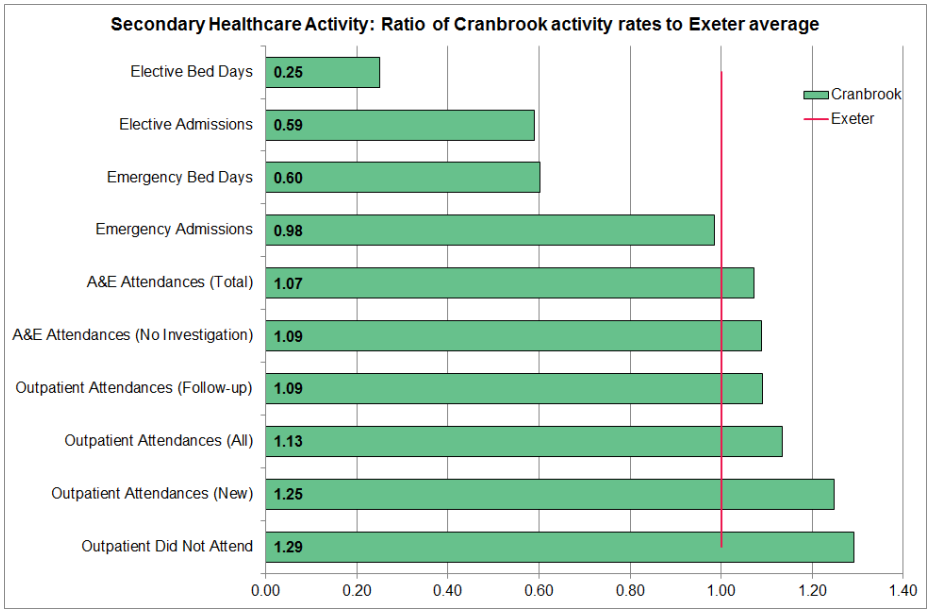
Social and economic characteristics

The current housing tenure of Cranbrook is 60% private, 20% social rented, 10% shared ownership and 10% 'low cost' rented. This is a relatively high proportion of affordable housing, most similar to the Mincinglake area of Exeter. As the community develops and expands the future tenure mix is likely to resemble Crediton or Cullompton. Jobseekers Allowance rates are consistent with the East Devon average, and benefit claimant levels are relatively low. Car ownership is very high, with the majority travelling to work by car, with Exeter as the main destination for work. Most residents consider it a good place to live with relatively low crime rates and no major environmental health concerns. Whilst deprivation indices are unlikely to be available for the town for some time, initial research suggests levels of socio-economic deprivation marginally above the Exeter and national averages, which is consistent with the tenure mix, population structure and urban nature of the community.

Emerging health and care needs

The pattern of health and care needs in Cranbrook is strongly influenced by the age profile of the area. Very low levels of long-term conditions and use of community-based social services are seen. Relatively high levels of smoking prevalence are seen in the area. The general health and care needs of the population relate to this age profile, with a focus on mental health and wellbeing, health-related behaviours, such as smoking, and sexual health, with considerable scope for interventions targeted on the primary prevention of disease and injury.

This is evidenced by an age standardised analysis of secondary health care activity rate highlights relatively high levels of 'front door' activity, such as outpatient and A&E attendance, but relatively low levels of higher intensity admitted patient care, particularly in relation to planned (elective) and low levels of bed days.

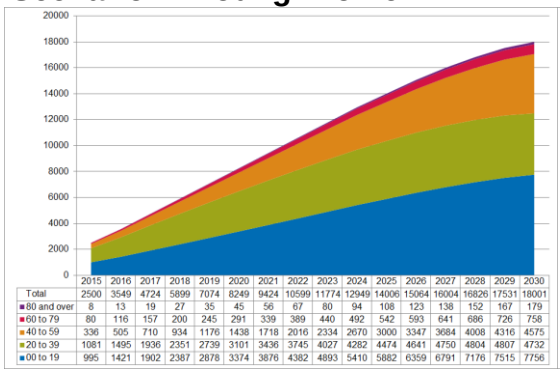


Source: Royal Devon and Exeter NHS Foundation Trust, 2015

Population projections

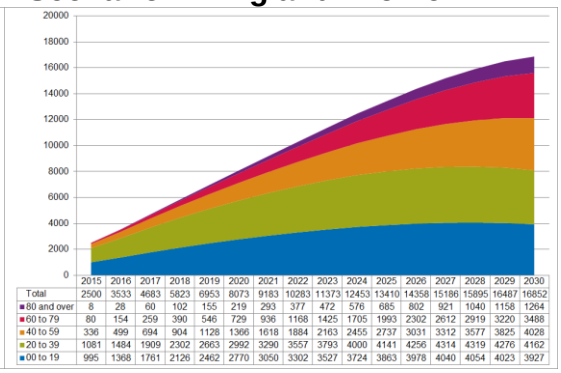
Population projections were created based on the current population structure of Cranbrook and planned housing developments between 2015 and 2030. Two alternative models of population growth were created. The first is the predicted growth based on only slight population ageing, and is based on the pattern of population change seen in Cambourne in Cambridgeshire. This would suggest a 2030 population of around 18,000 of which 70% would be under the age of 40. The second model is based on movement to the England population profile over the 15 year period, and predicts a smaller 2030 population of less than 17,000 of which 48% would be under the age of 40. The first model is the most likely scenario, with the 'England profile' projection unlikely, even with considerable intervention.

Scenario 1: Young Profile



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total	2500	3549	4724	5899	7074	8249	9424	10599	11774	12949	14006	15064	16004	16826	17531	18001
80 and over	8	13	19	27	35	45	56	67	80	94	108	123	138	152	167	179
60 to 79	80	116	157	200	245	291	339	389	440	492	542	593	641	686	726	758
40 to 59	336	505	710	934	1176	1438	1718	2016	2334	2670	3000	3347	3684	4008	4316	4575
20 to 39	1081	1495	1936	2351	2739	3101	3436	3745	4027	4282	4474	4641	4750	4804	4807	4732
00 to 19	995	1421	1902	2387	2878	3374	3876	4382	4893	5410	5882	6359	6791	7176	7515	7756

Scenario 2: England Profile



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total	2500	3533	4683	5823	6953	8073	9183	10283	11373	12453	13410	14358	15186	15895	16487	16852
80 and over	8	28	60	102	155	219	293	377	472	576	685	802	921	1040	1158	1264
60 to 79	80	154	259	390	546	729	936	1168	1425	1705	1993	2302	2612	2919	3220	3488
40 to 59	336	499	694	904	1128	1366	1618	1884	2163	2455	2737	3031	3312	3577	3825	4028
20 to 39	1081	1484	1909	2302	2663	2992	3290	3557	3793	4000	4141	4256	4314	4319	4276	4162
00 to 19	995	1368	1761	2126	2462	2770	3050	3302	3527	3724	3863	3978	4040	4054	4023	3927

Source: Cranbrook population projections 2015 to 2030, produced by Devon Public Health Intelligence Team, 2015

Future health, care and service needs

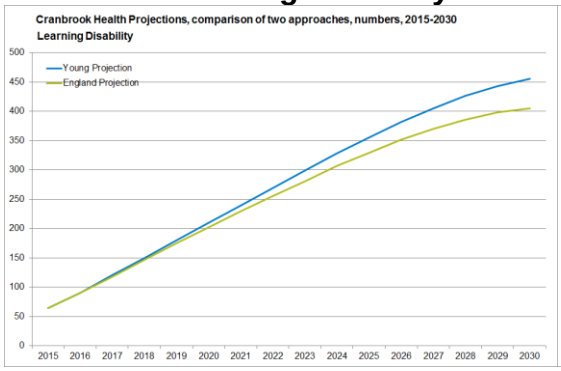
The future age structure of Cranbrook will be a major influence on the health, care and service needs of the population. However, the substantial population increase seen under both scenarios will mean that all conditions will increase substantially over the next 15 years. The table below sets out the numbers and percentage of the population with selected health conditions and health-related behaviours, both at present (2015), and in 2030. The table is ordered so the biggest differences between the two scenarios appear at the bottom. This highlights that under the more likely 'young profile' scenario (S1) the focus of health and care needs will relate to mental health, sexual health, health-related behaviours and conditions affecting younger people or affecting people uniformly across the life course such as learning disabilities, autistic spectrum disorders, asthma and epilepsy. Under the less likely 'England profile' scenario (S2) health needs would be more focused on long-term conditions such as diabetes, COPD, CHD, stroke, along with hearing and vision impairments and dementia. Under this scenario extreme differences for these conditions appear between the likely younger population scenario and the England profile scenario, highlighting that any intervention to balance the population to the England profile would require a much greater focus on care and treatment rather than prevention services.

Condition	2015 Baseline					2030 Projection							Increase *	
	No	%	Dev	Eng	Chart	S1 (n)	S2 (n)	S1 (%)	S2 (%)	Dev	Eng	Chart	S1	S2
Learning Disability	64	2.56%	2.39%	2.43%		455	405	2.53%	2.40%	2.36%	2.41%		7 X	6 X
Autism (ASD)	26	1.04%	0.98%	0.99%		185	168	1.03%	1.00%	0.99%	1.00%		7 X	6 X
Phobias (15+)	28	1.12%	1.05%	1.13%		190	180	1.06%	1.07%	0.97%	1.07%		7 X	6 X
New STI Diagnoses	24	0.96%	0.68%	0.80%		129	127	0.72%	0.75%	0.63%	0.75%		5 X	5 X
OCD (15+)	22	0.88%	0.85%	0.92%		149	148	0.83%	0.88%	0.80%	0.88%		7 X	7 X
Treated Asthma	64	2.56%	2.65%	2.74%		443	447	2.46%	2.65%	2.53%	2.66%		7 X	7 X
Panic Disorder (15+)	21	0.84%	0.83%	0.87%		138	141	0.77%	0.84%	0.79%	0.84%		7 X	7 X
Binge Drinking	284	11.35%	11.46%	12.13%		1907	1976	10.59%	11.73%	10.92%	11.72%		7 X	7 X
Depression (15+)	39	1.56%	1.87%	1.90%		296	309	1.64%	1.83%	1.77%	1.83%		8 X	8 X
Smoking	369	14.74%	15.93%	16.44%		2523	2704	14.01%	16.05%	15.39%	16.05%		7 X	7 X
Anxiety / Depression (15+)	158	6.31%	7.33%	7.40%		1108	1211	6.15%	7.19%	7.05%	7.19%		7 X	8 X
Anxiety (15+)	71	2.84%	3.56%	3.55%		533	583	2.96%	3.46%	3.42%	3.46%		8 X	8 X
Treated Epilepsy	6	0.24%	0.33%	0.32%		48	53	0.27%	0.31%	0.31%	0.32%		8 X	9 X
Obesity	363	14.50%	20.40%	19.45%		2888	3304	16.04%	19.61%	20.33%	19.61%		8 X	9 X
Diabetes	43	1.72%	5.26%	4.33%		400	802	2.22%	4.76%	5.74%	4.76%		9 X	19 X
Treated COPD	3	0.12%	0.45%	0.36%		30	67	0.17%	0.40%	0.49%	0.40%		10 X	22 X
Treated CHD	5	0.20%	0.90%	0.71%		52	135	0.29%	0.80%	1.00%	0.80%		10 X	27 X
Treated Stroke	2	0.08%	0.49%	0.38%		25	74	0.14%	0.44%	0.56%	0.44%		13 X	37 X
Hearing Impairment	43	1.72%	13.11%	9.82%		482	2068	2.68%	12.27%	16.61%	12.27%		11 X	48 X
Impaired Vision	4	0.16%	2.25%	1.59%		46	369	0.26%	2.19%	3.15%	2.19%		12 X	92 X
Dementia	3	0.12%	1.65%	1.16%		32	269	0.18%	1.60%	2.31%	1.60%		11 X	90 X

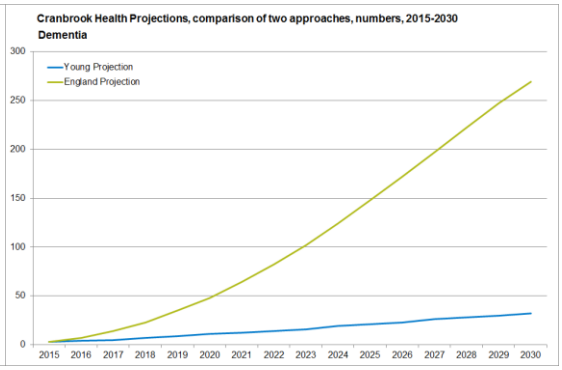
Source: Cranbrook population projections 2015 to 2030, produced by Devon Public Health Intelligence Team, 2015 applied to estimated prevalence rates by age from Dementia UK, Adult Psychiatric Morbidity Survey, Integrated Household Survey, Health Survey for England, GUMCAD, Symphony, POPPI, and PANSI. S1 is scenario 1 (young population) and S2 is scenario 2 (national profile). *The increase column is a multiplier i.e. 7 X (7 times higher).

Cranbrook Health Projections 2015 to 2030: Greatest extremes between scenarios

Learning Disability



Dementia



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November 2015

Appendix 3: Cranbrook: Enabling the vision of Cranbrook as the exemplar of sustainable travel in a new town

Enabling the vision of Cranbrook as the exemplar of sustainable travel in a new town: One which prioritises walking, cycling and other forms of active transport

Supporting Technical Document.

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Summary

There is a significant volume of evidence as to how to build more healthy and sustainable communities. Much of it has been drafted in the preparatory work for Cranbrook and is referred to in this report.

Mixed use developments which attract local trips within the new community and infrastructure planned to enable walking and cycling as the first option are central to achieving these aims. Establishing the physical infrastructure to embed and support these ways of living and moving is the opportunity presented at this relatively early stage in Cranbrook's development.

Healthy habits can be developed from the earliest possible opportunity. This will be particularly important for the generations of children who grow up in Cranbrook in enabling them to live fulfilling, long and healthy lives ; free from the burden of excess weight and from lifestyle diseases such as heart disease and diabetes which together bring suffering and premature death to those habitualised into sedentary lifestyles. Cranbrook can be an exemplar for physical activity and connectivity– not an area where car use removes people both from routine physical activity but also the important connections with others. Both are very powerful protectors against ill health and premature death.

Communities are largely comprised of streets and streets are an important part of the landscape of everyday life. People rely on them for such daily activities as travel, shopping, and interactions with friends and relatives. Much social life and learning occurs along streets. Good streets are democratic streets – streets that have meaning for people, invite access for all, encourage use and participation, are loved, and are well cared for by their users. [34]

The answer will lie in the detail. Will we build a community by the way we lay out the road infrastructure? Will we provide wide separated paths for cycle users which take them direct from A to B with short-cuts through the estates surrounded by beneficial green infrastructure to boost mental wellbeing? Will pleasant tree-lined paths with seating at regular intervals encourage walkers young and old to leave their car behind for short journeys in preference for a more social and cost-free alternative?

This is an opportunity to get things right- design in health and prosperity, be ready for the future with more modern ways of living, lead the way in terms of preventing and designing out diseases brought on by sedentary living and air pollution and realise the vision of creating a healthy and sustainable community in Cranbrook.

[34][1] Francis. M. The making of democratic streets, in Moudon, A. (Ed) Public Streets for Public Use, 1991. New York: Columbia University Press.

Cranbrook. A Test-bed for Prevention: helping people keep well

Building a new housing development that works for the health and wellbeing of its residents does not happen by luck. It happens by design which ensures that the new infrastructure supports people in active lifestyles and that they are easily and routinely able to connect with neighbours and others in their community.

People who have multiple connections in a place, including more friends and acquaintances, not only benefit from deeper trust in one another and a stronger sense of one's place in a community, but evidence shows that they also have better health, less illness and longer lives.[35], [36] Social capital is defined by the OECD as "networks together with shared norms, values and understandings that facilitate co-operation within or among groups". Social capital has been linked with better health in that the greater engagement and trust within communities the better the health outcomes.

> *"The more integrated we are with our community, the less likely we are to experience colds, heart attacks, strokes, cancer, depression, and premature death of all sorts… Over the last 20 years more than a dozen large studies . . . have shown that people who are socially disconnected are between 2 and 5 times more likely to die from all causes, compared with matched individuals who have close ties with family, friends, and the community."*[37]

Likewise, enabling active travel to be the easy choice for many local trips leads to substantial co-benefits which we ignore at our peril. For example, physical activity saves money by significantly easing the burden of chronic disease on the health and social care services, and by reducing absenteeism.[38] A feasible reduction in prevalence of physical inactivity can lead to major cost savings, with 37% of the savings arising in the health sector. By order of magnitude, the largest savings would benefit:

- Individuals
- The health sector
- Business and
- Government.[39]

UK research suggests that a switch to increased active travel even just for previous short motor vehicle trips i.e. up to 1.1 Km for walking and 1.9km for cycling (doubling of average distances now) could save £17bn in NHS costs over a 20 year period. The largest cost savings would come through reductions in the expected number of

[35] Berkman, L., Syme, L. 1979 Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents, *American Journal of Epidemiology*, 109(2): 186-204.

[36] Glass, T., de Leon, C., Marottoli, R., Berkman, L. 1999 Population based study of social and productive activities as predictors of survival among elderly *Americans, British Medical Journal*, 319: 478-483.

[37] Putnam, R., 2000 *Bowling alone: The collapse and revival of American community.* New York: Simon & Schuster.

[38] Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers, 2011. London: Department of Health.

[39] Confederation of British Industry/Pfizer, 2013 *Fit for purpose. Absence and workplace health survey 2013*. London: CBI.

cases of type 2 diabetes (£9bn).[40] More broadly still, the costs to society from road transport are substantial. In late 2009, the Cabinet Office estimated its costs to English urban areas. Based on excess delays, accidents, poor air quality, physical inactivity, greenhouse gas emissions and some of the impacts of noise, road transport is a drain of £38-49 billion pa.[41] Every new housing development has a role in helping to achieve more active lifestyles and design out some of the deleterious costs associated with road transport.

Such thinking is behind the NHS England Healthy Towns initiative, which invites leading local authorities, housing associations and the construction sector, to identify development projects where they would like NHS support in creating health-promoting new towns and neighbourhoods in England.[42] With around 200,000 extra homes needed to be built every year for the next five years, the challenges are significant, but as construction picks up, there is a huge opportunity to shape places to radically improve population health, integrate health and care services, and offer new digital and virtual care fit for the future. These areas are expected to show how this new approach will help:

- Build new communities that support social cohesion, physical and mental wellbeing, walking cycling and sports in place of our current 'obesogenic' built environments.
- Leapfrog old ways of providing community health and social care services by designing-in the use of new digital technologies to help people live independently in their own homes.
- Share land and buildings infrastructure such as new NHS clinics, schools, police and fire stations and other public services.

Cranbrook could provide the way, as a test bed, for such an approach to building new communities for better health. The first phase of Cranbrook does not meet the ambitions set out in the Cranbrook Health Impact Assessment published in 2007[43,] or entirely align with the emerging ambitions set out in the developing Master Plan , both of which describe a vision for a healthy community. We note the number of complaints regarding the quality of the built environment resulted in some community representatives being concerned about Cranbrook's future reputation and the success of future phases.[44] The risk is that we follow the past. UK suburbs created in the past 20-30 years have been shown to exhibit high levels of car dependence and low levels of active travel, compared to some of the older or mixed-age neighbourhoods which are less car-dependent and have high levels of active travel.[45] Such locations include Cherry Hinton and Trumpington on the edge of

[40] Jarrett, J., Woodcock, J., Griffiths, U., et al 2012 Effects of increasing active travel in urban England and Wales on costs to the National Health Service. *The Lancet*, 379: 2198-2205.
[41] Cabinet Office, 2009 *The wider costs of transport in English urban areas in 2009*, London: Cabinet Office Strategy Unit.
[42] https://www.england.nhs.uk/2015/07/01/healthy-new-towns/ accessed 9th October 2015.
[43] Cave, B. , Coutts, A., Gibbs, S., Pratt A, and Wheeler, B. 2007 *A Sustainable New community at Cranbrook. Health Impact Assessment: Technical Report.*
[44] Cranbrook Scrutiny Report, 2015.
[45] Barton, H., Horswell, M., Millar, P. 2012 Neighbourhood accessibility and active travel, *Planning Practice & Research*, 27(2), 117-201.

Cambridge, the outer London Borough of Barking, the Filton Avenue estates on the edge of Bristol, and Backworth and Shiremoor in Tyneside which tended to support walking to local services.

Getting it right from day One of Phase Two

Habits develop over time and these are triggered and reinforced by the physical environment (including infrastructure) and the social environment (including behavioural norms e.g.: perceptions of socially and culturally acceptable behaviour). There are UK examples to draw on which demonstrate how healthy lifestyles can be encouraged through innovative urban design. Some are cited in the background and Master Plan documents e.g. Dickens Heath, Solihull, or New Hall in Harlow.

Designing Cranbrook to enable healthy habits right from the outset is critical. Construction of the highways, housing and green infrastructure to maximise health and wellbeing is less compromised with new build developments as space is more readily available. Retrofitting, while possible, is harder, more resource-intensive and importantly, habits will have formed around existing infrastructure. However, retrofitting is particularly important within the first phase of Cranbrook, since relatively minimal time has elapsed and it is essential to ensure that all residents share in the health and economic benefits enabled in later phases.

The Chief Medical Officers of the UK note that for most people, the easiest and most acceptable forms of physical activity are those that can be built into everyday life.[46] Examples include walking or cycling instead of travelling by car, and using stairs instead of lifts. Regular physical activity is also a key contributor to energy balance, helping to prevent obesity and excess weight.[47] Transport systems and the wider built environment have a crucial part to play by either promoting or hindering people to achieve these physical activity targets.

So, in the detail, how do we achieve this? Take cycling: the spatial factors identified as being positively associated with cycling include presence of dedicated cycle routes or paths, separation of cycling from other traffic, high population density, short trip distance, proximity of a cycle path or green space and for children, projects promoting 'safe routes to school'[48]. Therefore to increase cycle use, infrastructure that separates cyclists from motor vehicles is needed. This is critical particularly in enabling women,[49] children and older people to feel confident to cycle regularly. In new developments there is often sufficient space to provide for 3.5 metre minimum width cycle paths grade separated from motor traffic.[50]

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[46] Department of Health, 2011 *Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officer.* London: DH.

[47] Public Health England, 2014 *Obesity and the Environment*. London: PHE.

[48] Fraser, S., Lock, K. 2010 Cycling for transport and public health: a systematic review of the effect of the environment on cycling, *European journal of public health*. ISSN 1101-1262 DOI: 10.1093/eurpub/ckq145

[49] Jarrard, J., Rose, G., Kai Lo, S. 2008 Promoting transportation cycling for women: The role of bicycle infrastructure, *Preventive Medicine*: 46(1): 55-59.

[50] London Cycle Design Standards, 2005 Transport for London http://content.tfl.gov.uk/lcds-chapter4-cyclelanesandtracks.pdf accessed

Improving or adding green spaces and tree cover improves air quality as well as making spaces feel more welcoming[51] and so to make cycling normal. To be 'normal', as we see below (addressing social norms) is a powerful way to establish or change behaviour. Changing social norms is likely to be the best means to address any poor habits which may have been established during the Phase One. Similarly, for walking: people walk more in places with mixed land uses, higher population densities and highly connected street layouts. These urban forms are associated with between 25% and 100% greater likelihood of walking.[52]

Highway design, including built-in traffic calming and 20mph speed limits, car and bicycle parking, trees, benches and priority to pedestrians crossing side roads - through speed tables at junctions (road raised to level of pavement)- then set the scene for safer and more democratic streets. Learning from countries which have achieved these aims denotes that streets should be well used and invite direct participation, provide opportunities for discovery and adventure and be locally controlled and broadly accessible to all.[53] Providing such facilities is not anti-car, but rather pro-choice , to provide a wider range of realistic travel choices, so that car, train, bus, cycle and walking are all modes of travel available to residents of Cranbrook. The wider benefits to society associated with increased use of walking and cycling instead of cars for short trips (under 5 miles) are multifarious (economic, health, environmentally sustainable). Figure 1 describes the potential impact of some of the related issues.

Figure 1 –Issues and impacts associated with walking and cycling

Issue	Impact
• **Traffic congestion**	• Reduces
• **Local air quality**	• Improves
• **Carbon emissions**	• Reduces
• **Road casualties**	• Reduces
• **Social cohesion**	• Improves
• **Public Realm**	• Improves
• **Quality of life**	• Improves

Adapted from the National Obesity Observatory, A Briefing for Local Authority Elected Members (2013)

In providing an evidence based approach to how to help create healthy communities we have robust evidence of what needs to be done physically in order to help establish cultural and social norms based on healthy lifestyles. The following headings address some of the issues and dispel some of the myths that can act as barriers to achieving healthy communities and are described in more detail below:

- **The opportunities to use social norms for travel mode choice**
- **The economic case is strong for sustainable transport**

[51] Public Health England, 2014 *Everybody active, every day. What works – the evidence*. London: PHE.

[52] Sinnett, D, et al. "Creating built environments that promote walking and health: A review of international evidence." *Journal of Planning and Architecture* (2012): 38.

[53] Pucher, J., Buehler, R. 2008 Making cycling irresistible: Lessons from the Netherlands, Denmark, and Germany, *Transport Reviews*, 28(4): 495–528.

- **Residents want a safe environment where they and their families live**
- **Urban design**

The opportunities to use social norms for travel mode choice

- Social norm interventions focus on peer influences, which have a greater impact on individual behaviour than biological, personality, familial, religious, cultural and other influences
- Research finds that people do not consciously admit to the influence of such peers, for example, it has been contended that individuals sorely underestimate the extent to which their actions in a situation are determined by the similar actions of others. In examining the relationship between conservation efforts and beliefs about saving energy, saving money, benefiting future generations, and protecting the environment the strongest predictor of energy conservation was the belief that other people are doing it, despite the fact that it was rated as the least important motivating factor.54
- Once a 'critical mass' of people regards something as 'normal' the cost of conversion of new entrants into the behaviour is likely to drop dramatically as each new entrant is more likely to copycat an embedded 'new norm'. For example, if people believe that driving at 20mph is the 'normal, everyday thing to do', and that 'everybody else' is doing it, then they are more likely to adopt this behaviour.
- Social norming approaches fit well with a life-course approach which seeks the best start in life, including establishing healthy habits in the family – not least when they may be moving into a new home in a new location where old habits are naturally broken. Cranbrook, with a predominantly young population profile provides an excellent opportunity for enabling children to achieve a healthy start in life, principally through the establishment of the healthy habits of their parents, though supported by behaviours observed beyond the family.
- In promoting social norms, Welcome Packs in new homes are a tried and tested way to help new residents consider their travel options before habits become established and are then harder to change. Information about the local train station, paths and distances to it, timetables and sometimes free or subsidised 'Taster Tickets', and local walking and cycling maps, help to ensure new residents are confident of the range of choices available to them. However, supportive infrastructure is a necessity prerequisite. These have been used extensively across the UK, for example across the West of England during the Local Sustainable Transport Fund programme in locations in three of the local authorities (Bath & North East Somerset, Bristol, South Gloucestershire).
- Studies of the commute and of stress, find that active travel, followed by public transport use are the least stressful modes and that active travel is

[54] Nolan, J., Schultz, W., Cialdini, R., Goldstein, N., Griskevicius, V. 2008 Normative social influence is under-detected, *Personality and Social Psychology Bulletin*, 34: 913-924.

often reported as a positive experience in terms of stress management.55, 56, 57 Such information can be used to promote sustainable travel locally.

The economic case is strong for sustainable transport and green space

- There is unequivocal economic justification for investments to facilitate cycling and walking says the Department for Transport58
- The economic benefits of active travel are highly significant, with Benefit to Cost Ratios averaging over 5:1. The Department for Transport classifies schemes returning over £4 for every £1 invested as 'very high' value for money.
- Next to providing considerable health benefits, walking and cycling also play an important part as 'co-benefits' in reducing carbon dioxide emissions, conservation of land, air pollution (which kills at least 29,000 people a year in the UK)59, noise as well as traffic congestion – which contributes to economic prosperity
- Review evidence of 20mph speed limit, an important measure in residential areas for active travel use, finds that such speed limits are cost-effective.60
- Physical activity should be part of the school day for both its physical health and cognitive benefits. The physically active school journey can therefore contribute significantly to broader educational, health and economic goals on enhanced academic attainment, less air pollution and traffic danger (see Safe routes to schools).
- There is a major misconception about which mode users spend most money on local high streets. Car users clearly spend most at out of town locations which almost invariably designed around car use. This often results in them spending less in local centres. Indeed, research has found that as motorised traffic flow increases so does the proportion of vacant shops along that particular street.61
- Repeated research across Europe from Graz, Austria, to London Boroughs and the Gloucester Road suburban high street in Bristol finds that car users

[55] Paez, A., Whalen, K. 2010 Enjoyment of commute: A comparison of different transportation modes, Transportation Part A: Policy and Practice: 44(7): 537–549

[56] Olsson, et al, 2013 Happiness and Satisfaction with Work Commute, Social Indicators Research, 111:255–263.

[57] Wener, R., Evans, G. 2011 Comparing stress of car & train commuters, Transportation Research Part F, 14: 111-116.

[58] Department for Transport, 2014 Claiming the Health Dividend. London: DfT https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/371096/claiming_the_health_dividend.pdf accessed 6th October 2015

[59] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304641/COMEAP_mortality_effects_of_long_term_exposure.pdf accessed 12th October 2015.

[60] Cairns, J., Warren, J., Garthwaite, K., Greig, G., Bambra, C. 2014 Go slow: an umbrella review of the effects of 20mph zones and limits on health and health inequalities, *Journal of Public Health*, doi:10.1093/pubmed/fdu067
Abstract: http://jpubhealth.oxfordjournals.org/content/37/3/515 accessed 8th October 2015.

[61] Leicester Environment City Trust, 1993 Streets, traffic and trade: A survey of vacant shops sites in Leicester City Centre. Leicester: Leicester Environment City Trust.

often spend less on their local high streets than bus users, pedestrian and cycle users. Surveys by traders have found this to be the case and traders have since become strong supporters of improvements for mode users other than cars. 62

- Key ingredients for economically viable local centre include: Reducing speeds and traffic danger; widening footpaths, adding cycle lanes; improving public transport; "greening" the street.63
- Resale of homes by owners is also generally quicker for houses in close proximity to trees.64
- Home adjacent to or fronting green space areas can achieve 20% higher sales prices.65

Residents want a safe environment where they and their families live: 20mph default speed limit and safe routes to schools

- A safe environment is one of the top 5 most valued aspects of where people live, as reported in the Cranbrook Master Planning Workshop 13-14 July
- Physical activity and factors such as independent mobility are likely to be influenced by the type of neighbourhood (housing density, land use mix, available green space) as well as perceptions of neighbourhood. Parents may be much more likely to allow independent mobility of their children if they perceive their environment to be safe and traffic density to be low.66
- The British Social Attitudes Survey (BSA) continues to report that public opinion is pro-20mph in residential streets. For example, research in 2010 showed that 71% of British people support 20mph67 and this was 72% when the BSA reported last on the issue in 2012. A YouGov survey in 2013 also reported high levels of support for 20mph where people live.
- The top 3 reasons for people supporting 20mph speed limits are:
  - fewer serious accidents;
  - children can play more safely;
  - makes our streets more pleasant to live in68
- There is convincing evidence that 20 mph speed limits are effective in reducing accidents and injuries, motorised traffic speed and volume.69

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[62] National Heart Foundation of Australian, 2011 The benefits of making streets more walking and cycling friendly. http://www.planning.org.au/documents/item/4045 accessed 8th October 2015.

[63] National Heart Foundation of Australian, 2011

[64] Seila, A., L. Anderson 1982 Estimating Costs of Tree Preservation on Residential Lots. *Journal of Arboriculture* 8:182-185.

[65] Crompton, J. 2001 The Impact of Parks on Property Values: A Review of the Empirical Evidence. *Journal of Leisure Research* 33, 1:1-31.

[66] Reilly, J. (ed) 2008 Objective measurement of physical activity and sedentary behaviour, a review with new data, *Archive of Diseases in Childhood*, 93(7): 614-619.

[67] British Social Attitudes Survey 2010 and 2012 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209890/bsa-2012.pdf accessed 9th October 2015.

[68] Tapp, A., Nancarrow, C. 2014 *20mph speed limits: attitudes and behaviours compared for GB, Bristol, established 20mph cities and towns*, and non-20mph cities and towns, UWE and YouGov.

[69] Cairns, J., Warren, J., Garthwaite, K., Greig, G., Bambra, C. 2014 Go slow: an umbrella review of the effects of 20mph zones and limits on health and health inequalities, *Journal of Public Health*, doi:10.1093/pubmed/fdu067

- It is of note that there is a higher level of support for 20mph limits within the settlements with 20mph limit compared to Britain as a whole70 which suggests that support rises once residents see what 20mph limits means in the daily lives
- Children and young people's views are often absent when adults are designing and redesigning transport systems. Yet they have rights and often strong desires to travel sustainably as well as constructive views as to developing sustainable travel solutions. Children very largely support 20mph speed limits, if asked.
- Concern about child pedestrian injury has been linked to declines in children's activity and contribution to childhood obesity. Higher levels of physical activity are strongly and inversely associated with levels of fat mass in 12 year old children. An increase of 15 min/day in moderate-vigorous physical activity at age 12 is associated with around 10% lower fat mass in girls and a 12% lower fat mass in boys at age 14.71
- Robust evidence exists as to successful traffic interventions to reduce child pedestrian casualties. These invariably involve reducing vehicle speeds through traffic calming and speed limits. 72, 73
- Many children travel to school unnecessarily by car when they live close enough to be able to walk or cycle and can gain the health benefits as a result. The school journey is therefore a key means by which children can achieve the Chief Medical Officers' recommended level of at least 1 hour of physical activity per day.
- There is a significant positive relationship between physical activity, improved cognitive performance and academic achievement. There is convincing evidence that physical activity and fitness levels in school children is associated with better academic scores and improved classroom behaviour. 74, 75, 76

Urban design

- As noted in the Cranbrook Master Planning Workshop 13-14 July residents value Neighbourhood and External Appearance most with a Safe Environment also as a fifth most important item.
- As noted in the Movement and Health Workshop II Master Planning document, people say that it is quality, not quantity of streets and parks that will encourage them to walk more. Trees, seating at regular intervals, green

[70] Tapp, A., Nancarrow, C. 2014 *20mph speed limits: attitudes and behaviours compared for GB, Bristol, established 20mph cities and towns*, and non-20mph cities and towns, UWE and YouGov.

[71] Riddoch, C. et al, 2009 Prospective association between objective measures of physical activity and fat mass in 12-14 year old children: the Avon Longitudinal Study of Parents and Children (ALSPAC), *British Medical Journal*, 339: b4544 doi:10.1136/bmj.b4544

[72] Schieber, R, Vegega, M. 2002 Reducing childhood pedestrian injuries. *Injury Prevention*; 8 (suppl 1):i1–i10.

[73] DiMaggio, C., Li, G. 2013 Effectiveness of a safe routes to school program in preventing school-aged pedestrian injury, *Pediatrics*. (doi: 10.1542/peds.2012-2182).

[74] Fedewa A, Ahn S. 2011 The effects of physical activity and physical fitness on children's achievement and cognitive outcomes: A Meta-Analysis. *Research Quarterly for Exercise* & Sport, Sep; 82(3): 521-535.

[75] Trudeau F, Shephard R. 2010 Relationships of Physical Activity to Brain Health and the Academic Performance of School children. *R J American Journal of Lifestyle Medicine*; 4(2): 138-150.

[76] Van Dijk M, De Groot R, Savelberg H. 2014 The association between objectively measured physical activity and academic achievement in Dutch adolescents: Findings from the GOALS Study. *Journal of Sport & Exercise Psychology*; 36: 460-473.

space, informal play space, sufficient widths of footpaths, visible and attractive covered cycle parking in the streets and amenities and accessible storage in/outside homes and segregated cycle paths are some of the typical constituent parts of a quality design that need to form the basic fabric of the new housing estates. In the Vison for Cranbrook such features are visible in case study examples but largely absent from the phase one build.

- In the first phase of the development one of the clear challenges has been unregulated car parking. This issue can be largely resolved once the roads have been adopted, but better design, for example, a clear but unobtrusive mechanism to denote precise motor vehicle parking locations (such as a letter P in a sett) and better street lighting.
- Green space for informal play and recreation: Time spent outdoors with other children is an important source of physical activity after school. Interventions to increase physical activity may benefit from fostering friendship groups and limiting the time children spend alone. Physical activity during childhood confers health benefits throughout the lifespan. Children aged 5–18 are recommended to engage in at least one hour of moderate-to-vigorous physical activity (MVPA) per day, but the majority of children in the UK do not meet this target.77
- As noted in the Cranbrook Master Planning Workshop 13-14 July in the Design Brief a mixed use development was identified. Mixed use developments are important for providing local trip attracters within an area to encourage shorter trips and hence increased routine physical activity opportunities through walking and cycling. In addition, such developments provide reasons for people to informally meet others in the community and so build and maintain social cohesion.
- Higher connectivity can be associated with more frequent walking, partly because more utilitarian destinations are available in areas with well-connected street networks.78 This includes cycle paths and footways that link the estate to local trip generators (such as the local shop or play park) to enable shorter trip distances on foot and by bicycle. In such conditions even very car-predisposed residents tend use active travel more often than in more car-oriented neighbourhoods.
- Neighbourhood green environments where people can walk are likely to contribute to residents' physical and mental health.79 In addition, evidence shows that exposure to natural places can lead to positive mental health outcomes, whether a view of nature from a window, being within natural places, or exercising in these environments.

Conclusion

[77] Pearce, M. et al 2014 How children spend time with after school: associations with objectively recorded indoor and outdoor physical activity, *International Journal of Behavioural Nutrition and Physical Activity*, 2014, 11:45.

[78] Koohsari, M. et al 2014 Street connectivity and walking for transport: Role of neighborhood destinations, *Preventive Medicine* 66 (2014) 118–122.

[79] Sugiyama, T, Leslie, E., Giles-Corti, B., Owen, N. 2008 Association of neighbourhood greenness with physical and mental health: do walking, social coherence and local social interaction explain the relationships? *Journal of Epidemiology and Community Health*, 62: e9.

Cranbrook could provide the way, as a test bed, as an approach to building new communities for better health. Better health is intrinsically sensible in itself in order to reduce future ill health, suffering and premature deaths. However, it is recognised that other benefits need to be clear in the shorter term. These will include the value of a more attractive environment, particularly so for families with young children. If parents are able to be confident that their children are safe playing outside, they will have the benefit of happy and healthy children in place of the risk of highly sedentary children with poor physical activity habits.

More attractive housing estate areas, with high quality walking and cycling facilities, slow traffic speeds and green spaces including trees, are likely to be worth considerably more on the market than more traditional designs.80 Cranbrook can also be a blueprint for replication time and again in future developments and so providing longer term value for money to developers.

For local authorities there is, among a range of other issues, the reputational value of helping to build new communities which meet these economic and health criteria. A successful Cranbrook can bring with it kudos and confidence to move on to the next development opportunities with a recipe for success. In so doing it can also demonstrate how planning and public health working together can help to deliver to a higher quality than each on their own.

[80] Wall Street Journal, 2013 *How Trees Can Boost a Home's Sale Price*. October 10th.

Appendix 4: Health and wellbeing strategy implementation plan

To be developed