

Barnsley Out-of-hospital Workforce Report, June 2019



Contents:

1	Introduction	1
2	The approach adopted	2
2.1	Overview	2
2.2	Care functions.....	3
2.3	Skill mix.....	4
3	Future out of hospital levels of need.....	5
3.1	Population health drivers.....	5
3.2	Service transformation	6
3.3	Inequalities.....	6
4	The ambition	7
4.1	Introduction	7
4.2	The locality dimension.....	7
4.3	The mental health dimension	8
4.4	Working with the wider independent and voluntary sector	8
5	Workforce futures	9
5.1	The out of hospital workforce	9
5.2	Local community health teams	11
5.3	General Practice	15
5.4	Social Prescribing in the context of case finding and pro-active care	18
5.5	The GP Contract	19
6	Recommendations	20

Appendices:

Appendix 1: Discussion notes for out-of-hospital mental health services	i
Appendix 2: Discussion notes for locality integration	iii
Appendix 3: The Dearne.....	v
Appendix 4: Place based thinking and 'maturity' model	viii
Appendix 5: The technology dimension	xiii
Appendix 6: Model sensitivity – community nursing teams	xvii

Exec Summary

This report was commissioned by Barnsley CCG to set the scene for writing it's **out of hospital workforce strategy**. The project consisted of the mapping of the existing out of hospital workforce, the calibration of existing modelling tools developed by WSP to explore workforce futures, and engagement with a group of local stakeholders to sense check the emerging findings and to provide inputs to the workforce modelling. It ran from February through to May 2019.

The approach taken to developing this report is based on WSP's **SWiPe** framework. The distinctives of this approach include the rooting of future workforce requirements in local population health needs, the identification of impact from service transformation and the use of spreadsheet and simulation tools to explore the 'A' to 'B' journey of workforce transformation. A further distinctive of the **SWiPe** framework is the use of care functions and skill mix in shaping future requirements enabling stakeholders to be temporarily agnostic to organisational or professional boundaries when exploring future requirements.

Rooting this work in **changing population health needs** was made easier due to the fact that WSP had recently completed a separate piece of work with Barnsley to model future population health needs taking a 'cohort' approach, i.e. exploring the incidence and prevalence of conditions that lead to an understanding of the broad health status of a local population across four broad adult health segments, i.e. the healthy, those with single conditions, those with multiple and complex needs and those who are severely frail.

For the purposes of this out of hospital workforce project the most significant cohorts from this modelling were the frail and those who had complex needs. For the former group we demonstrated how even with prevention strategies to moderate the rate of progression to frailty (reduced rates of smoking, improved diet and physical activity) the proportion of the local population who would be severely frail would still grow from about 3.3% to over 4% by the mid 2030's and that the absolute growth in this cohort over the shorter term would be over 300 from an estimate of 6,374 in 2017 to 6,696 in 2022. The report also outlines its approach to factoring in service transformation objectives and makes recommendations as to future requirements around addressing inequalities.

Local engagement provided an invaluable contribution to developing this work, including the opportunity to develop assumptions that fed into the modelling, sense checking outputs and describing the ambition for out of hospital care. With regard to the local ambition three areas have been reflected in this report, the first two of which were explored at the second of two engagement events:

- The local ambition for greater **integration** as opposed to simply the alignment of services was significant – the report provides a simple expression of the 'ladder of integration' that could form the basis of discussion around the appropriate level of integration for different areas of out of hospital workforce;
- The **mental health** dimension to out of hospital care was emphasised with a number of roles and functions highlighted as being critical (note – at the time of this draft report we had not received baseline workforce intelligence for MH services);
- The importance of close working with the wider **independent and voluntary sector** was not covered in detail in this project but is recognised as a critical factor going forwards, hence the inclusion of an appendix describing their contribution to developing a sense of 'place'.

This report has identified an out of hospital workforce of **2,333 wte** across General Practice, Community and Mental Health services, Social Care and Children's services. We have described the potential for adult services to be organised at three levels, namely a core locality team, a locality network and District-wide staff. An initial review

informed by the nature of the care being provided and increasing evidence from elsewhere of moves toward greater integration at a local level, suggests that for Barnsley almost exactly half of the current community and mental health services and social care staff working in out-of-hospital services (excluding General practice and Children's services) could be delivered at this locality level either as part of a core team or a closely aligned network.

We believe there are two potential catalysts for change in taking this forward, namely the emerging Primary Care Networks (PCNs) and the existing Locality Nursing Teams (currently totalling 137.1 wte), which became the focus of the more detailed modelling work. When population change and service transformation were both taken into account our modeling suggested a growth in the Locality Nursing Teams workforce of **44.3wte by 2024/25**. We have recommended that this suggested investment be seen as a catalyst for change and transformation, coupled with a robust organisational development and culture change programme to promote local integration. The improvements in effectiveness and the efficiencies associated with greater integration and the adoption of new technologies over the next 3-5 years would then be expected to provide a return on this investment.

Our modelling work for the **General Practice workforce** follows a parallel approach in identifying changing population health needs and describing the skill mix necessary to meet this future need. It factored in whole population needs (i.e. including children and young people) and suggested an increase in workforce of **25.7wte by 2024/25**, about half of which could be supported by the new GP Contract. What is of most significance in this respect, however, is the significant reshaping of that workforce toward higher skill levels.

Our modelling work also estimated the required capacity in case finding, care navigation and **social prescribing** as a new and embedded function at the heart of future integrated working at a locality level. This modelling suggested a capacity requirement of **9.9wte by 2024/25**, some of which would be available through the GP contract (taking care not to double count with the note above).

The report makes the following recommendations:

1. **Locality/PCN working:** that the next stage of out of hospital workforce planning should reflect locality/PCN footprints and in particular adopt allocation and service development approaches that have the greatest chance of addressing health inequalities.
2. **Locality/PCN needs assessment:** that each locality/PCN team should be supported to undertake, or be closely involved in, the development of locality needs assessments that have the potential to inform local priority setting.
3. **Integration:** that the framing of the out of hospital workforce using the 'core', 'network' and 'district-wide' functions should form the basis for discussion about the ambition for integration across the services significantly increasing the capacity and capability of the workforce that is managed on an integrated basis by local leadership.
4. **Technology:** that a full review of the opportunities for adopting new technologies to contribute to new ways of working should be undertaken.
5. **Leadership:** that the leadership model emerging from the Dearne pilot is adopted and rolled out across the other five localities allowing for local flexibility and factoring in the role of the Clinical Directors for the PCN(s).
6. **Developing 'place-maturity':** that the role of the independent and voluntary sector in the context of 'place-maturity' be explored early on in the implementation of an out of hospital workforce strategy.
7. That the **community nursing function** is redesigned and strengthened to provide a further pillar on which to develop local integrated teams and that the

development of capacity and upskilling indicated in this report is fully costed against the anticipated benefits of reduced hospital activity and improved health outcomes and used as the basis for discussions with local education providers and as part of internal training and development commitments for SWYFT.

8. That the model of **social prescribing**, and in particular the additional capacity arising through the new GP contract, be developed in partnership across local areas to ensure clarity of purpose, effectiveness and anticipated outcomes.
9. That other **new roles** made available through the **GP contract** are developed in the context of joint working across practices, integration with the wider locality team and local needs.
10. That further work is undertaken as a matter of urgency to develop a robust strategy for supporting people with low to moderate **mental health needs** in the community and as part of the local integrated service, bringing together stakeholders from all sectors and ensuring a strengths-based approach.
11. That **HR and OD strategies** are developed in response to this 'direction of travel' in partnership across the system to ensure such things as aligned HR policies to support integrated working and a joint culture change programme that focusses on system rather than organisational needs.

1 Introduction

Barnsley CCG requested support in developing a strategic out-of-hospital workforce plan, which WSP were commissioned to undertake in January 2019. The project has run from February through to May 2019 and has included two engagement events that have helped to shape this report. Alongside this engagement WSP have worked with local stakeholders to gather and shape intelligence relating to the existing out-of-hospital workforce.

The context for the work includes the national development of Integrated Care Systems and the implementation of Primary Care Networks (PCNs) as part of the NHS Long Term Plan (January 2019), with the latter being supported by the new GP Contract. Barnsley is well placed to be able to understand and respond to local needs at this level through its locality/district-based patterns of work. The pilot project in the Dearne is showing the way locally and has been used to inform this work.

Fundamental to the approach adopted in developing this report has been a strong population health perspective. During the Autumn and Winter of 2018/19 WSP had worked with Barnsley Public Health specialists to calibrate an existing population cohort modelling tool that was able to generate demand drivers for future care needs. These were used to underpin our assumptions about what the future workforce requirements would need to be.

This project consisted of:

- The use and calibration of existing strategic workforce modelling tools developed by WSP to understand future needs for Neighbourhood working and in General Practice;
- The mapping of the whole out-of-hospital workforce and as a baseline from which to explore future workforce needs;
- Testing this process out with a group of senior stakeholders at two workshops held in March and April 2019;
- Reflecting the outputs from each of the above in this report as the basis for developing a comprehensive out-of-hospital workforce strategy.

The outputs from the work, as well as this report, include the presentation material prepared for the two workshops; data and assumptions gathered made available in a spreadsheet; and four tools that focus on the out-of-hospital workforce, as highlighted in Figure 1. The assumptions and outputs from these tools form a key part of this report.

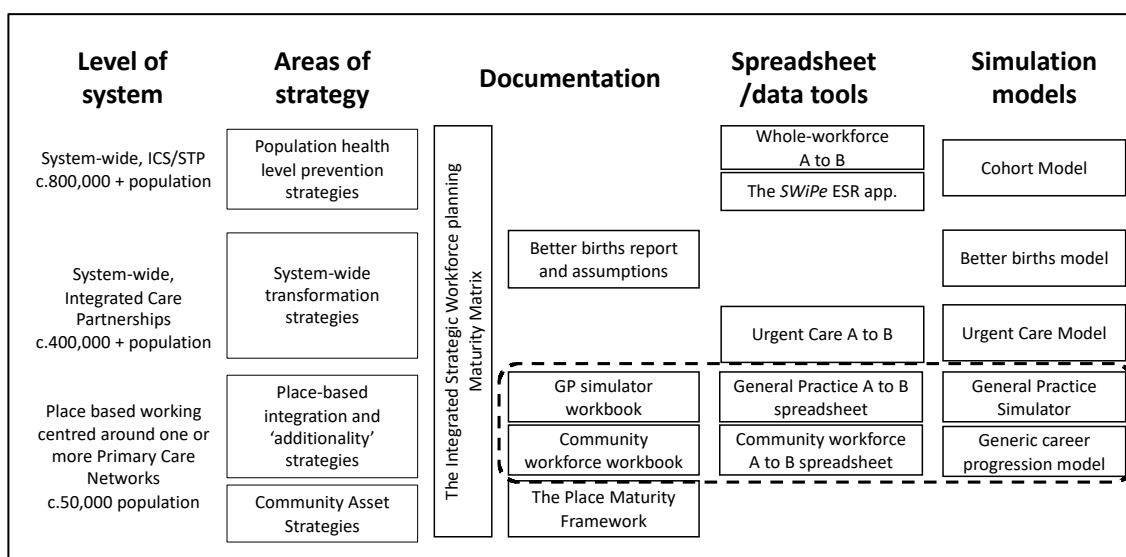


Figure 1 The WSP SWiPe toolkit for strategic workforce planning

2 The approach adopted

2.1 Overview

WSP has worked with a number of STP/ICS footprints in recent years to develop the SWiPe¹ framework for strategic workforce planning. The framework provides the umbilical cord between:

- Underlying **population health needs**, and how these will change over time;
- **Service transformation**, and how things will look different in the future;
- The **workforce transformation** necessary to respond to these challenges.

The main concepts used to facilitate this are:

- **Care functions**, that combine a number of tasks and activities into a coherent 'episode' or level of support irrespective of provider organisation, i.e. focussed on needs;
- Workforce **skill levels** (foundation, core, enhanced and advanced) that again focusses on need rather than professional groups.

The approach touches on all of the key ambitions described in the Barnsley Outcomes Framework. Strengthening the out-of-hospital workforce, and ensuring that they are sufficiently integrated to deliver improved outcomes for local populations, will contribute toward improved population health and wellbeing; can address inequalities if the capacity, capability and culture of local services are appropriately redesigned and developed; will enable more people to lead healthy and productive lifestyles including addressing some of the wider determinants of health; will address both physical and mental health challenges; will improve the quality of care and reduce reliance on hospital based services; will support people with complex or multiple needs including as they approach the end of life; and will make the care sector a better place to work and to learn.

¹ SWiPe stands for Strategic Workforce integrated Planning & evaluation and is a registered trademark of WSP.

2.2 Care functions

A care function is a group of tasks and activities that together deliver an outcome for a group of patients or clients. Examples include an episode of reablement, a rapid response to an urgent care need or the input necessary to assess, diagnose and resolve an emerging concern presenting in Primary care. The benefit of using the care function concept is that it is applied at a level of aggregation that encourages us to think about the care being delivered and not the organisation or individual profession providing input at any point in time.

Care functions do not, however, operate in isolation, the bigger picture being reflected in Figure 2. The challenge in developing a workforce strategy is that each dimension of the care function cube is changing over time, so we are constantly having to anticipate what is required. And we know that the workforce itself changes, ages, adopts new roles and needs to respond to new challenges constantly. This creates a truly complex and dynamic environment in which to plan for the future.

The care function map for out of hospital care, i.e. reflecting one 'slice' of the cube in Figure 1, is shown in Figure 3. The scope of the project, and the application of the modelling tools described later in this report, are framed in this illustration. It is designed to enable the whole of the out of hospital workforce to be reflected in the work, whilst also allowing for flexibility on where the internal system boundaries lie and therefore the extent of the focus that will be given to the District/Neighbourhood/PCN level of working at populations of 30-50,000. These factors are explored further in this report.

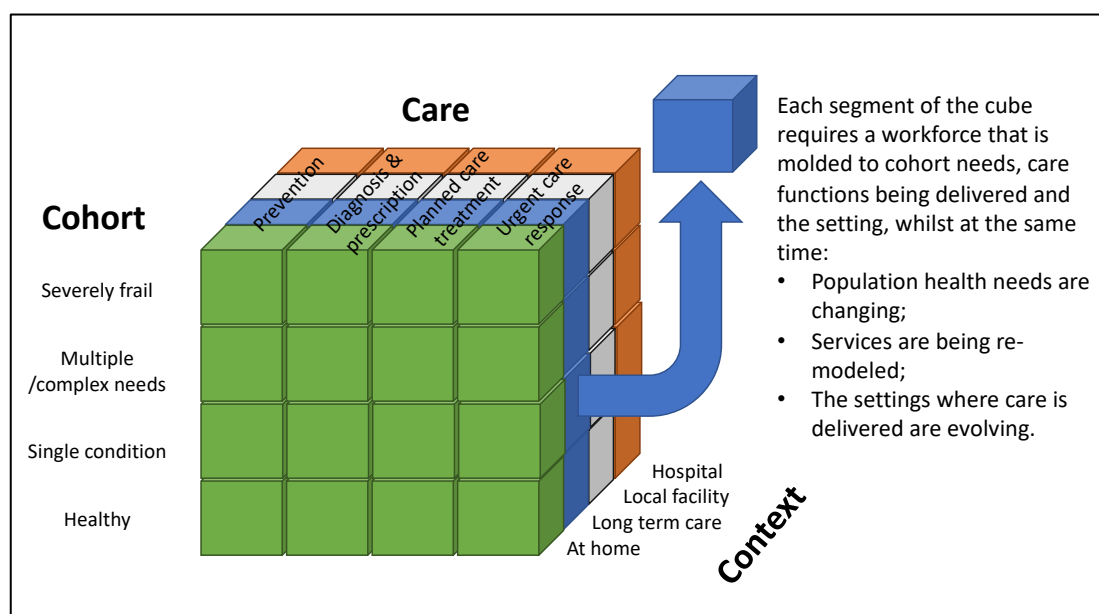


Figure 2 The care function cube

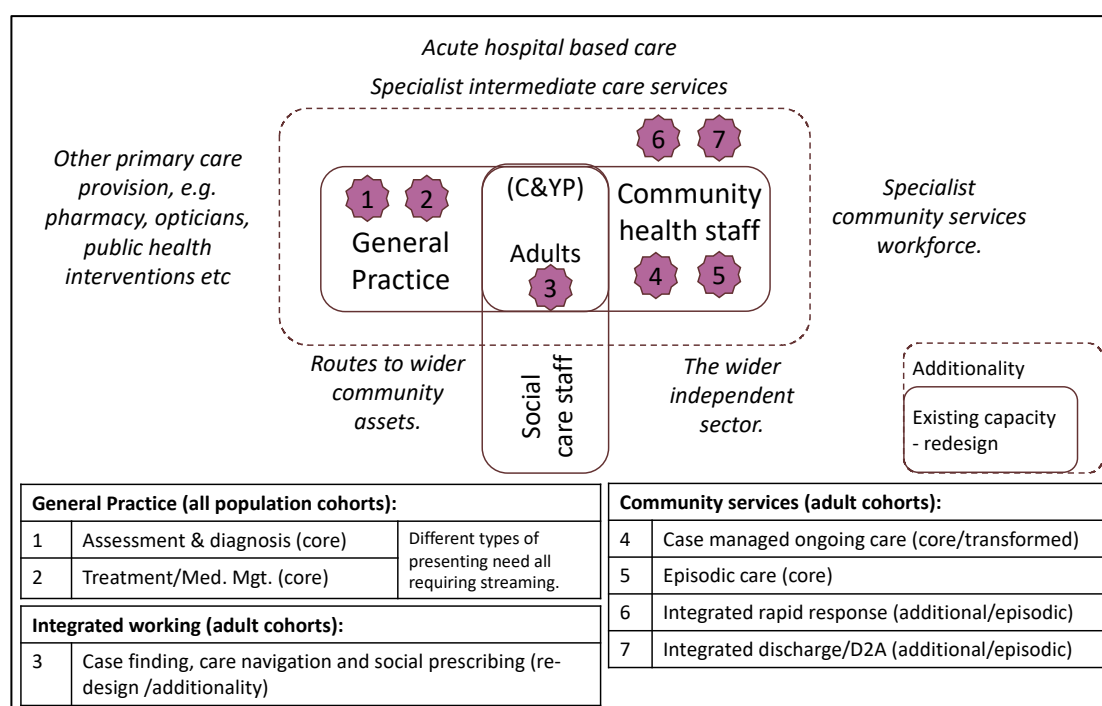


Figure 3 The care function map for out of hospital care

2.3 Skill mix

The skill mix dimension of the *SWiPe* framework is outlined in Figure 4. This is applied to the baseline workforce, but most importantly is used as the basis for discussions about the future workforce required to support the effective delivery of different care functions in the future.

Participants in the first of the two workshops for this project were provided with the skill mix descriptors above and the care functions shown in Figure 3 and asked to reflect on the ideal skill mix for each. They were provided with some examples from elsewhere and considered how current services were staffed, but the focus was on the future skill mix. Outputs from that exercise are incorporated into this report.

Group	Description
Foundation	This level of skill requires staff to have an understanding and awareness of work procedures which staff would be expected to have after induction and on the job training.
Core	An understanding and knowledge of work procedures that requires a level of theoretical knowledge normally acquired through formal training or equivalent experience.
Enhanced	Understanding of a range of work procedures and practices that require a higher level of theoretical knowledge and practical experience normally acquired through formal training or equivalent experience and applied in a specific area of need such as a single health condition.
Advanced	Knowledge across a range of work procedures underpinned by advanced theoretical knowledge acquired through extended formal education and training and practical experience.

Figure 4 Skill mix descriptors used in the *SWiPe* framework

3 Future out of hospital levels of need

3.1 Population health drivers

Changing levels of need provides an incentive to redesign, and a demand driver for the amount of care that will be needed in future. However, prevention strategies also have the potential to moderate growing demand, which has been demonstrated in the cohort modelling work undertaken previously in Barnsley. Figure 5 shows the change in the size of the four main adult population cohorts that drive demand. Between 2017 and 2022 the growth in the total adult population for Barnsley is about 3%, whilst the growth in the frail population is 5%, highlighting the growing demand from this cohort. Looking further ahead by 2037 the growth in the frail population compared to 2017 is 35%, over a third higher and an absolute change of c.2,200 more people who are frail.

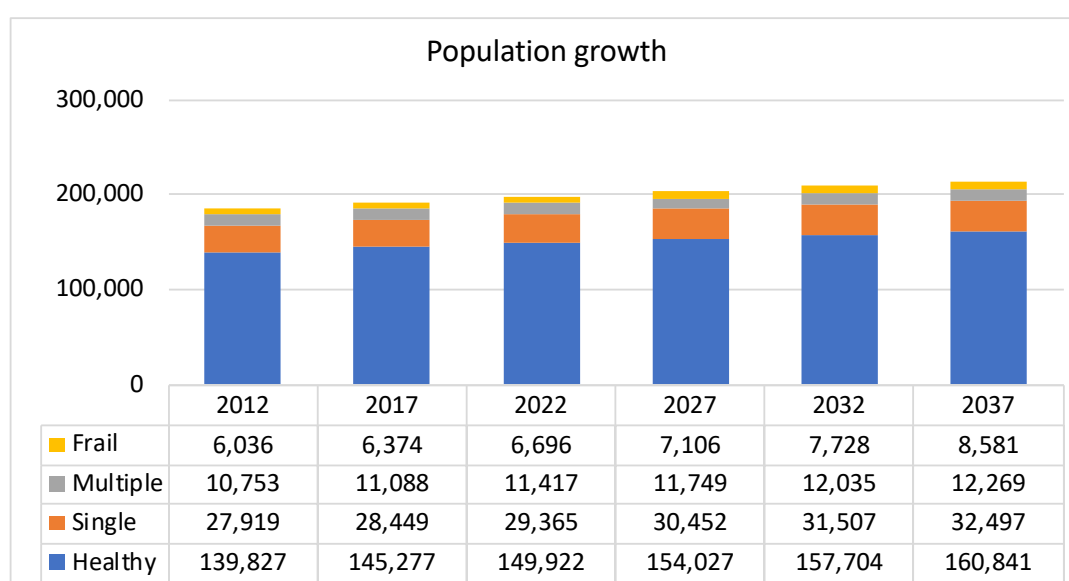


Figure 5 Population cohort changes over time for Barnsley

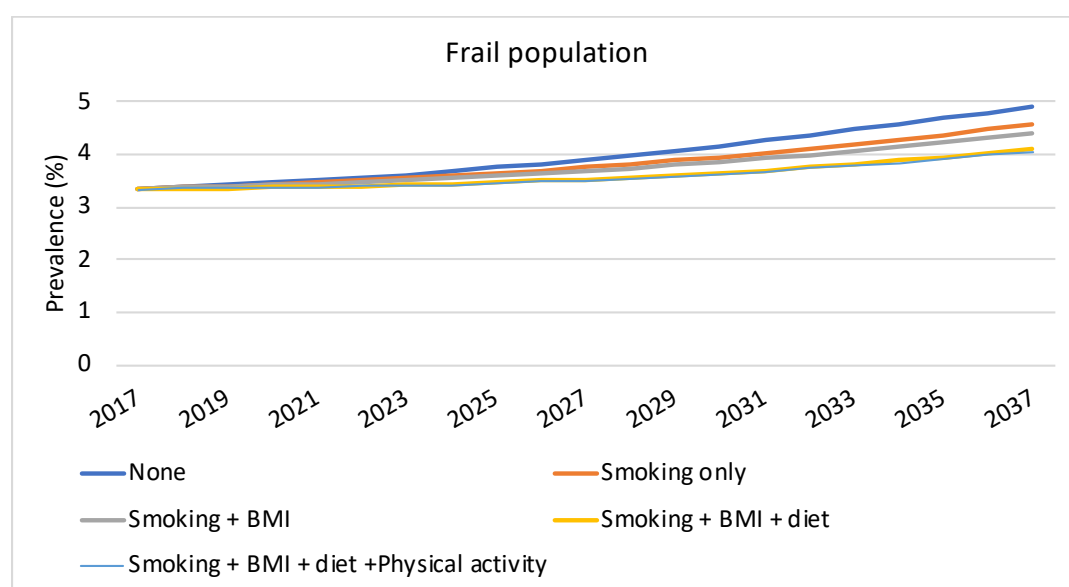


Figure 6 The impact of prevention on the % prevalence of frailty in the adult population

The estimates in Figure 5 include a range of improvement targets relating to prevention strategies, for example continued reductions in levels of smoking and reversing trends in

obesity through factors such as increased physical activity. Figure 6 shows the alternative to not achieving these prevention strategies. It is important to note that even with prevention strategies having their impact the growth in the proportion of the adult population who are frail will still continue to grow. Our workforce modelling is therefore provisionally based on achieving these reduced levels of growth in the prevalence of frailty.

3.2 Service transformation

In addition to the demographic drivers, national policy and local expectations are that services will change in ways that mean:

- More care being delivered in out of hospital settings either through explicit transfer of functions or through improved 'reactive' care, i.e. diverting people away from the 'front door' of the hospital;
- There will be a greater emphasis on pro-active working with people identified as being at risk or vulnerable, resulting in fewer cases of urgent care needs presenting to the system;
- A greater emphasis on prevention amongst those at risk of progressing to higher levels of need, and therefore presenting for care at greater rates in the future, as reflected in the prevention strategies outlined in the section above.

Alongside the demographic drivers these transformation objectives can moderate future demand on acute services, but need to be factored in to the development of primary, community and social care services and therefore workforce. This is made explicit in this approach through the translation of current activity into a future shape of services in a way that dovetails with the workforce transformation approach outlined above. Further consideration will need to be given to factors such as technology changes (see Appendix 5), but the care functions provide the common currency to enable the translation from services to workforce and form the basis on which indicative costs and benefits can be assessed.

3.3 Inequalities

Addressing and potentially reducing health inequalities requires a mix of approaches and, we believe, a fundamental change in the culture and approach adopted by the 'out of hospital' workforce in conjunction with the wider society and local communities. The scope of this work does not extend to the detail of such an approach, although we strongly recommend that as the strategy is developed the opportunities to address inequalities is fully embedded into the implementation plans. We would recommend:

- That from the perspective of workforce capacity the District-wide outputs from this modelling are subject to a 'fair-shares' review based on the health needs of new PCN footprints, broadly coterminous with the District Localities;
- That the ambition for integration described in this report is underpinned by a strengths-based approach to community development as outlined in Appendix 4 to this report;
- That the evidence for interventions that look to address the needs of High Intensity Users and people who struggle to cope with multiple long-term conditions (patient activation), both groups being disproportionately represented in more deprived areas and having poorer health outcomes, are reviewed and suitable interventions embedded within the emerging future model.

4 The ambition

4.1 Introduction

Having reviewed the provisional workforce analysis and possible 'futures' at the workshop on the 26th April (see section 5), participants were asked to discuss particular challenges that had emerged during the project. Three significant areas were identified, two of which (the locality and mental health dimensions) were discussed at the event, with more detailed notes of those discussions contained in the appendices. The third area (wider community assets/CVS) was not tackled as we did not have appropriate representation at the event. A short section is included in this section but will need to be embedded in the work going forward building on both the role of the Social Prescriber and the lessons from Dearne and elsewhere.

4.2 The locality dimension

The question being addressed by this group focussed on the extent and nature of integrated locality (/PCN) working and in particular which care functions work best when delivered with a strong, local horizontal integration and which are best organised and delivered at a Barnsley-wide level. The group identified a number of general themes and a number of areas where greater integration should be explored as follows (see appendix 2 for more detail):

- Relationship building and leadership models for integration are a critical factor;
- Future arrangements need to remain flexibly and should not replace professional or organisational silos with geographical ones;
- Supporting local technology with appropriate administration, technology solutions and operating procedures was important;
- Areas where greater local integration could be explored included end of life care, continuing health care, therapy services and prevention and wellbeing services.

The over-riding impression having explored these issues in the discussion group was that there was a fair amount of alignment but little integration. In previous work by WSP we have used the concept of the 'ladder of integration' that describes the ambition and appropriateness of different levels of integration. This is reflected in Figure 7.

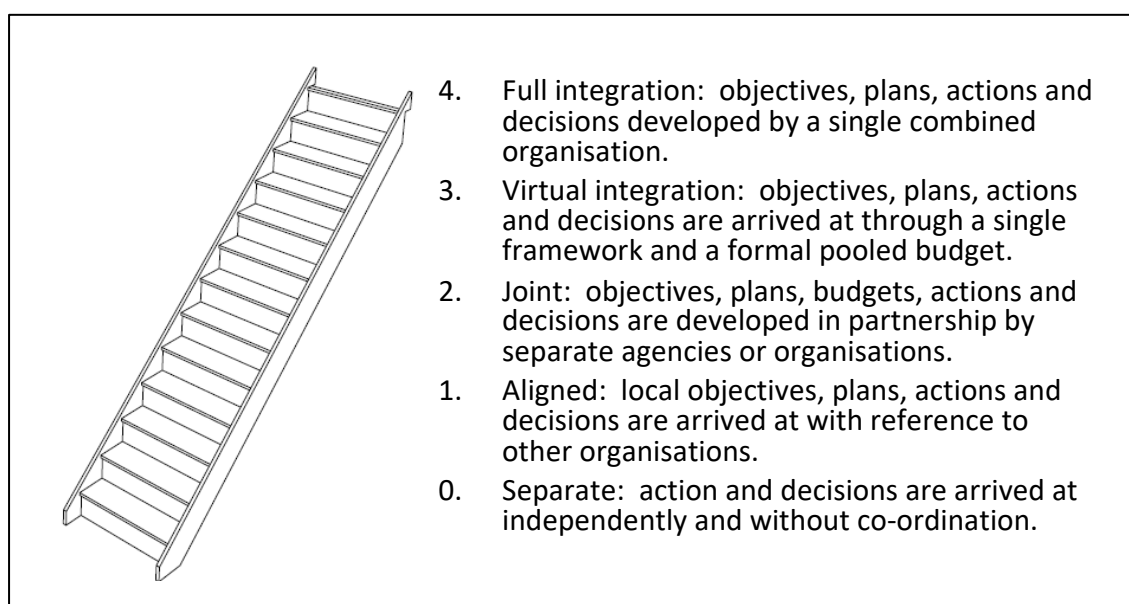


Figure 7 The ladder of integration

4.3 The mental health dimension

The question being addressed by this discussion group was ***how should out-of-hospital mental health services be embedded within the emerging picture of integrated locality working?*** The following themes emerged:

- Primary Care remodelling needs to ensure that the role of the Social Prescriber (SP) in mental health is designed to meet the needs of people suffering low-level mental challenges that are currently making repeat appointments to General Practice. This remodelling needs to take into account IAPT and therapeutic services working in tandem with Social Prescribers.
- The Community Psychiatric Nurse (CPN) role is important and needs to be undertaken in a more relational way working closer in partnership with Primary Care rather than the current system where advice and informal information is not routinely shared on a weekly basis. This means the working practice of CPNs needs to be changed to meet more low-level needs coming from Primary Care strengthening the preventative pathway. Co-locating some services into the PCN will help provide a better service and will ensure better links to SP services.
- Using Associate Practitioners more in Primary Care to support patients with mental health needs with more focus on managing a cohort of need will proactively reduce churn. The sum of this activity should transfer reactive activity to more proactive work for Primary Care Networks (PCNs) resulting in less GP appointments and less churn. This activity could be modelled using system dynamics to show changes over time and a projection of demand with the effects of service transformation.
- The Discharge to Assess Care Function could be strengthened by ensuring a more holistic mental health assessment that captured mental health issues such as those relating to loneliness and social isolation. More consultation with social care is needed to check that this isn't already happening and to ascertain how needs can be met in this area.
- Services in the acute area are experiencing 500 referrals a month with high DNA rates. People with non-acute or low-level mental health needs are in these referrals and need to be better treated through either the PCN (which will increase workload for the PCN) and/or through accessing a social prescribing model. Many of these cases are people suffering stress and these people are being medicalised, this may not always be the right solution for them.
- The Dearne model should be viewed as a possible model to work on. There are risks that the dependency cycle of medication could be swapped into the social model so using models of social prescribing that break the dependency model should be used (such as Asset Based Community Development).
- Taking a "population health management" approach to people with mental health needs will ensure the health system is better able to cope with demand. Creating a cohort could be done through identifying patients on anti-depressants and researching their needs and potential solutions will be useful in forming a more detailed strategy.

4.4 Working with the wider independent and voluntary sector

A third key area for the success of an out of hospital workforce strategy is how the statutory sector works with the wider independent and voluntary sector. The engagement approach in this initial piece of workforce modelling has not extended to this sector but we strongly recommend that this features in the strategy that will be based on the findings in this report. We have provided two appendices that frames the contribution that this sector makes to the development of a place-based approach (Appendix 4 on

Place) and how learning from the Dearne pilot about working with this sector could be applied (Appendix 3 on the Dearne). It is critical that such an approach:

- Embeds and values the contribution that this sector makes in the networks of support created through closer integration;
- Partners with this sector, particularly in the context of developments in social prescribing described in the NHS Long Term Plan, being sensitive to existing pathways to support;
- Uses a strengths-based approach to community development;
- Is sensitive to the changing demographics associated with the 'capacity to give back' in a given area through for example, volunteering, compassionate neighbours programmes and other means to harness and build resilience in local communities.

5 Workforce futures

5.1 The out of hospital workforce

The out of hospital health and care workforce is extensive and operates at different levels of geography and to varying degrees of 'connectedness' or integration. The boundaries that we have drawn around the workforce capacity are fluid, but we have focussed on the statutory sector provision for which local partners have direct responsibility, notwithstanding the comments made in the previous section on working with the wider independent and voluntary sector, which remains the case.

We have sourced workforce data from:

- NHS Digital and Barnsley Healthcare Federation for the General Practice workforce;
- Barnsley Council for Social Care and Community Development workforce intelligence;
- South West Yorkshire Partnership NHS Foundation Trust for community health services and Mental Health workforce;
- Additional workforce intelligence continuing healthcare staff, medicines management and social prescribing workforce;
- Barnsley Healthcare NHS Trust for outreach services from the hospital.

The focus on workforce futures means that we have then shaped this baseline workforce intelligence to reflect a future in which there is greater integration at a local level, although we have not at this stage suggested how the split between localities should be made. We are recommending that this be reviewed in the light of population health needs. We have therefore sought to describe the future out of hospital workforce as consisting of three 'levels':

1. A '**core**' locality team would have a high level of integration and strong local leadership.
2. A **locality network** would consist of services that need to be closely aligned but where separate management remains the most sensible option.
3. Services that are organised and delivered at a **District wide** level for reasons of specialisation, capacity or the nature of the care functions being undertaken.

At this stage this is a highly simplified and flexible framework, but one that assists in the ongoing discussion about workforce development and transformation in the context of integration. It therefore gives equal focus on both developing the capacity and capability within the workforce and the culture and ways of working necessary to optimise impact and improved both outcomes and the wellbeing of the workforce itself.

A first-cut/high-level assessment of the workforce at each level of the out-of-hospital system is shown in Figure 8. The total workforce comes to 2,332.7wte, with the potential for 806.7wte of this working in core local teams and a further 352.1wte in networks with a strong affinity toward their locality. This means that 1,158.9wte staff could be working in local systems of an average of just under 200wte per PCN/locality (see Table 1).

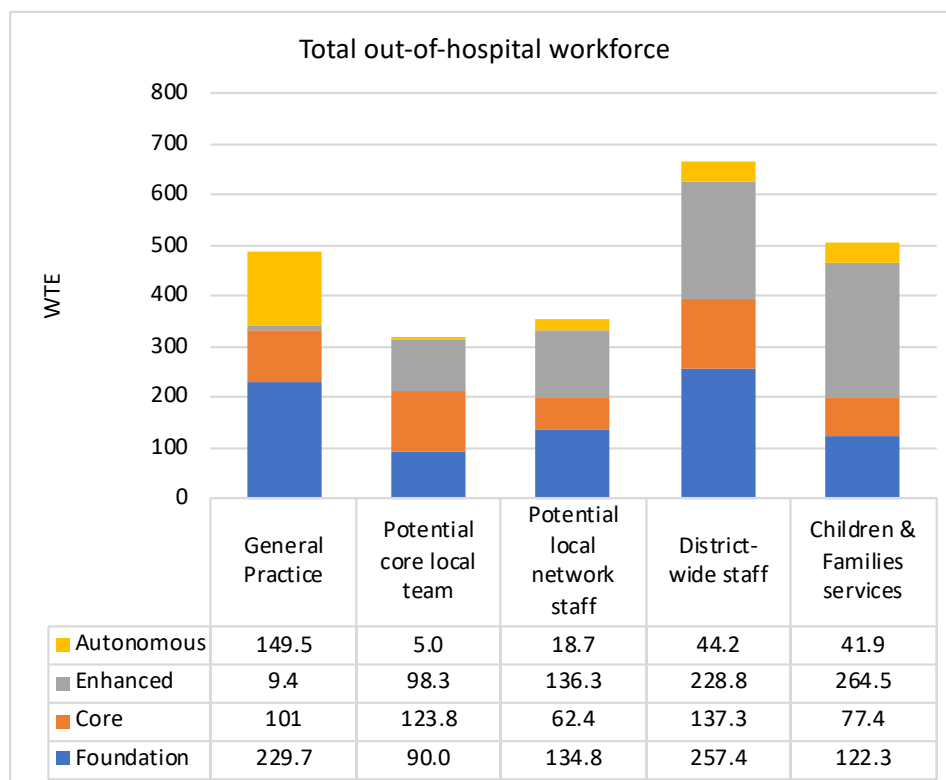


Figure 8 Total out of hospital workforce in scope by skill mix and system level

We are suggesting that the core teams consists of General Practice, community nursing, social care teams, social prescribing and IAPT and that the network includes specialist (therapy) health services, specialist social workers, public health prevention services, ‘Stronger Barnsley’ staff and CMHTs. This is shown in Figure 9 below.

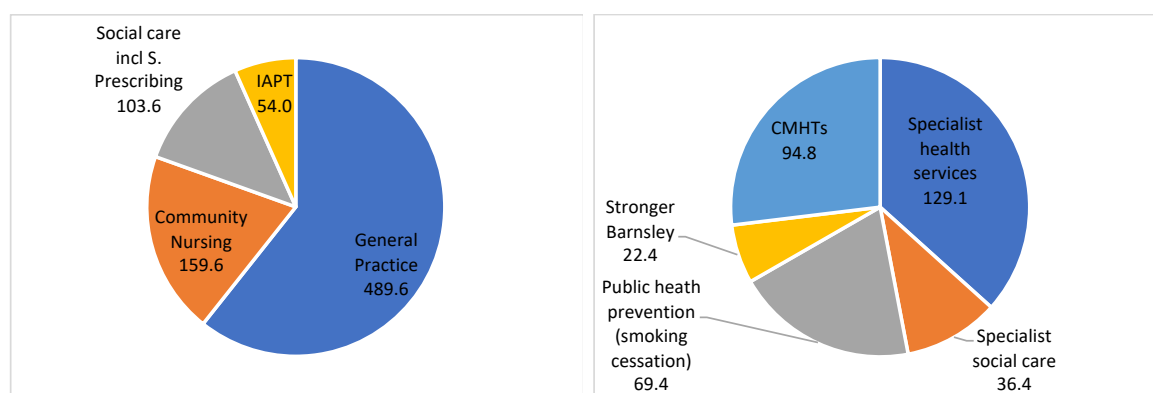


Figure 9 Suggested components of the core and networked staff for integrated locality working

Core PCN/locality workforce	Foundation	Core	Enhanced	Autonomous	Total
General Practice	229.7	101	9.4	149.5	489.6
Community Nursing	28.5	96.5	33.5	1.0	159.6
Social care incl S. Prescribing	26.8	23.6	49.2	4.0	103.6
IAPT	34.7	3.7	15.5	0.0	54.0
TOTAL	319.7	224.8	107.7	154.5	806.7
Local networks	Foundation	Core	Enhanced	Autonomous	Total
Specialist health services	42.4	17.4	68.3	1.0	129.1
Specialist social care	0.0	9.8	23.6	3.0	36.4
Public health prevention (smoking cessation)	57.6	7.8	4.0	0.0	69.4
Stronger Barnsley	1.0	1.0	14.6	5.8	22.4
CMHTs	33.9	26.4	25.7	8.9	94.8
TOTAL	134.8	62.4	136.3	18.7	352.1
District wide staff	Foundation	Core	Enhanced	Autonomous	Total
Admin	45.0	15.3	30.9	4.4	95.6
Specialist health staff/teams	41.7	37.7	52.4	3.4	135.2
Intermediate care & hospital discharge	26.2	27.5	30.4	5.7	89.7
Planned care outreach	0.0	2.3	13.6	4.0	19.9
Equipment & adaptations	18.3	8.6	4.8	0.0	31.7
Social care access	22.7	0.0	2.0	0.0	24.7
Wellbeing & enablement services	11.5	9.0	10.8	10.0	41.4
Social care commissioning	0.0	3.8	4.0	0.0	7.8
Public Health Specialists	5.4	4.4	18.7	4.8	33.4
MBC Learning Disability	42.0	0.0	10.8	0.0	52.8
Specialist social care staff/teams	0.0	0.0	1.5	2.0	3.5
Specialist Community MH services	44.5	28.8	48.9	9.9	132.1
TOTAL	257.4	137.3	228.8	44.2	667.8
Other out-of-hospital staff groups	Foundation	Core	Enhanced	Autonomous	Total
Children & Families	122.3	77.4	264.5	41.9	506.0
Totals	Foundation	Core	Enhanced	Autonomous	Total
General Practice	229.7	101	9.4	149.5	489.6
Potential core local team	90.0	123.8	98.3	5.0	317.1
Potential local network staff	134.8	62.4	136.3	18.7	352.1
District-wide staff	257.4	137.3	228.8	44.2	667.8
Children & Families services	122.3	77.4	264.5	41.9	506.0
TOTAL	834.2	502.0	737.2	259.3	2332.7

Table 1 The current 'in-scope' workforce for out of hospital care by skill level

5.2 Local community health teams

The analysis, modelling and engagement undertaken during this project has suggested that a dual strategy at the start of a transformation programme for out of hospital workforce would consist of developing the capacity and skills within the core neighbourhood nursing teams whilst also working on a model of stronger integration based on learning from the Dearne. The focus on community nursing provides a catalyst whilst the integration agenda broadens the scope and readies other parts of the system to undertake similar reviews of capacity and capability in the light of integration.

This section reflects the former of these strategies, i.e. it answers the question *how should the core community nursing teams be developed to meet these future needs*, and does so in the context of changing population health needs and the need to reflect wider service transformation objectives such as reducing reliance on hospital services.

Figure 9 illustrates how we have modelled the impact of demography and service change on the core community nursing teams. It suggests that for Barnsley:

- When taking account of the relative growth in the frail/complex needs cohort demographic changes to 2024/25 will add 5.8% to the level of expected community contacts and A&E attendances but a 9.1% increase in unscheduled hospital admissions – this compared to an overall population growth for Barnsley of 4.5%;

- That in making activity shifts consistent with NHS Long Term Plan and other STP footprints known to WSP there is the potential to reverse the growth in A&E attendance and moderate/cancel out any increase in unscheduled admissions.

To achieve these impacts, the additional activity for community nursing services will need to be identified, which is the focus of the next stage of the modelling.

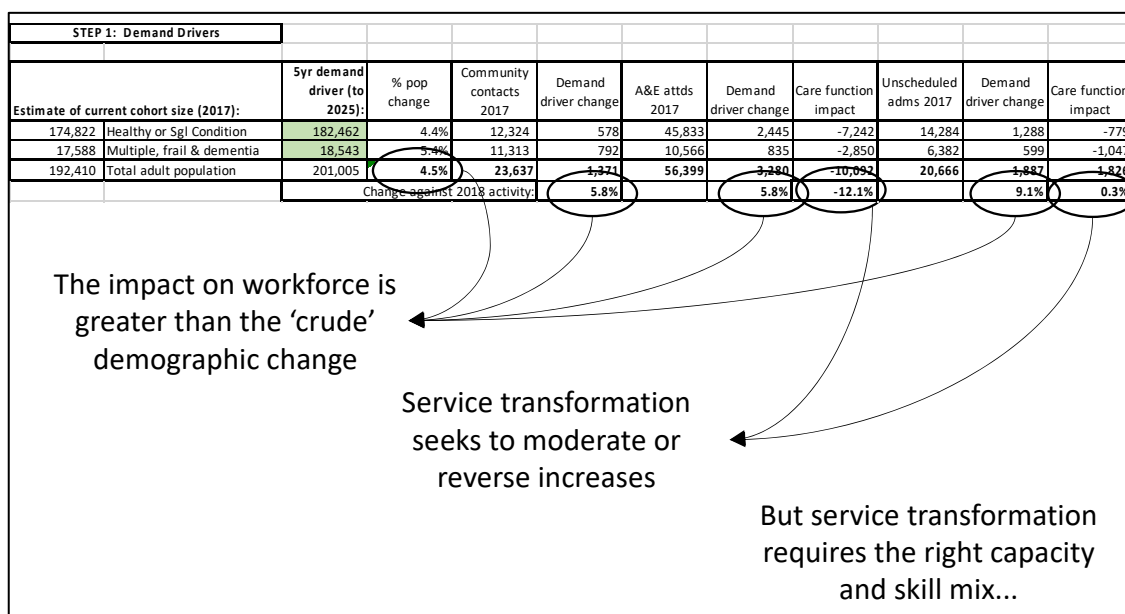


Figure 10 Demographic and service transformation drivers for the core community health teams

Figure3 identifies the key care functions that need to be adjusted to enable the shifts suggested above to take place, i.e.

- A shift toward ongoing case managed care with a higher skill mix for around half of the contacts made by community nursing, whilst sustaining the necessary capacity for episodic care for people not appropriate for ongoing case management;
- Additional capacity for reactive/rapid response for those whose care is case managed;
- Additional capacity for the final stage of the discharge pathway for those who are being case managed as their care packages are adjusted and revised to reduce the risk of re-admission of further unnecessary urgent care needs.

The capacity identified through this process is then translated into a future workforce according to the skill mix assumptions for each care function developed at the first of the two engagement events. These are shown in Figure 10.

Care function:	Foundation	Core	Enhanced	Advanced
Case managed ongoing care	40%	25%	30%	5%
Episodic care	40%	40%	20%	0%
Rapid response	38%	12%	12%	38%
Integrated discharge	45%	15%	35%	5%

Figure 11 Skill mix assumptions for community nursing care functions

When the additional capacity and future skill mix profiles are combined and compared with the in-post workforce for the core integrated community nursing teams you arrive at the picture reflected in Figure 11. This identifies a potential growth in wte community

nursing capacity of 44.3wte from 137.1wte to 181.4wte by 2024/25, with the elements of this growth attributable to the different care functions clearly identified (see Appendix 6 for a brief discussion on model sensitivities to assumptions). What is perhaps equally significant is the difference in skill mix that the future services model is expected to require, i.e. significantly less core skilled staff and more of both Foundation and then Enhanced or Advanced skills.

WSP are undertaking similar work in other areas and are therefore able to compare the existing workforce capacity and skill mix. Comparisons with total wte are difficult because what is defined as the core 'integrated community nursing team' will differ between locations. However, the skill mix variation is worthy of note, as illustrated in Figure 12 where it can be seen that Barnsley has the greatest reliance on 'core' skilled staff and is therefore further away from the type of skill mix identified in Figure 10 compared to these three other locations.

Workforce summary	Foundation	Core	Enhanced	Advanced	TOTAL
In-post workforce	23.6	96.5	16.0	1.0	137.1
ICT Gap	34.4	-49.0	20.0	2.5	7.9
Additional RR	5.7	1.8	1.8	5.7	15.0
Additional Int discharge	9.6	3.2	7.4	1.1	21.3
Total gap	49.7	-44.0	29.3	9.3	44.3
Future requirement	73.3	52.5	45.3	10.3	181.4

Figure 12 Workforce transformation for the core community nursing capacity

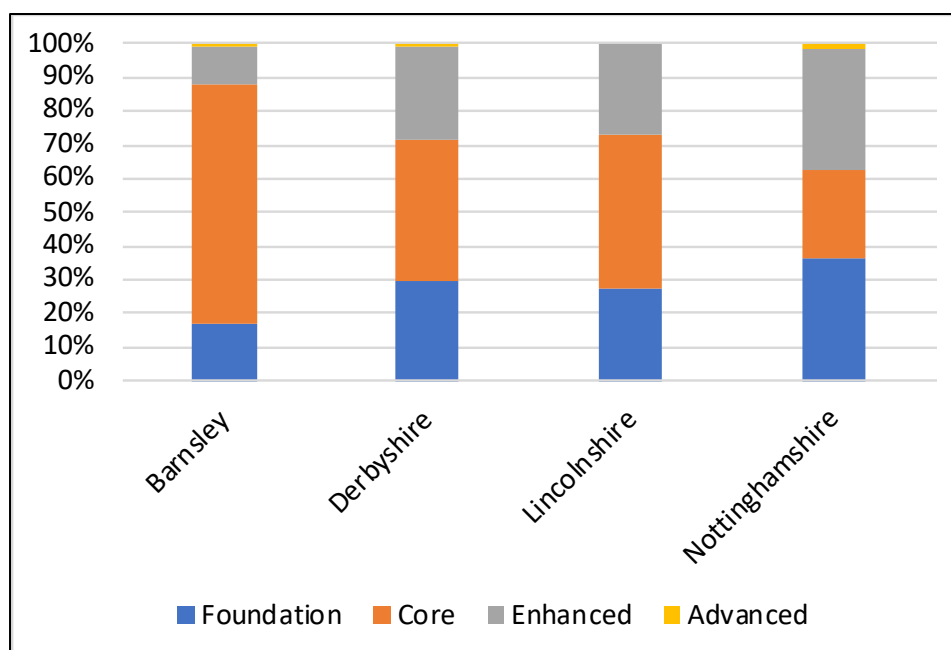


Figure 13 Skill mix comparisons for community nursing teams

We describe the first row in Figure 11 as the 'A' workforce, i.e. the starting point, and the final row as the 'B' workforce. Once identified we now need to explore the 'A' to 'B' journey, for which we use a simple system dynamics model that reflects the career progression for nursing staff through the different skill levels, reflected in Figure 13. This model takes account of a phased introduction of the new capacity and skill mix as well as the training requirements, including loss of capacity during training, attrition and staff turnover, to arrive at a simple set of outputs that can guide the recruitment and training programme. It also provides people with options to explore the benefits of training and upskilling as opposed to external recruitment and can therefore provide the basis for conversations with local training providers. This model outputs are shown in Table 2.

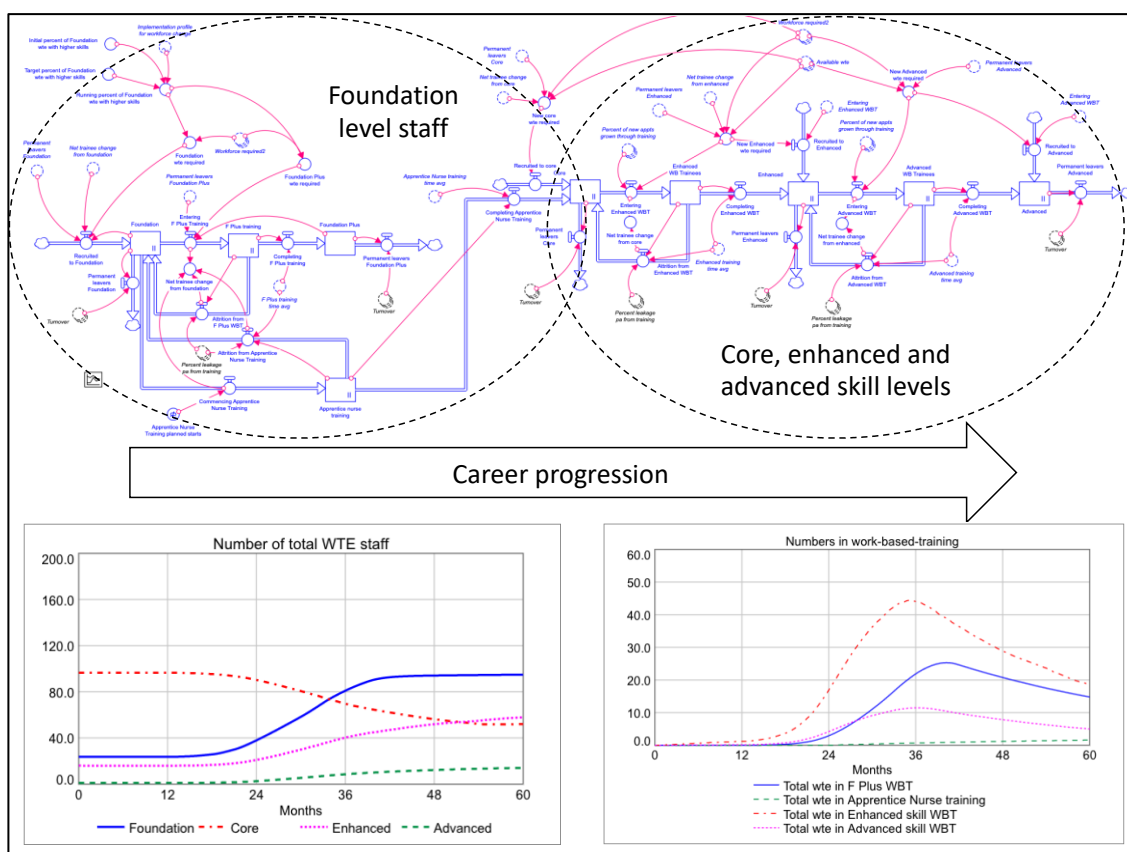


Figure 14 Plotting the workforce transformation journey for community nursing

	2019/20	2020/21	2021/22	2022/23
Recruit to Foundation	15.2	47.6	14.1	0.9
Recruit to Core	0.2	0.0	0.0	3.7
Recruit to Enhanced	4.6	10.6	0.4	0.0
Recruit to Advanced	1.1	2.7	0.2	0.0
	2019/20	2020/21	2021/22	2022/23
Foundation Plus trainee starts	3.1	22.8	6.8	0.0
Enhanced trainee starts	18.3	42.2	1.5	0.0
Advanced trainee starts	4.6	10.9	0.7	0.0

Table 2 Recruitment and training starts for community nursing to achieve the modelled future state

As suggested above, this workforce transformation programme for community nursing is designed to act as a catalyst for the wider development of local and integrated care. It should be carried out alongside a robust and thorough organisational development (OD) programme to embed new ways of working across what has been suggested as the core and network arrangements in a locality, as well as the close working necessary with General Practice.

This modelling, and experience from elsewhere, does not suggest that any significant shift of workforce is likely from hospital to community settings within the scope currently modelled. The reductions in A&E attendance are not likely to reduce staffing requirements and the moderation rather than reduction in inpatient admissions means that closing bed capacity is also unlikely.

Reductions in A&E attendances are in part factored into our modelling for the community and will also have a marginal impact on General Practice, although in the case of the

latter our experience suggests that additional extended hours capacity in General Practice is sufficient to accommodate any 'left-shift' of this type of activity. Other areas where there is, however, further potential to supplement capacity for out of hospital care from other sectors may include the planned/outpatient transformation programmes and the greater integration of mental health services for people who do not have severe and enduring needs.

It is recommended that these areas form part of the early implementation plans for the out of hospital workforce strategy.

5.3 General Practice

The tools used to explore workforce transformation for General Practice follow the approach outlined in section 2 of this report. This work was summarised at the second workshop and is reflected here. The data, assumptions and modelling tools that have been used to produce these outputs have been made available locally so that they can be adjusted in the light of local discussions and any new assumptions or future scenarios considered.

The logic-steps that this process has followed, and which are reflected in the associated spreadsheet tool, can be summarised as follows:

- ✓ Identifying the population health drivers relevant to General Practice, taking a whole-population (children and adults) approach and identifying relative rates of appointments from each population cohort, thus identifying a level of need at given future point, in this case 2025;
- ✓ Describing the care function response and the input required to address each case of presenting need;
- ✓ Considering the skill mix required for each care function;
- ✓ Identifying the future capacity requirement as the product of the above steps;
- ✓ Using a simulation model to explore the journey from the 'as-is' to the future workforce.

These are reflected in Figure 14, which shows the move from population health needs through care function delivery to skill mix.

The population health drivers, derived from the cohort modelling for Barnsley referred to earlier suggest an increase practice list sizes between 2018 and 2025 of c.4.2% (from c.243,000 to c.253,000) but a growth in estimated future capacity requirements for the resultant appointments of 4.8% due to the growing proportion of people with frailty or complex needs.

The distribution of appointments by cohort, across the care functions and by presenting need has then been estimated. This has enabled us to estimate a workforce capacity input for each appointment (total staff minutes per appointment, varied according to cohort and therefore the time required and typically in the range of 20-30 minutes averaging between 23-25 minutes). We have triangulated the product of these assumptions with the current wte workforce, taking account of non-patient facing time, holidays and sickness/absence as a final sense-check for the assumptions being used.

For each population cohort, care function and presenting need we have then applied the care function skill mix assumptions discussed at the first engagement workshop, as shown in Figure 15. This has enabled us to estimate the future workforce requirement by skill mix compared with the current 'as-is' workforce, taking full account of local demographic changes, as shown in Figure 16.

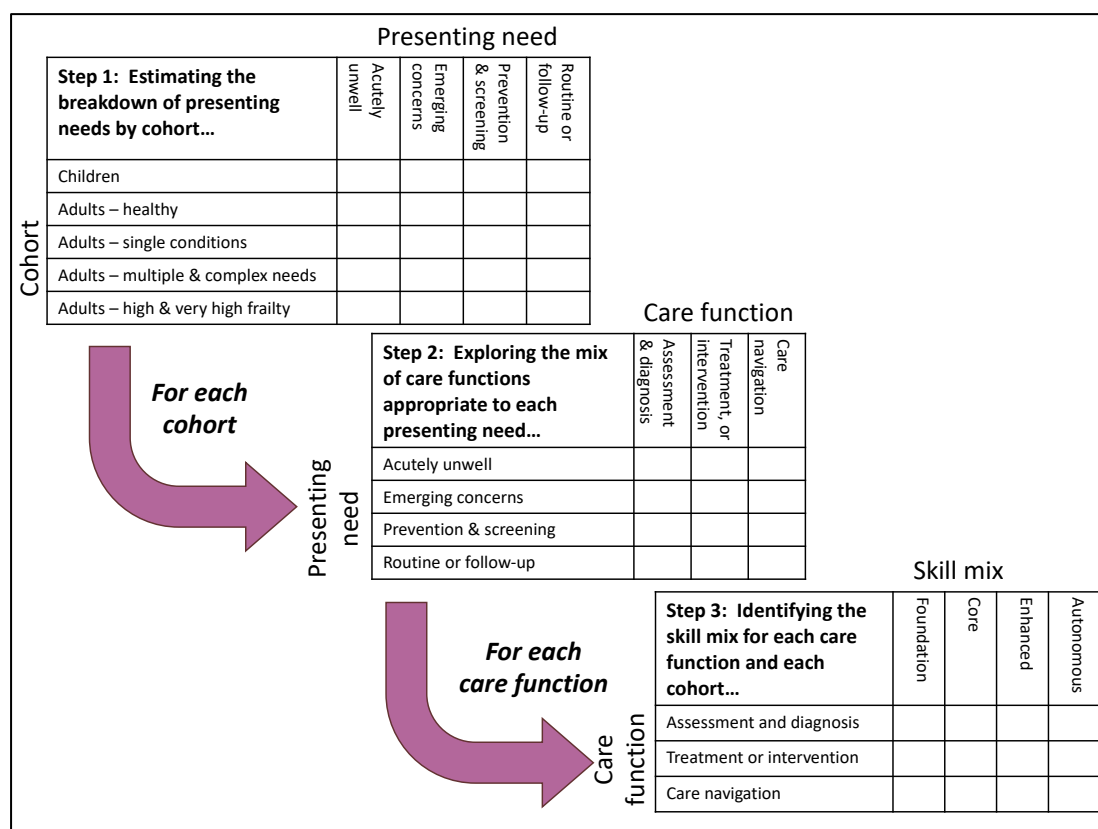


Figure 15 The logic for identifying future workforce requirements in General Practice

Care function	Presenting need:	Foundation	Core	Enhanced	Autonomous
Assess & diagnose	Acutely unwell:	45%	5%	5%	45%
	Emerging concerns:	20%	15%	15%	50%
Treatment incl Meds Mgt	Prevention & screening:	70%	20%	5%	5%
	Routine/follow-up:	50%	25%	5%	20%

Figure 16 Skill mix assumptions for General Practice by care function and presenting need

Whole workforce:	wte 2018	wte 2025	Change
Autonomous	149.5	199.4	49.9
Enhanced	9.4	45.1	35.7
Core	101.0	66.7	-34.3
Foundation	229.7	204.1	-25.6
TOTAL	489.6	515.3	25.7

Figure 17 As-is and future General Practice workforce as estimated by the modelling approach²

Figure 16 suggests that the General Practice workforce needs to grow by 25.7wte from the 2018 baseline to 2025 before consideration is given to additional activity and therefore capacity associated with 'left-shift' activity from hospital or greater integration with other locality services³.

² The 'as-is' workforce is based on NHS Digital data for in-post staff but excludes Practice Management and Estates.

³ Factoring in additional left-shift activity is currently out of scope of this project, although could be added in. In WSPs work elsewhere the impact of additional urgent care activity is relatively limited given that this area of transformation relies significantly on the development of alternative out of hospital pathways such as Clinical Assessment Services, Ambulance See and Treat and Ambulatory Care solutions. The potential impact of changing planned care activity shift also has the potential to impact on General

WSPs work in other areas provides a number of potential comparisons to sense check these outputs against. Figure 17 suggests that compared to three other areas where WSP has applied a parallel approach that Barnsley has a relatively high level of workforce, but lower ratio of GPs to population. This is illustrated further in Figure 18 where the % of the General Practice workforce that are GPs ranges from c.32% in Nottinghamshire to just c.22% in Barnsley. This is partly off-set by the non-GP autonomous skill level staff at c.8% in Barnsley compared to c.3% in Nottinghamshire. These figures suggest that the 'ambition' behind the assumptions and the future workforce requirements described in this report with respect to the need to increase skill levels significantly are well founded.

General Practice	Total pop	Annual appts	Total practice workforce	GP wte	wte/1,000 total pop	wte/10,000 appts	Pop/GP wte
Barnsley	243,206	1,435,780	489.6	111.5	2.01	3.41	2,181
Derbyshire	1,053,192	6,333,352	1835.0	560.0	1.74	2.90	1,881
Lincolnshire	755,021	4,399,870	1508.0	383.0	2.00	3.43	1,971
Nottinghamshire	1,036,797	5,824,225	1678.0	546.0	1.62	2.88	1,899

Figure 18 Comparison of the General Practice workforce to other areas

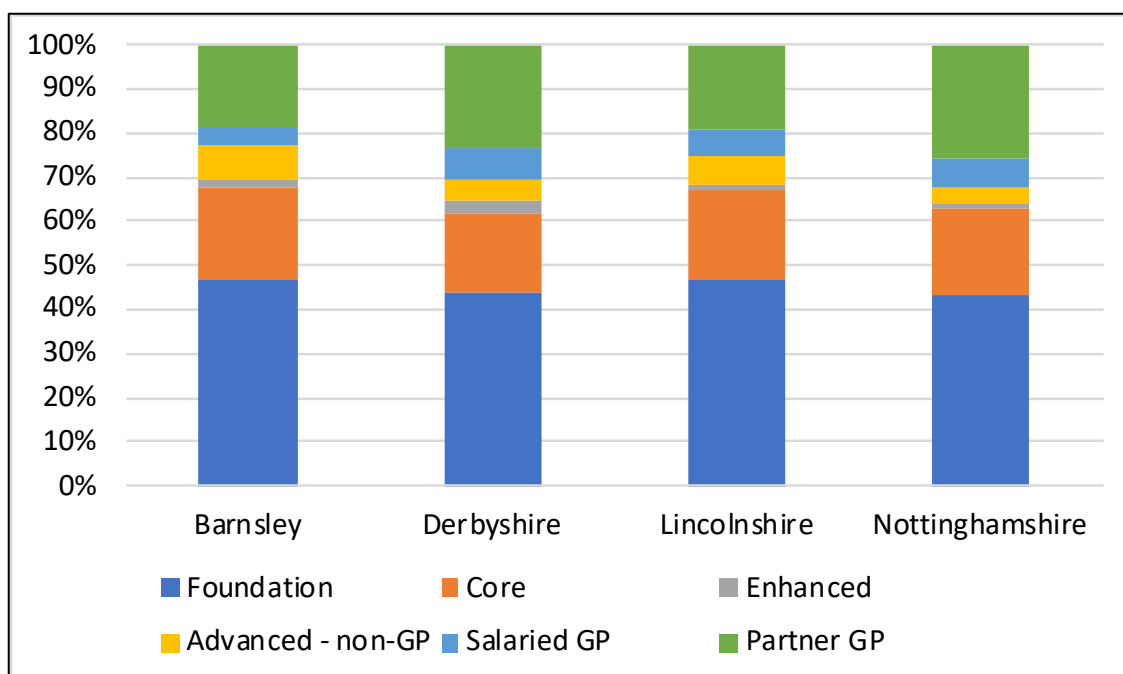


Figure 19 Comparative skill mix of the General Practice workforce

The wte estimates for 2018 and 2025 shown in Figure 16 are what we described as the 'A' and 'B' of the workforce transformation journey. To understand how this journey needs to be navigated in the context of staff turnover and opportunities for the upskilling of the workforce alongside any new recruitment that may be necessary, we have imported the 'A' and the 'B' into the simulation model developed for that purpose. Figure 19 shows the interface and therefore the assumptions adopted. It should be noted that in addition to the 2025 position we have adopted assumptions about the mix of the advanced/autonomous workforce between GP Partners, Salaried GPs and Advanced practitioners.

Highlights from the model outputs based on this first iteration of assumption building suggests the following:

Practice. As these areas are explored it will be important to ensure that solutions reflect the increased integration across primary and community health services to avoid double counting.

- That to achieve the suggested level of advanced/autonomous practitioner capacity, taking account of turnover, would require in the order of 8-12 wte new GP appointments each year from now to 2023, and thereafter the appointment of c4-6wte pa, plus c.4wte new ANP/ACP practitioners a year up to 2023 and thereafter c.2wte pa;
- To achieve the desired levels of enhanced skill practitioners would require the recruitment or upskilling of c12wte pa to 2023 and thereafter about 7wte pa;
- As the current assumptions suggest an absolute reduction in core skilled staff the numbers needing to be recruited dips over the period to 2023 but is still present due to the need to address turnover and to replace staff who may be progressing to higher skill levels. The modelling suggests need for c7-9wte recruited or upskilled over the period to 2023, rising to c12wte pa by the mid-late 2020's.

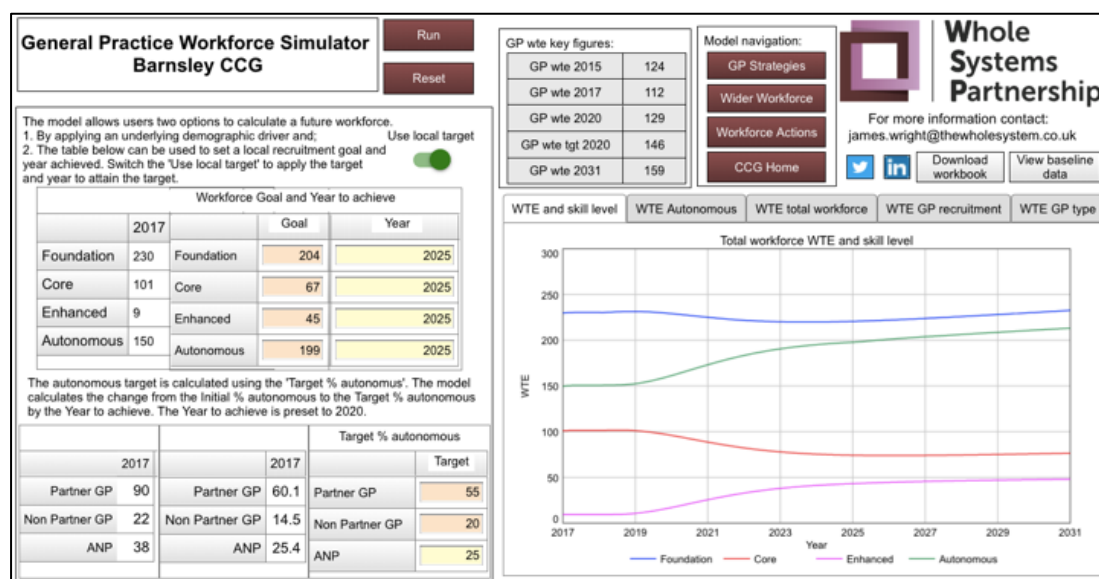


Figure 20 The A to B model interface for the General Practice workforce

5.4 Social Prescribing in the context of case finding and pro-active care

Social prescribing features in the NHS Long Term Plan as a significant additional capability, and capacity, for General Practice going forward. However, this function has been part of the way that Local Authorities have sought to develop community assets and address people's wider needs for a long time. We have positioned social prescribing in our future model of services (Figure 3) alongside case finding and proactive care and at the interface between General Practice, Community Health and Social Care services. We believe that this is a 'good place' to start the conversation that will be necessary as the NHS Long Term Plan and the GP Contract are implemented.

Our modelling approach to estimate the workforce requirements for this combined care function adopts a similar population health basis to that for Neighbourhood Nursing and General Practice. However, it calculates its main 'driver' from estimates of the transition between cohorts of need (incidence) rather than the absolute numbers in each cohort (prevalence).

We have further based our calculations on a notional proportion of these transitions that would have the potential to benefit from an initial case review and then an intervention that will typically be a conversation exploring the potential to benefit from wider community support. The contribution that social prescribing interventions whether relating to 'healthy habits' or wider considerations such as isolation and loneliness, are outside the immediate scope and therefore the calculations reflected here. For the Barnsley population we have estimated a wte capacity requirement of c.10wte to properly

support this care function, a capacity that is likely to be employed by a combination of General Practice, Community Health and Social Care providers. This should be seen in the context of expected additional capacity signalled in the GP Contract as well as in the already provided elements of the care function.

5.5 The GP Contract

At the time of this report being drafted proposals for Primary Care Network (PCN) footprints will have been submitted to but not finalised by NHS England. Once agreed the revised GP Contract and Locally Enhanced Service (LES) arrangements associated with it, will come into play. For each population of between 30-50,000 (expected to reflect the existing six localities within Barnsley) the following requirements and resources will be put in place:

- There will be funding available to appoint a Clinical Director for each PCN providing the opportunity for local leadership and engagement in wider service and workforce transformation opportunities;
- There will be funding for one social prescribing link worker per PCN and one of a number of other roles to reflect local need, including Clinical Pharmacists, Physician Associates, Physiotherapist and Community Paramedics;
- PCNs will be expected to adhere to a set of new service specifications (not yet released) regarding medications review, enhanced health in care homes, anticipatory care for high need patients, personalised care, supporting early cancer diagnosis, CVD prevention and diagnosis, and tackling inequalities;
- Incentives will be available for reductions in avoidable A&E attendances and emergency admissions as well as for timely hospital discharge, outpatient redesign and a national prescribing incentive scheme, the first three of which are reflected in the modelling undertaken to support this report, albeit in partnership with the community health service partners;
- There will be an expectation of digital improvements including online and video consultations, read and write access to patient records and online booking of appointments.

Key opportunities in the context of this report and the strategy that will follow include:

- The diversification of autonomous skill level levels between GPs, ANPs, Physician Associates and others;
- The additional capacity of c.12wte including people with enhanced skill levels, which will make a meaningful contribution to the workforce development indicated by our modelling;
- The emphasis on prevention by active case management to reduce hospital use, for example through addressing the needs of high intensity users.

6 Recommendations

This report has sought to provide the context and specific workforce transformation opportunities that are consistent with changing population health needs and the local ambition for improved health and wellbeing outcomes of the population of Barnsley. To take advantage of these opportunities we make the following recommendations:

1. **Locality/PCN working:** that the next stage of out of hospital workforce planning should reflect locality/PCN footprints and in particular adopt allocation and service development approaches that have the greatest chance of addressing health inequalities.
2. **Locality/PCN needs assessment:** that each locality/PCN team should be supported to undertake, or be closely involved in, the development of locality needs assessments that have the potential to inform local priority setting.
3. **Integration:** that the framing of the out of hospital workforce using the 'core', 'network' and 'district-wide' functions should form the basis for discussion about the ambition for integration across the services significantly increasing the capacity and capability of the workforce that is managed on an integrated basis by local leadership.
4. **Technology:** that a full review of the opportunities for adopting new technologies to contribute to new ways of working should be undertaken.
5. **Leadership:** that the leadership model emerging from the Dearne pilot is adopted and rolled out across the other five localities allowing for local flexibility and factoring in the role of the Clinical Directors for the PCN(s).
6. **Developing 'place-maturity':** that the role of the independent and voluntary sector in the context of 'place-maturity' be explored early on in the implementation of an out of hospital workforce strategy.
7. That the **community nursing function** is redesigned and strengthened to provide a further pillar on which to develop local integrated teams and that the development of capacity and upskilling indicated in this report is fully costed against the anticipated benefits of reduced hospital activity and improved health outcomes and used as the basis for discussions with local education providers and as part of internal training and development commitments for SWYFT.
8. That the model of **social prescribing**, and in particular the additional capacity arising through the new GP contract, be developed in partnership across local areas to ensure clarity of purpose, effectiveness and anticipated outcomes.
9. That other **new roles** made available through the **GP contract** are developed in the context of joint working across practices, integration with the wider locality team and local needs.
10. That further work is undertaken as a matter of urgency to develop a robust strategy for supporting people with low to moderate **mental health needs** in the community and as part of the local integrated service, bringing together stakeholders from all sectors and ensuring a strengths-based approach.
11. That **HR and OD strategies** are developed in response to this 'direction of travel' in partnership across the system to ensure such things as aligned HR policies to support integrated working and a joint culture change programme that focusses on system rather than organisational needs.

Appendix 1: Discussion notes for out-of-hospital mental health services

How should out-of-hospital mental health services align with the emerging picture of integrated locality working?

Discussion participants

Janette Hawkins SWYPFT, Dr Nick Balac GP/CCG, Joe Minton CCG, Nick Garrett (WSP)

The challenge:

Nick B: "The large workload of mental health appointments for GPs needs addressing as there isn't enough capacity and joined-up working at a Primary Care level to support patients and manage demand."

Joe: "There are views that we under-prescribe in mental health especially compared to physical health."

Janette: "The workload in SWYPFT is too large to manage meaning visits, personalised approaches and addressing low-level mental health needs are being missed. These patients then end up bouncing round the system including booking in with their GP."

Group:

- We need to break the culture of dependency. Young people are prescribed anti-depressants early and stay on them for long period of time. Tailing off medication becomes a challenge. Managing that is difficult. Getting patients off anti-depressants and SSRIs is very, very hard.
- Medication reviews are hard as patients often can't attend appointments due to anxiety. Fear of regression in patients is significant especially as they are anxious anyway.
- What support is there to avoid over-prescribing from those in GP care who have low-level mental health needs?
- More addiction support to refer to from Primary Care is needed.
- The SWYPFT [Single Point of Access](#) gets 500 referrals a month. High DNA rates. Many DNA clients are NFA'd.

Changes to the system:

Low level Mental Health needs addressed through closer working and SP in Primary Care:

1. Primary Care needs to be remodelling mental health approaches in PCN to reduce the churn.
2. We need to have SP and IAPT and therapeutic services combining and possibly more of them. These services need to be for people managing stress. Many low-level mental health needs can be dealt with through social prescribing combining with the voluntary sector. Tying the voluntary sector in to Social Prescribing is key.
3. Locally networked mental health worker integrated into the social prescribing sphere.
4. CPN role working in a GP surgery once a week. Practices being engaged in the community with someone that works as part of the team. CPN would understand

if it needed more prescribing then it would come back. CPN's have 70-80 people to get around. Links need to be strengthened to Primary Care so it's a conversation.

5. Associate Practitioner fitting in to PCN's looking more at the low-level mental health activity.
6. Need to look carefully at the SP model - It's the building block. Are they working with the right people?
7. Look at co-locating of services in a PCN - some hand holding and risk management will be needed with an earlier hand off to social prescribing.
8. Difficult to access the long tail of people with mental health issues. Finding people who are on anti-depressants and defining them as a cohort and starting some research into what will work for this cohort will be helpful in showing a way forward.

Discharge to Assess to include mental health:

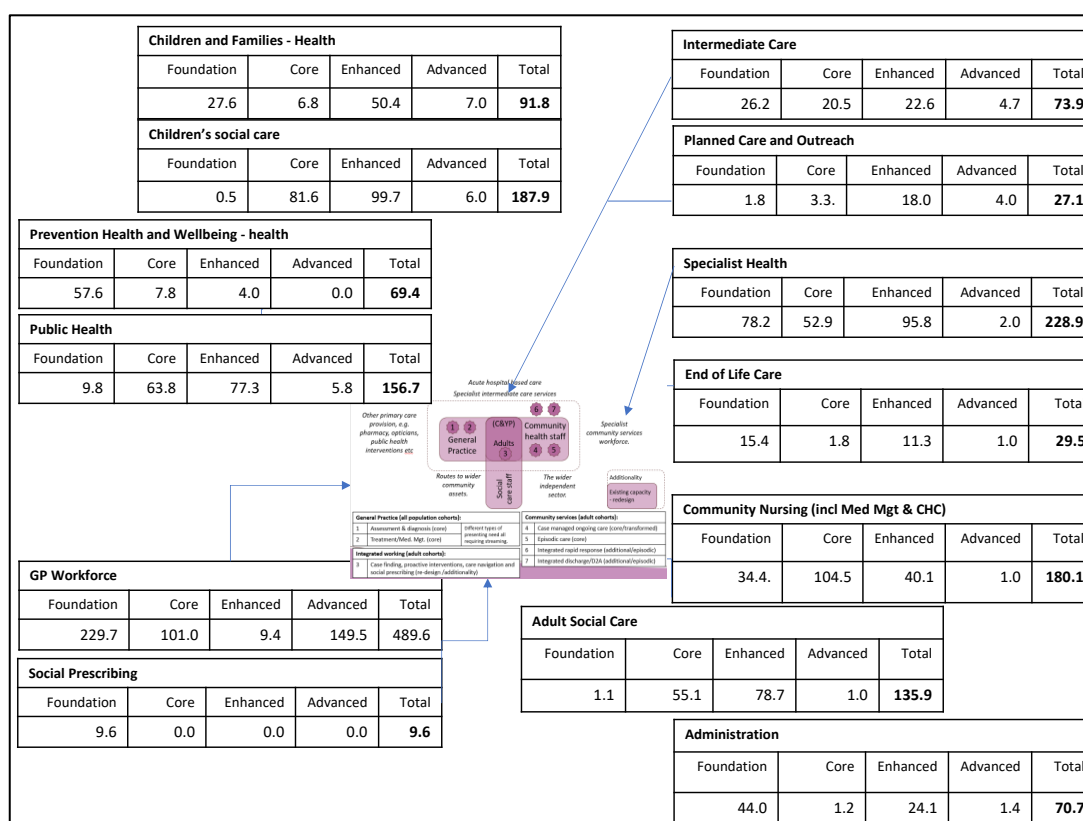
9. Opportunities in D2A for people to have a more holistic mental health assessment particularly for prevention for Frail Elderly.

Acute Mental Health needs to capture demand to avoid churn

10. SPA gets 500 a month. There are high numbers of clients who then do not attend sessions, these clients are not followed with routinely. Integrating a response through social prescribing and allowing clients to access a range of services that can support them could be a solution. More staff in this function are needed to work closer with patients and the community. Medicalising stress needs to be reduced and stress needs to be tackled by a SP service. The Dearne Model is a good case study. ABCD (asset-based community development) could break the dependency model.

Appendix 2: Discussion notes for locality integration

The question being addressed by this group focussed on the extent and nature of integrated locality (/PCN) working and in particular which care functions work best when delivered with a strong, local horizontal integration and which are best organised and delivered at a Barnsley-wide level. Participants in the workshop had been provided with the following representation of the workforce identified at this stage of the project (c.1,750wte excluding Mental Health provision) as context for that discussion:



General comments:

There was consensus in the group to the following general comments:

- That building relationships between different professional groups was critical in the development of integrated solutions;
- That leadership models also needed to reflect the challenges and opportunities around locality working (see the appendix on the Dearne and the description of the triumvirate model of leadership that has evolved);
- There was a need for flexibility between the different levels and location for care delivery so as not to reproduce professional or organisational silos with geographical ones, i.e. enabling the workforce to flex where and how they contribute to meeting local need;
- There was the need for enhanced/additional/transformed admin and technology solutions to facilitate both integration and flexible working;
- Agreeing a set of operating procedures that supported flexible working would also be beneficial.

With potential for greater locality integration:

A key theme in this discussion was the distinction between alignment and integration, with a view that whilst there was a fair amount of the former, the latter was limited. There was therefore discussion around a number of areas where alignment might need to be transformed into a greater degree of integration, probably of a virtual rather than structural or organisational form in the first instance. Areas where this discussion focussed were:

- End of life care (a set of services with c.74wte workforce identified in the workforce baselining) – it was noted that a significant proportion of those with frail and complex needs supported at a locality level will be in their last year of life. This means that integration that supports anticipatory care, end of life discussions and the management of transitions toward the end of life is desirable.
- Continuing health care is currently organised at a Barnsley-wide level, but with the potential for closer integration at a locality level on much the same reasoning as for end of life care.
- Specialist out of hospital health service provision, predominantly the therapy professions, provide important inputs to a range of District wide and local services. Some of these professions are of sufficient scale that greater integration with locality services should be possible, subject to appropriate supervision, mentoring and other professional benefits of alignment with the professional group.
- Whilst centralising of certain administrative tasks can save money the loss of any local 'glue' that can oil the wheels of local integration should be considered. This was highlighted in the general comments above and needs to be translated into how an integrated locality team/network should be supported.
- Prevention, wellbeing and public health functions are typically delivered by District-wide teams. However, the relevance and contribution of this function to improved health and wellbeing at a local level, and the fact that people's health and social care needs will often be entwined with lifestyle and other factors, means that how this is integrated into local delivery should be explored.

Requiring delivery at scale:

The group discussion recognised a number of care functions that required delivery at the District level, in particular:

- The inpatient Stroke and Neuro-rehab units;
- Specialist intermediate care services including the Acorn Unit.

The workforce associated with these services needed to be identified in the mapping and modelling exercise. Whilst these functions are best delivered at a District-wide level there is still the potential to explore how they dovetail with locality services and maintain a strong focus toward the integrated solutions increasingly needed at this 'lower' level.

Appendix 3: The Dearne

Key Facts:

Dearne Population: 22,387

Challenges: higher demand / usage of acute services, health inequalities, higher deprivation and evidence of less favourable access to healthcare

Agencies involved: Community Health, Social Care, VCFS, Primary Care, Acute Trust.

Aims: To deliver a comprehensive community service focussed on the health and care needs of individuals, families and communities, unconstrained by current barriers such as different employing organisations, systems and labels. To provide a 'proof of concept' in one area so they could learn and refine intentions and approach before rolling out across the Borough.

Project Approach:

The work began in the Dearne in July 2018 which led to the development of the Integrated Wellbeing Team. An incremental approach to building the team in Dearne from the bottom up was taken. People from all organisations across health and social care were invited to put themselves forward to be part of the team and because of this approach there was a high degree of willingness and commitment to collaborative working. Core membership of the group includes staff who work in the following teams:

- Communities
- Primary Care
- Mental Health
- Social Care (Adults)
- 0-19 Services
- Social Prescribing

Workshops were used for engagement and informal team meetings started with the core membership group.

A project manager, task and finish group with governance tracing up to the Health and Wellbeing Board were used to co-ordinate and report activity.

The service design and delivery was allowed to evolve organically.

New Model for Neighbourhood Integrated Wellbeing Teams

As the new model emerged it featured the following:

Meeting Structure: The new team started by understanding each other's service provision and quickly moved on to examining cases of mutual interest and problem solving. This evolved to a new meeting format which included a structured approach to complex case discussions, key themes, "what's hot" along with an escalation process.

Population Health Management and prioritisation: A population health needs profile was developed with regular insight added in, performance management information and local insight derived from experience. This was used by the new team to determine local priorities.

Collaboration between Services and Community Assets: Asset mapping the statutory and community provision resulted in both sectors having a better understanding of what provision was available including opportunities for collaboration and co-location of clinics.

Leadership: The team was led by a core leadership team called a Triumvirate. Community Lead – Community Development; System Lead – Community Matron; Clinical Lead- GP

Public Engagement: Community volunteer researchers were recruited from the local area through Healthwatch and Barnsley CVS.

Information Sharing and Governance: Sharepoint was used by the team and developed by the council as an interim virtual environment for sharing documents.

Communication: A Partnership Communications Group was developed to develop collective messages to other staff and the public.

Training and Development: A Partnership Workforce Development Group was established to identify key development needs.

The new team identified the following priorities after triangulating the population health management data with performance management information and local insight:

- Emotional Wellbeing – focusing on low level mental wellbeing and those people not known to mental health services in the adult population;
- Young People – 11-18yrs, including emotional wellbeing (further work planned to define specifics involving young person's specialists working in the area);
- Specific complex cases.

The aim of these priorities is to support broader outcomes in relation to building resilience in the adult population to enable improved self-care, presenting earlier with health issues, and improved compliance with treatment and lifestyle plans. In relation to young people it is hoped that by building emotional wellbeing that this will have direct impact on the uptake of the education offer, improve school attendance, build resilience to make improved lifestyle choices i.e. reduce smoking, alcohol and drug use.

Lessons

Allow Integrated Wellbeing Teams free-reign to determine their own shared priorities following consideration of population health data, operational intelligence and local insight:

- Review membership and attendance of the group as the work develops;
- Allow the leaders to emerge and adopt distributed leadership model;
- Each Integrated Wellbeing Team needs to develop its own approach and structure that works for that group.

Outputs

- A common direction for colleagues working in Dearne has come from bringing colleagues together to collaborate and sharing intelligence this has resulted in better quality joined-up care.
- There has been an impact on times of service offer, joint working on specific cases that didn't exist previously, relocating of some services and expansion of out of hospital care linked to the key strategic priorities. This incremental change is responsive to patient feedback, staff experience and available data.
- There is now a blueprint for developing this model into other areas of Barnsley.

Appendix 4: Place based thinking and ‘maturity’ model

Introduction:

WSP has developed an approach to Place-based thinking which has been used in Kent, Nottinghamshire, Derbyshire and Lincolnshire to help health and social care system leaders develop approaches that enable a left shift from the integrated (or otherwise) statutory sector health and social care workforce to community assets in the VCF Sector. When conceptualising the out of hospital workforce and reflecting on its role in prevention and rehabilitation links to the community and voluntary sector are becoming increasingly crucial to reducing hospital admissions and GP appointments. The increase and planned growth in GP-led social prescribing requires health and social care systems to consider the concept of Place in the health system as community assets are often vital for patients and citizens in providing solutions that support their health and wellbeing.

WSP's approach to Place is consistent with the recent focus on the development of Primary Care Networks (PCN) with populations of between 30-50,000. We recognise that community organising can be effected in smaller populations, for example a PCN may have two or three ‘village’ (urban or rural) centres, and also that for pragmatic reasons some statutory sector services will be organised at a larger population level. However, the conceptualisation summarised here should be seen as flexible and applicable to a core set of characteristics, these primarily being:

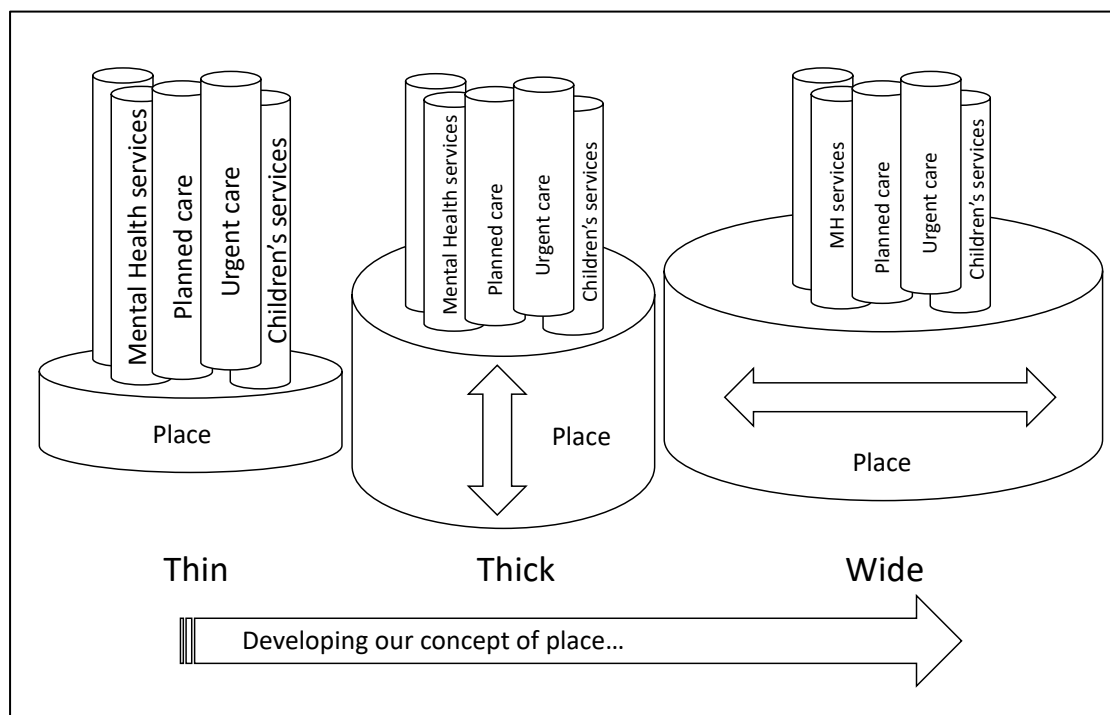
- A level of **health and wellbeing** that can be expressed in absolute and aspirational terms using the outputs from population health analysis, described using high level population cohorts;
- A ‘natural’ resource often described as ‘**community assets**’ that strengthen individual and community resilience and therefore reduce the risk of poor health as well as providing a buffer against inappropriate use of statutory sector services,
- An ‘**unhealthy**’ **asset base** that weakens community resilience and increases poor health behaviours due to the proximity of people to assets that are hazardous to health,
- Rates of **access to services** such as primary care, social care, hospital or specialist services identified in local data and/or estimated from national survey data modified for local socio-demographic profiles.

Thinking about ‘Place’:

Our ‘traditional’ conceptualisation of place has been on a narrow and ‘thin’ set of resources. The illustration below challenges this and encourages us to think ‘thick and wide’:

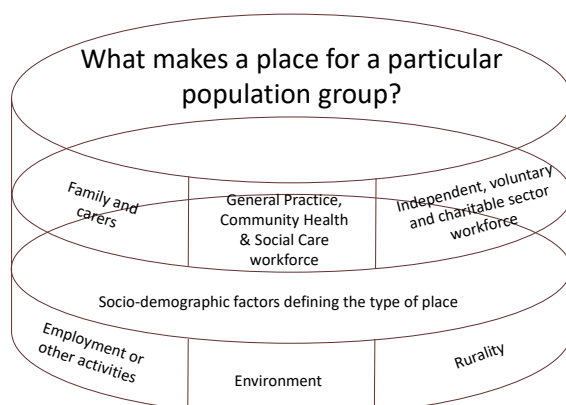
- **Thin:** services which are delivered in a locality or neighbourhood by statutory state sector organisations, sometimes being aligned or working together on specific projects. These teams are core to their organisations and are geographically based in the Place that they serve.
- **Thick:** This next stage of the conceptualisation encourages us to extend the scope of Place to include services such as in-reach and out-reach teams of specialists supporting people in their own homes. This includes the services in ‘Thin’ but typically retains a focus on the state sector including the majority of the ‘Out of Hospital’ workforce.

- **Wide:** Includes both the Thin and the Thick and now broadens out to include independent voluntary sector organisations and charities. These organisations can be providing services that are commissioned by the state or services of their own volition and funding. They can also be institutions that are part of the social fabric of a Place.
- **Wide+:** Social infrastructure and community assets can be thought of in a Wide Place concept. Parks, having a strong sense of civic duty, clean air, dementia-friendly cafe's, a strong sense of community ownership in the local population are all elements that make up a Place and are seen as being important to the wider determinants of health.

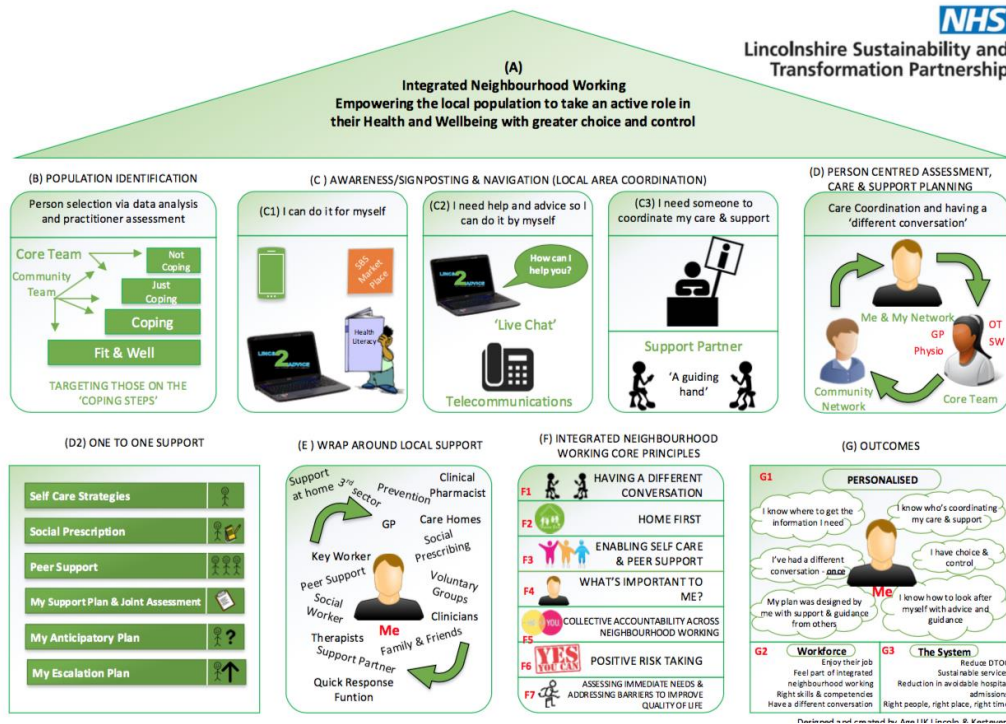


The Place Cylinder illustrated opposite provides a way of conceptualising the domains of place in relation to population groups. The domains will vary according to the population group under consideration, for example for the frail elderly family and carers are important, whilst for other groups employment opportunities could be more significant. Equally rurality relates to the physical environment and could be replaced with an urban setting.

The health and care system in Lincolnshire has articulated this well in their model for integrated neighbourhood working, which is shown in the diagram below. This illustration also introduces the idea of how people 'cope', and that this is just as important as someone's medical condition. To 'cope' can be defined as "*facing and dealing with responsibilities, problems, or difficulties successfully or in a calm and adequate manner.*" In this framework it has a close association with the idea of resilience, i.e. the ability to 'bounce-back' or recover from

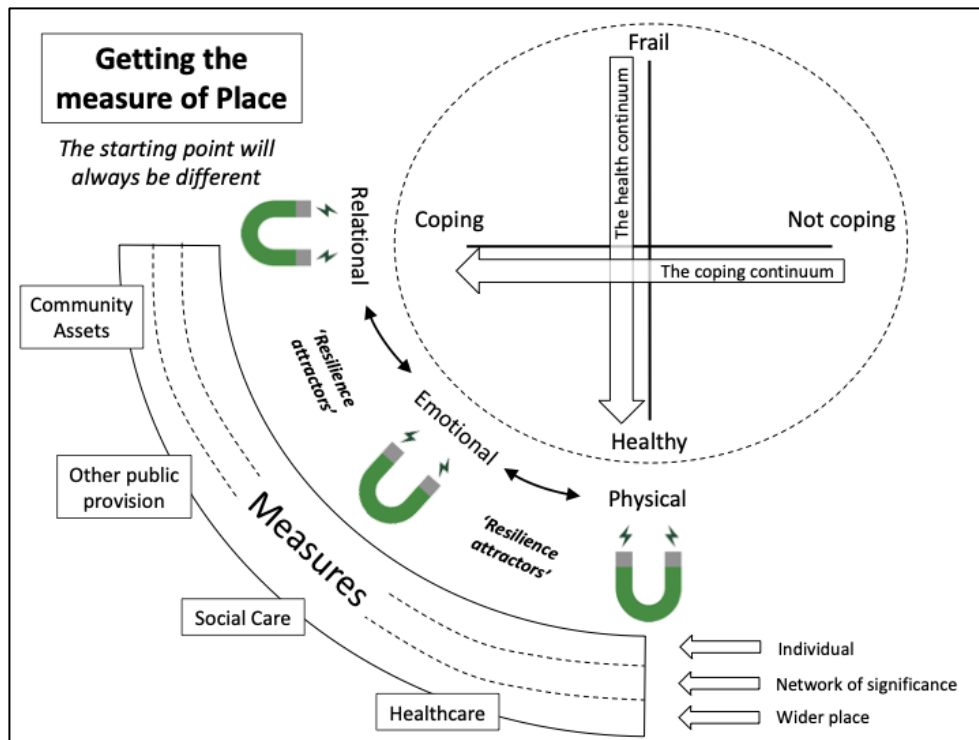


adversity, change or crisis. This ability to cope is a function of physical, emotional and relational dimensions.



Place Maturity

Place maturity matters to people's health and wellbeing. It provides the 'fabric' for communities to live well together and for individuals to flourish. Individual and community resilience becomes a critical 'measure' of the likelihood that health and wellbeing will be optimised and that calls on statutory sector provision will be minimised. This is further illustrated in the diagram below where the strength of the 'resilience attractors' will impact on the overall health of a place population, thus impacting on episodic calls on services, whether from the statutory or other sectors.

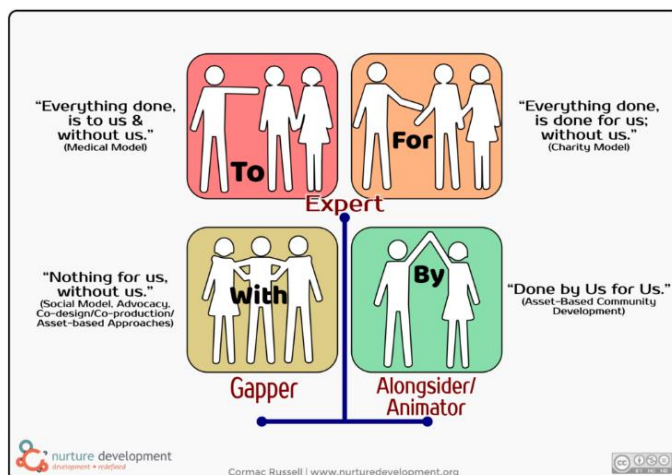


There are four domains that can help measure the nature of the community/wider elements of place in this emerging model:

1. Social and place wellbeing
2. Lifestyles and health improvement
3. Health and wellbeing status
4. Social Capital

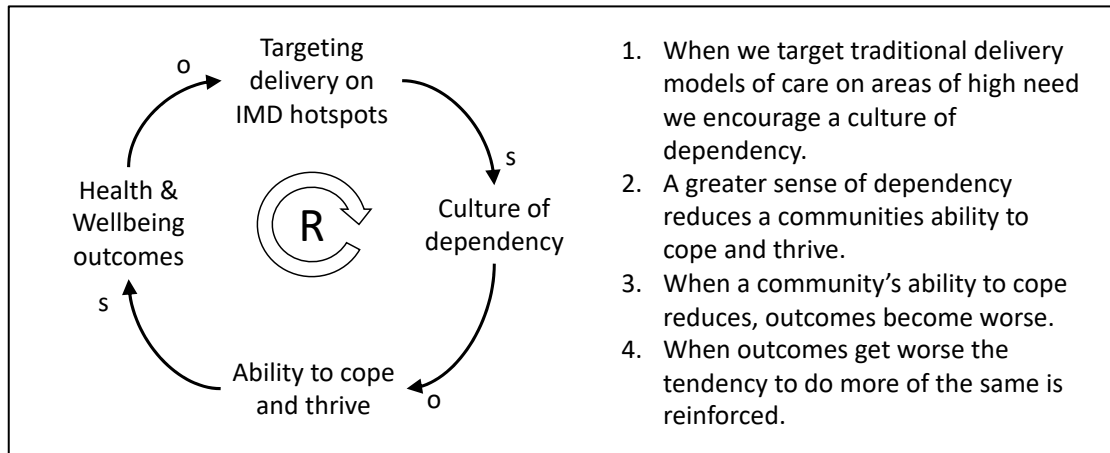
These domains can be used to measure the maturity of a place and the data are found in a variety of open source datasets including Public Health England Fingertips data.⁴

Combined into the measure of Social Capital and community assets WSP use **Asset-Based Community Development**⁵ (ABCD) as its classification schema. ABCD has been used extensively in community development and local government for over 30 years. The body of evidence around it suggests that community assets that are strength based in their approach focussing on people helping themselves and creating solutions built from their own lived experience are more sustainable and lead to behaviour change. Barnsley's community development approach fits the co-production/co-design part of the model.



⁴ <https://fingertips.phe.org.uk/>

⁵ www.nurtureddevelopment.org/



A simple systems' perspective on the move from 'doing to' to 'doing with' or alongside is illustrated in the causal link diagram below. This illustration reflects a classic re-enforcing loop that will spiral ever downward if the focus remains on targeting delivery of a 'doing to' nature and requires a different point of intervention, namely at the point of shifting the culture of dependency and therefore strengthening the ability to cope and thrive. Interventions or ways of work that reduce levels of dependency will feed through the system and have the potential to reverse the downward spiral into a positive one, i.e. reduced dependency increases the ability to cope and outcomes resulting in the need for less targeting. It may be counter-intuitive, but our current paradigm actually increases inequalities whilst a focus on a strength-based approach will, over time, reduce them.

Barnsley's Place Opportunities

The strengths of the Barnsley system in relation to Place-based thinking are:

- That the 6 areas are coterminous between health and local government;
- Barnsley Council's community development approach "Doing With" supports the health agenda in reducing dependency on statutory services;
- The Neighbourhood Integrated Wellbeing Team pilot in Dearne uses community asset mapping in its approach.

Collaboration between Out of Hospital Services and community assets at a Place level is likely to result in a reduction in hospital admissions and GP appointments⁶. The Neighbourhood Integrated Wellbeing Team pilot has shown that asset mapping the statutory and community provision resulted in both sectors having a better understanding of what provision was available including opportunities for collaboration and co-location of clinics. WSP's research into Place-based approaches shows that Integrated community teams in a Place are often best suited to micro-commission community provision based on an understanding of community need.

⁶ 'Building Community Capacity – 7 Economic Case Studies' National Development Team for inclusion (April 2019)

Appendix 5: The technology dimension

Introduction:

We have drawn on three sources of information that inform how digital technology will impact the Barnsley out of hospital workforce over the next five years:

1. Barnsley Digital Roadmap⁷
2. The NHS 10 Year Plan⁸
3. The Topol Review⁹

These are summarised below, followed by an illustration of how they have the potential to impact on the out-of-hospital workforce.

Barnsley Digital Roadmap:

In line with most health and social care systems Barnsley's digital roadmap expresses a digital vision. The vision for Barnsley is as follows:

- Transform the way in which we engage with citizens, empowering them to maintain their own health and wellbeing through digital solutions;
- Transform the way in which health and care providers, our voluntary and charitable sector organisations engage with patients within their communities;
- Accelerate mechanisms that promote record sharing and support access to data for those working within a community setting;
- Enabling clinicians to provide the best care in all settings by the use of mobile technology.

The impact on the workforce from this vision could be significant especially as the two key priorities of supporting the development of universal information and advice to enable citizens to self-care and self-manage their health and wellbeing along with enabling the sharing of information and the integration of health and care records will require skillset changes and provide integration capabilities.

The NHS 10 Year Plan:

The NHS Long Term Plan has made significant commitments in the area of Digital Health including:

- Digital access to services that will help both patients and their carers manage their health;
- Decision support and AI helping professionals to apply best practice;
- Predictive analytics helping to support local health systems to plan care for populations.

⁷ <http://www.barnsleyccg.nhs.uk> Digital Roadmap 2016

⁸ www.longtermplan.nhs.uk January 2019

⁹ <https://www.hee.nhs.uk/our-work/topol-review> February 2019

The Topol Review:

The Review covered the following areas of technology:

- Digital Health: defined as 'digital technologies and products that directly impact diagnosis, prevention, monitoring and treatment of a disease, condition or syndrome' (HEE June 2018);
- Artificial intelligence (AI): with a particular emphasis on machine learning, i.e. the ability of computers to learn directly from examples, data and experience and therefore to improve the diagnosis and prescription for a range of conditions;
- Robotics: including tele-operated surgery, exoskeletons, pharmacy/lab robots with the potential to significantly reduce errors and make routine procedures more efficient;
- Genomics: with the potential to significantly increase the personalisation of medicine and to make early diagnosis, particularly of rare conditions;
- Biotech and regenerate medicine: although not covered by Topol, this area has potential impact in getting organisms to produce new drugs, using stem cells to regenerate damaged tissues or entire organs.

Impact on an Out of Hospital Workforce:

The Whole Systems Partnership published a report into the Topol Review: "Workforce Futures – The Topol Review and the Impact of Technology."¹⁰ This report followed on from a symposium WSP led at The University of Southampton in February 2019. The symposium consisted of senior academics, senior workforce planning experts including those with clinical backgrounds. The report takes into account the NHS 10 Year Plan digital technology proposals.

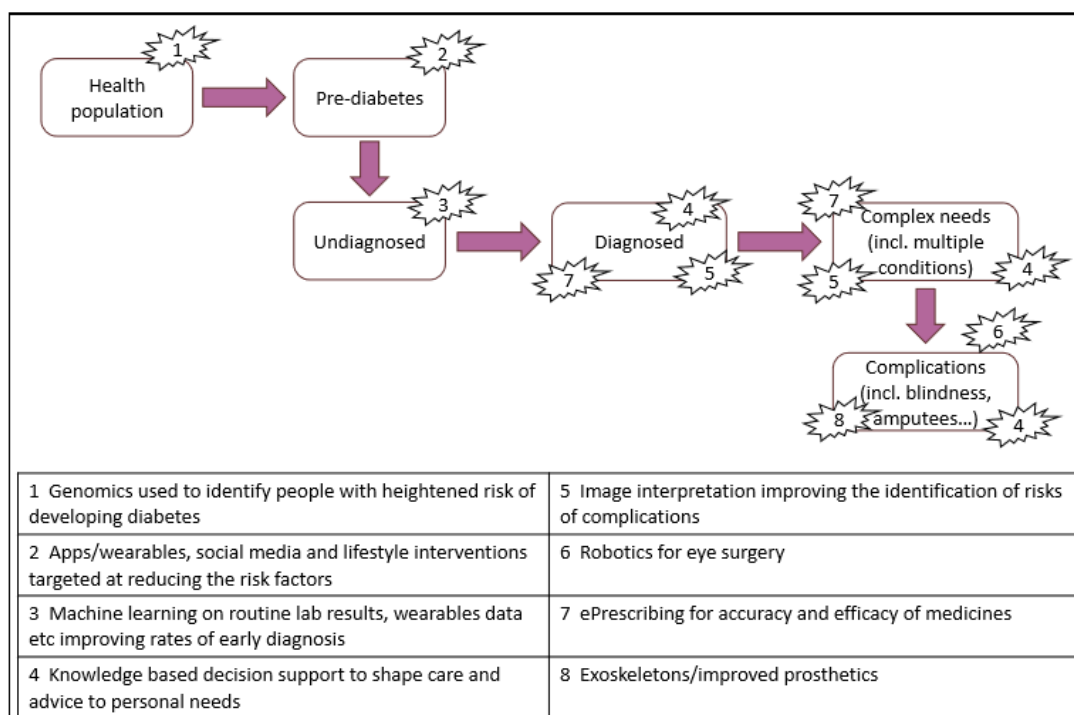
The impact on the workforce from digital technologies was framed as follows:

- A. Technologies that impact on the incidence of conditions, including reductions in the risk factors associated with the onset of different conditions.
- B. Technologies that change the nature of the care provided, including improvements in the effectiveness and efficiency of care delivery.
- C. Technologies that impact on where care is provided, including the provision of remote care and care provided at home.

An example of how digital technology could affect citizens with Type II Diabetes is illustrated below. The current Barnsley digital roadmap covers 1 of the examples on how technology could impact on citizens with Type II Diabetes which is that of using Apps/Wearables (2) which could be classed as "empowering them to maintain their own health and wellbeing through digital solutions".

The impact of technology on the out of hospital workforce could be that the time saving that follows from the introduction of new technologies could be re-invested in to patient-clinical relationships, however there is a risk this won't happen as the quantification of the benefits of this time re-invested in relationships is complex and resource pressures are expected to continue.

¹⁰ <https://www.thewholesystem.co.uk/wp-content/uploads/2019/03/Technology-and-workforce-futures-thought-piece.pdf> February 2019



Our analysis of The Topol Review is that increasing use of technology will mean existing training programmes will become longer and the content will change as each new technology may require a different mix of technical skills, governance issues and changes in culture. This extra training requirement could reduce the amount of patient facing time, particularly in the short term but potentially on an ongoing basis as new technologies continue to emerge. Our analysis is that demand could also increase as technology overcomes distance and time barriers this could expose unmet need.

Whilst strong progress has been made on digital health in Barnsley particularly on the shared record delivered by the Medical Interoperable Gateway, the Barnsley Digital Roadmap needs refreshing to consider extra areas which are mentioned in the Topol Review and the NHS 10 Year Plan, such as:

- Decision support and AI
 - Digital health
 - Predictive analytics
 - Robotics
 - Genomics
- } Relevant to the Out of Hospital Workforce

As in the Diabetes pathway example, knowledge-based decision support to shape care and advice to personal needs is where the community health workforce would be better supported by digital decision support using artificial intelligence. Apps and wearables used by patients supported by the community health workforce will change some of the tasks required of the community workforce. Being able to bring together multiple risk factors when analysing the health of a population will enable community health workers to proactively respond to need in a preventative way through the use of predictive analytics.

A new Digital Roadmap could be drawn out of the renewed Out of Hospital Workforce Strategy (and expanded into other areas) with the ensuing change programme integrating the organisational and technical change requirements. This blended approach

would help ensure that cultural and organisational development integrates both the technological and the workforce change requirements.

Appendix 6: Model sensitivity – community nursing teams

The assumptions underpinning the identification of a possible workforce future for community nursing teams consists of three elements:

1. The demographic change expected by 2025;
2. The extent of 'left-shift' activity from hospital to community associated with rapid response and integrated discharge functions;
3. The skill mix assumptions for the future care function delivery.

In terms of model sensitivity to these assumptions, and therefore making a judgement on the model outputs, it should be noted that:

- The demographic driver is based on need rather than demand and could be exceeded if public expectations and other factors continue to result in higher than expected growth, over and above underlying needs;
- The extent of left-shift has been based on several similar exercises undertaken by WSP in areas where STP plans have been based on the national model underpinning projections. These have tended to follow a demand/trend trajectory and have typically made ambitious claims for the extent of activity that could be shifted to community settings;
- The skill mix assumptions do not affect overall capacity changes but may influence costs as future skill mix tends to be 'richer'.

In testing the model the extent of left-shift has been shown to impact most on the outputs and we therefore present here an alternative, less ambitious set of expectations associated with this element. The default assumptions for care function impact are shown below...

Step 2: Care functions & impact			
Care function	Cohort focus	A&E	Unsch adm
Self care	Healthy/Sgl conditions	-15%	-5%
Case mgt	Complex & frail	-10%	-5%
R. response	Complex & frail	-15%	-10%
Int. discharge	Complex & frail	0%	0%

In other systems where WSP has undertaken more detailed modelling of urgent care care function impact (in particular in Lincolnshire and Kent) lower assumptions have been suggested. When a needs-led demographic driver is used, which is the case in Barnsley, it may be more appropriate to assume these lower impact assumptions. The default assumption for the proportion of frail elderly admissions to hospital who would benefit from additional support on discharge is also 50% and could be moderated.

The table below identifies an alternative low set of assumptions for impact for the different care functions within the model, alongside which we have applied a 30% requirement at discharge compared with the default assumption of 50%.

Step 2: Care functions & impact			
Care function	Cohort focus	A&E	Unsch adm
Self care	Healthy/Sgl conditions	-5%	-2%
Case mgt	Complex & frail	-5%	-2%
R. response	Complex & frail	-5%	-5%
Int. discharge	Complex & frail	0%	0%

Using these more conservative set of assumptions the model suggests an increase in workforce of 29.4wte compared to the default output of 44.3wte, i.e. 14.8 less, which is spread across all skill levels.

Other assumptions in the spreadsheet model (which has been provided alongside this report) can be tested for sensitivity including the hours of support for each care function episode. It is recommended that these assumptions are reviewed in the context of care function delivery and fed back into the tools to support learning through the implementation phase.