



## Wellbeing Board

**Date:** Friday 13 July 2018

**Time:** 1.30 pm **Public meeting** Yes

**Venue:** Room 116, 16 Summer Lane, Birmingham B19 3SD

### Membership

Councillor Izzi Seccombe (Chair)	Warwickshire County Council
Councillor Ruth Buttery	Dudley Metropolitan Borough Council
Councillor Kamran Caan	Coventry City Council
Councillor Les Caborn	Warwickshire County Council
Councillor Karen Grinsell	Solihull Metropolitan Borough Council
Councillor Paulette Hamilton	Birmingham City Council
Councillor Marco Longhi	Walsall Metropolitan Borough Council
Councillor Barry Longden	Nuneaton and Bedworth Borough Council
Councillor Hazel Malcolm	City of Wolverhampton Council
Councillor Ann Shackleton	Sandwell Metropolitan Borough Council
Andy Hardy	STP Systems Leader NHS
Helen Hibbs	STP Systems Leader NHS
Dame Julie Moore	STP Systems Leader NHS
Sarah Norman	WMCA Chief Executive Lead
Alison Tonge	NHSE
Sue Ibbotson	Public Health England
Guy Daly	Universities (Coventry)
Sean Russell	Mental Health Implementation Director
Gary Taylor	West Midlands Fire Service
Sarah Marwick	West Midlands Police

Quorum for this meeting shall be seven members.

If you have any queries about this meeting, please contact:

**Contact** Wendy Slater  
**Telephone** 0121 214 7016  
**Email** [wendy.slater@wmca.org.uk](mailto:wendy.slater@wmca.org.uk)

# AGENDA

No.	Item	Presenting	Pages
1.	Apologies for Absence	Chair	None
2.	Welcome and Introductions	Chair	None
3.	To note the schedule of meetings for 2018/19 <ul style="list-style-type: none"> <li>• 31 October 2018 (10.00-12.00)</li> <li>• 18 January 2019 (10.00-12.00)</li> <li>• 5 April 2019 (10.00-12.00)</li> </ul>	Chair	None
4.	Chair's Remarks (if any)	Chair	None
5.	Minutes of the last meeting	Chair	1 - 6
6.	Matters Arising	Chair	None
7.	Terms of Reference	Chair	7 - 8
8.	Overview of Health & Wellbeing Programme <ul style="list-style-type: none"> <li>• PSR plan on a page</li> <li>• Wellbeing plan on a page</li> <li>• Major elements of the Wellbeing Programme               <ul style="list-style-type: none"> <li>❖ Radical Prevention</li> <li>❖ Productivity &amp; Health</li> <li>❖ System Collaboration</li> </ul> </li> <li>• STP Update</li> <li>• Review of Progress to date</li> </ul>	Henry Kippin/Others	9 - 44
9.	Discussion of current agenda and opportunities to build on this going forward	Chair	None
10.	Date of next meeting -31 October 2018 at 10.00am		None



## WEST MIDLANDS COMBINED AUTHORITY

### Wellbeing Board

Friday 20 April 2018 at 1.30 pm

### Minutes

#### Present

Councillor Bob Sleight (Chair)	Solihull Metropolitan Borough Council
Councillor Ken Meeson (Vice-Chair)	Solihull Metropolitan Borough Council
Councillor Paulette Hamilton	Birmingham City Council
Councillor Peter Miller	Dudley Metropolitan Borough Council
Sarah Norman	WMCA Chief Executive Lead
Alison Tonge	NHSE
Sue Ibbotson	Public Health England
Guy Daly	Universities (Coventry)
Sean Russell	Mental Health Implementation Director
Gary Taylor	West Midlands Fire Service
Sarah Marwick	West Midlands Police

#### In Attendance

Dr Henry Kippin	WMCA
Simon Hall	WMCA
Jane Moore	WMCA
Adam Rigarlsford	Sports England

#### Item No. Title

#### 35. Apologies for Absence

Apologies for absence were received from Councillors Caborn, Robertson, Shackleton and Sweet and Andy Hardy and Dame Julie Moore.

#### 36. Minutes of the last meeting

The minutes of the meeting held on 19 January 2018 were agreed and signed by the Chair, as a correct record subject to minute number 26, Chair's Remarks being amended to read, 'The Chair also reported on the launch of the 'West Midlands on the Move' event in November which he had attended on behalf of the Mayor'.

#### 37. Matters Arising

There were no matters arising.

#### 38. Developing the PSR and Wellbeing Agenda

Sarah Norman presented a 'WMCA Inclusive Growth, Public Service Reform and Wellbeing Plan on a Page' on behalf of Henry Kippin.

Sarah Norman referred to the three tranches of activity, inclusive growth,

radical prevention and system collaboration and how the WMCA was seeking to add value in these areas by embedding inclusive growth in everything we do, addressing the socio-economic problems that stop people from thriving, and building the enabling conditions for whole- system, whole – placed change.

It was noted that further information regarding the integration of PSR and Wellbeing was included in the Update on Health and Wellbeing Programme report that would be considered later in the meeting.

Resolved : That the approach as outlined be endorsed.

### **39. West Midlands Mental Health Commission Update**

The board considered a report of the Mental Health Implementation Director that updated them on progress and the current position of the West Midlands Health Commission Action Plan and the work undertaken since the launch of the programme on 31 January 2017.

The Mental Health Implementation Director, Sean Russell, outlined progress in key areas.

In relation to the allocation of a further £7m to the Midlands Engine to support mental health wellbeing in the workplace across the Midlands Engine footprint from 2018/19 and 2019/20 and an enquiry from the Chair as to whether a criteria has been assigned for the allocation of funding and how this will be progressed, Sean Russell reported that no criteria has been established to assign funding but he is seeking to work with the Midlands Engine to identify principles by which the funds will be released. He added that a Midlands Engine Mental Health forum is taking place on 27 April 2018, in Loughborough which will seek to bring partners together to start the discussions regarding the proposed approach. Sean Russell undertook to prepare a briefing paper for the Chair post this event to enable further discussions to take place

The Chair reported that he and the Mayor would progress the matter with Sir John Peace, Chairman of Midlands Engine following feedback from Sean Russell on the funding criteria/scoping event.

In relation to Zero Suicide Ambition, the Chair noted that there were two suicides at Solihull Rail Station last week and enquired as to what work is being done in this area.

Sean Russell outlined the work that is being undertaken with regards to rail stations at a national and local level with Network Rail, rail companies and British Transport Police to try to prevent any more suicides at stations

Jane Moore added that she and Sean Russell were talking to Transport for the West Midlands (TfWM) on suicide that would look at this area across all transport modes.

In relation to the second 'Walking out of Darkness' event that is planned for 7 October 2018, the Chair considered that as many people as possible should

be encouraged to sign up for the event and asked that a letter be written on his behalf (following 3 May local elections) to all Leaders to make them aware of the event.

The Chair noted that Sean Russell had recently received the WMCA's Chief Executive Special Award and conveyed his congratulations to the Mental Health Implementation Director.

Resolved: That progress and the update on the current position of the West Midland Mental Health Commission Action Plan and the work undertaken since the launch of the programme on 31 January 2017 be noted.

**40. Update from STPs Leads & NHSE / Feedback from Health & Wellbeing Chairs**

Alison Tonge reported on the partnership structure of the STPs and how these would be developed into Integrated Care Systems (ICS). It was noted that the pilot programme would commence at the end of April and would be open to all partners in STP areas who would be provided with resources to shape the strategic commissions. Alison Tonge added that this was a good development opportunity for STPs to have support and consider what the ICS should like. A further update would be presented to the next meeting

In relation to a comment from Councillor Hamilton that politicians have not been involved in the transition process, Jane Moore undertook to include feedback on this issue in her report to the STPs.

In relation to the first report prepared by Jane Moore for Health and Wellbeing Chairs, Jane Moore advised that the report had been well received and Chairs had asked for short and simple reports moving forward.

Resolved: That the update be noted.

**41. Update on West Midlands On The Move & proposed collaboration with Sports England**

Simon Hall, was in attendance to update the board on the West Midlands on the Move and report on the proposed collaboration with Sports England, with Adam Rigarlsford, Strategic Lead, Sports England

The presentation provided an overview of the housing deal, spatial investment delivery plan, the smart bike scheme, the scope of the disability and physical activity work and Sport England's Strategy with the WMCA which included in the pilot Birmingham and Solihull.

In relation to housing and growth, Councillor Meeson reported of the need for the WMCA to have the powers to ensure housing developments incorporate social/ sports facilities.

The Chair concurred and considered that local development plans need to include what the WMCA wants.

Henry Kippin advised that devolution and inclusive growth would bring together housing, skills and transport with the Wellbeing principles to deliver something better and different.

Sarah Norman reported there was a real opportunity to develop the evidence base so that the WMCA can identify the most appropriate interventions and deliver those initiatives that have the most impact.

Guy Daly reported that the universities have amassed a wealth evidence on behaviour change but consideration needs to be given to changing behaviour for hard to reach groups and noted that 'run a mile' in Scotland was easy to roll-out and effective.

Simon Hall reported that he was supportive of using the evidence base to seek to incorporate activity into people's lives and would be working with local communities to try to attract people who do not undertake any physical activity.

The Chair thanked Simon Hall and Adam Rigarlsford for their presentation.

Resolved: That the presentation be noted.

#### **42. Update on the Health and Wellbeing Programme**

The board considered a report of the WMCA Director of Prevention and Wellbeing, Jane Moore that provided an update on the health and wellbeing agenda since the last meeting.

Jane Moore reported on the work undertaken to align the WMCA Health and Wellbeing agenda with the WMCA PSR and Inclusive Growth agenda and to set out a clearer narrative on how the Health and Wellbeing portfolio contributes to the overall WMCA objective of delivering economic growth that benefits all people of the West Midlands.

It was noted that this information was captured in the appendices attached to the report; a plan on page for PSR, inclusion and cohesion; WMCA Health and Wellbeing Portfolio - plan on a page and WMCA Health and Wellbeing Work Plan-plan on a page.

Jane Moore also referred to appendix 3 of the report, a table that summarised the actions and deliverables for the workstreams within the three key work areas of productivity and health, radical prevention and system collaboration.

In relation to productivity and health and the action to develop an interactive online version of the Wellbeing Dashboard, Jane Moore reported that she would welcome comments from colleagues on the indicators they would like to see included in the dashboard.

In relation to the digital social referral pilot (urban challenge) that seeks to improve the health, wellbeing and social connections of a group of older

people, Henry Kippin undertook to circulate a briefing note to the board for information.

Resolved:

- (1) That the Health and Wellbeing plan on a page, work plan and framework be endorsed.

The meeting ended at 3.10 pm.

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<b>Wellbeing Board</b>	
<b>Governance Type</b>	Strategic Development
<b>Purpose</b>	<p>Responsible for setting the overarching strategic vision for the West Midlands Health and Social Care economy.</p> <p>Support the West Midlands to achieve its ambition of improving health outcomes for its residents as quickly as is possible, robust and inclusive governance structures need to be developed and put in place.</p>
<b>Membership</b>	<p><b>Members</b></p> <ul style="list-style-type: none"> <li>• Constituent and Non-Constituent members</li> <li>• Health representatives</li> <li>• Public Health representative</li> </ul>
<b>Chair</b>	The Chair will be appointed by the Combined Authority Board. A Vice Chair will be appointed by the Wellbeing Board.
<b>Voting</b>	All members of the Wellbeing Board will have one vote.
<b>Quorum</b>	The quorum for the Wellbeing Board is one third of its members.
<b>Frequency</b>	The Wellbeing Board will meet monthly or more frequently if required to deliver the work.
<b>Allowances</b>	No allowances to be paid.
<b>Servicing</b>	The Wellbeing Board will be serviced by the Combined Authority Governance Team.
<p><b>Functions</b></p> <ol style="list-style-type: none"> <li>I. To understand and influence the interdependent health and social care system within the West Midlands.</li> <li>II. To influence NHS spend in West Midlands in pursuit of West Midland priorities.</li> </ol>	



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|------|---|
| III. | To provide a focus on total public sector commitment to population health commitments.  |
| IV.  | To provide political leadership for major system reform.  |
| V.   | To influence and hold to account new national bodies which will have commissioning roles and play a major role in wellbeing in the West Midlands. |

<b>Review</b>	To be reviewed June 2017
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## Wellbeing Board Meeting

<b>Date</b>	13 July 2018
<b>Report title</b>	Overview of Health and Wellbeing Programme
<b>Portfolio Lead</b>	Councillor Izzi Seccombe - Wellbeing
<b>Accountable Chief Executive</b>	Sarah Norman Email <a href="mailto:sarah.norman@dudley.gov.uk">sarah.norman@dudley.gov.uk</a> Tel (01384) 815201
<b>Accountable Employee</b>	Dr Jane Moore -Director of Prevention and Wellbeing Email <a href="mailto:Jane.Moore@wmca.org.uk">Jane.Moore@wmca.org.uk</a> Tel 0121 214 7039
<b>Report to be/has been considered by</b>	This paper will be considered by WMCA Programme Board

**Recommendation(s) for action or decision:**

**The Wellbeing Board is recommended to:**

1. The Wellbeing Board are asked to consider the Health and Wellbeing Plan on a page.
2. The Wellbeing Board are asked to review the key work areas under this plan.

## **Purpose**

- 1.1 This report is intended to ensure that new and previous members of the Wellbeing board have a clear overview of the programme to date and the current activities being undertaken on the Health and Wellbeing agenda.

## **2.0 Background**

- 2.1 The focus on the wellbeing agenda of the WMCA has been on keeping the people of the West Midlands healthy so that they are able to contribute to and benefit from the economic growth at the heart of the WMCAs strategy. This means that the WMCA Health and Wellbeing agenda is also clearly aligned with the WMCA PSR and Inclusive Growth agenda. This has been summarised in the PSR plan on a page in appendix 1 together with the Wellbeing plan on a page in appendix 2.
- 2.2 A summary of the current work programme is set out in appendix 3. This sets out the main objectives, deliverables and timescales. In the meeting there will be an opportunity for members to review in more detail the main work streams.
- 2.3 The Board are asked to consider the current framework for describing the work undertaken within the Health and Wellbeing Portfolio and to review the summary work plan. An update of the summary work plan will be included at each Board meeting together with more detailed reports on specific elements of the work at critical milestones or delivery points.

## **3.0 Wider WMCA Implications**

- 3.1 The development and implementation of these priorities will involve non-constituent areas (e.g. within STP geographical areas).

## **4.0 Financial implications**

- 4.1 The financial implications will depend on the development of the programmes for the two priority areas.

## **5.0 Legal implications**

- 5.1 Any legal implications will depend on the programmes developed.

## **6.0 Equalities implications**

- 6.1 Any equalities implications will depend on the programmes developed

## **8.0 Other implications**

- 8.1 None.

## **9.0 Appendices**

**Appendix 1 - PSR Plan on a page**

**Appendix 2 - Wellbeing Plan on a page**

**Appendix 3 - Current Work Programme**

**Appendix 4 - STP Update (Draft STP Strategy from BSOL)**

# PUBLIC SERVICE REFORM, INCLUSION AND COHESION PLAN ON A PAGE

The WMCA’s ‘public service reform, inclusion and cohesion’ portfolio is the foundation stone for inclusive growth across the region that all of our residents can benefit from. We believe in change through collaboration - working with our members and partners on public service innovation that connects our communities and unlocks our potential. This is ‘whole place collaboration built from the bottom up’. Our role is about adding value through insight, innovation and system leadership - helping to create the conditions for new models of service delivery that can make a real difference on the ground.

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## INCLUSIVE GROWTH

Promoting a model of economic growth that impacts positively on all of our residents and communities. Our activities focus on building our capacity to influence and promote inclusive growth priorities, driving social value in everything we do, and developing specific actions to promote inclusive transport, housing, skills and public service outcomes.

## RADICAL PREVENTION

This is about developing radical new ways of preventing social problems that are entrenched within the region, and which block the potential of so many of our communities. Our activities focus on changing outcomes for some of our most disadvantaged people, both through leading edge research and the application of new delivery models alongside our members and system partners.

## SYSTEM COLLABORATION

This is about enabling change across the system of public services and civil society within the West Midlands - through creating space for collaboration and establishing the building blocks for whole place change. Our activities focus on unlocking collaboration between our members, and applying new ways of solving problems.

### INCLUSIVE GROWTH UNIT

Including our Inclusive Growth Toolkit, and regular blueprints for inclusive growth outcomes in key policy areas.

### SOCIAL ECONOMY & SOCIAL VALUE

Including our Social Economy Taskforce, which explores the role of social econ orgs and social value commissioning in inclusive growth.

### CONNECTED COMMUNITIES

Including the development of PSR hubs and ensuring IG outcomes in transport and housing policy.

### MULTIPLE COMPLEX NEEDS

‘Pathfinder’ pilot in south Birmingham. Potential to create WM service innovation around MCN.

### YOUTH & WOMEN’S JUSTICE

Including path breaking research work on ALTAR and development of a strategy for CJS devolution.

### FUTURE DELIVERY MODELS

Including service co-design with fire, police and PS partners, and work with CWC and youth unemp.

### LEADERSHIP & WORKFORCE

Including early work to develop a collaborative leadership programme for WM - with WMCA playing an enabling role.

### DIGITAL & DATA

Including the Office for Data Analytics, and the recruitment of a Chief Digital Officer to support digital innovation in public services.

### PUBLIC VALUE COLLABORATION

Including setup of a WM ‘Public Impact Lab’, and potential development of ‘public value’ pilots in case study areas.

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# WMCA Health and Wellbeing Portfolio – plan on a page

*The West Midlands Strategic Economic Plan has set out bold ambitions to improve the health and wealth of communities within the West Midlands. We want to provide a system leadership role: supporting efforts to unlock productivity, manage demand and address health inequalities that are shared by our partners and delivered within their Sustainability and Transformation Plans. Our role is to provide the ambition, the innovation, and to support collaboration across these partnerships - focusing our efforts on areas where radical action can close the health and productivity gap that impacts on so many of our communities.*

## PRODUCTIVITY AND HEALTH

Unlocking the economic premium generated by a healthy and well population, supporting the WMCA's ambition for inclusive growth that reinforces the link between health, wealth and human capital. Our activities focus on intelligence to support better health outcomes across all policies, and on specific activities to improve the resilience and social mobility of children and young people.

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### Inclusive Growth and Population Health

Including our Population Health Intelligence Hub, our Inclusive Growth Unit and deep collaboration with public health partners.

### Health in Housing and Transport

Including the testing wellbeing & transport hubs, the One Public Estate Programme, and a health & housing commitment.

### Children and Young People

Including research into resilience & ALTAR and focused projects on radical prevention and young people.

## RADICAL PREVENTION

Enabling models of radical prevention that tackle the causes of ill health and poor productivity in the West Midlands. Our role here is as an innovation partner - trialing new initiatives, catalysing change and promoting new ways of working across the system in areas within which we can add value to our partners.

### Thrive

Growing and coordinating the delivery of our globally recognised movement for innovation system change in mental health awareness and practice.

### CVD and Diabetes

Building the business case for innovation pilots that catalyse multi-setting prevention activity to target the biggest chronic health problems upstream.

### West Midlands on the Move

Our regional strategy for physical activity being made real through three dynamic pilots linking physical activity and social connectivity. Inc, the Bham 2022 CWG.

## SYSTEM COLLABORATION

Providing a system leadership role - convening, supporting better outcomes, and strengthening the links between health, care and other sectors within public services. Our role here is to support collaboration: acting in areas where we can bring people together and support whole-place change led by our partners.

### Support for System Change

Collaboration across the system and supporting the development of new models of place-based health.

### Digital Innovation

Exploring opportunities to drive digital innovation to support Industrial Strategy goals and better health outcomes.

### Workforce and Leadership

Supporting workforce collaboration across the West Midlands. A convening role and bringing sectors together.

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## Appendix 3

### Summary activity plan

#### Productivity and Health

Area	Action	Outcome	Delivery Date
<b>Inclusive Growth and Population Health</b>			
WMCA online Indicator Dashboard	<ul style="list-style-type: none"> <li>Develop an interactive online version of the Wellbeing Dashboard</li> <li>Ensure that the Inclusive growth monitor incorporates population wellbeing indicators</li> </ul>	<ul style="list-style-type: none"> <li>Enable better use of WMCA level wellbeing data by a wider range of users</li> <li>Ensure that the contribution of health and wellbeing to economic growth and productivity is made</li> </ul>	<p>April 2018</p> <p>September 2018</p>
PHE/WMCA Summit on Population Intelligence	To launch an ongoing joint commitment to development of the Population Intelligence Hub	Commitment from the CEO of PHE to support the WMCA Inclusive Growth and Wellbeing agenda	May 2018
<b>Health in Housing and Transport</b>			
One Public Estate	To develop a unified approach to the use of public estate across the West Midlands	The better use of public estate to enable public sector transformation and the release of surplus estate for other uses	Ongoing – various delivery dates for different projects
Bike share	Delivery of a Bike share providing 5000 bikes across the West Midlands with a joined up approach to marketing and location of bikes between transport and wellbeing	More people active through cycling to and between work and for leisure purposes	September 2018 onwards
Transport and Health Strategy	To turn the Health and Transport Strategy into a small number of proposals for action	Agreed action on improving health and wellbeing through transport initiatives	June to December 2018

Housing and Health	Set of design principals being developed for delivering better health outcomes which will be in the WMCA Spatial Investment and Delivery Plan (SIDP)	Improved, wellbeing, liveability and community cohesion	Completion of the SIDP by end of 2018
<b>Children and Young People</b>			
West Midlands Children and Young People Summit	To bring together work on Children and Young People across the West Midlands in partnership with the Nuffield Trust/Health Foundation and Birmingham Children's and Women's NHS Trust.	To use the convening power of the WMCA to bring together the different perspectives and work on children and young people and reflect on the opportunities for more collaborative action in the West Midlands	November /December 2018

### Radical Prevention

Area	Action(s)	Outcome	Delivery Date
<b>Thrive</b>			
Employer and Employee Programme	<ul style="list-style-type: none"> <li>Individual Placement Support Pilot in primary and community settings</li> <li>Fiscal Incentive</li> <li>Wellbeing Charter</li> </ul>	<ul style="list-style-type: none"> <li>Improve support for people to return to work</li> <li>More employers develop wellbeing programmes in the workplace</li> <li>A wellbeing toolkit for businesses</li> </ul>	<p>Started June 2018</p> <p>Start recruitment of SME's July 2018</p> <p>Commitment completed. Now in testing phase and due for launch in Sept 2018</p>
Housing First	Development of a model of Housing First linked to the	Reduction in the number of people with mental health	Ongoing – awaiting update

	regional Housing First pilot	problems who are homeless	from DCMS on Funding stream
Criminal Justice	<ul style="list-style-type: none"> <li>Engager Programme to support people leaving prison</li> <li>Mental Health Treatment Requirements</li> </ul>	<ul style="list-style-type: none"> <li>Improved psychological support for people leaving prison</li> <li>Diversion of people with mental health and drug and alcohol problems</li> </ul>	<p>Paused due to provider issues. Reshaping programme and seeking to relaunch in Autumn</p> <p>Birmingham site live and Black Country/ Coventry Summer 2018</p>
MERIT	Improved collaboration between NHS Mental Health Providers	Reduction in out of area placements, reduced restraint in mental health units and improved early access for psychosis	Ongoing – variable dates for different elements of the programme
<b>Cardiovascular Disease and Diabetes</b>			
Radical Prevention in the West Midlands	<ul style="list-style-type: none"> <li>Stocktake of current Prevention actions within STPs</li> <li>Workshop on potential Prevention work across the West Midlands</li> </ul>	<ul style="list-style-type: none"> <li>Stocktake is underway and a progress report is going to the STP Exec group</li> <li>Further work in the autumn on joining up NHS and LA prevention agendas linked to population health management</li> </ul>	<p>June/July 2018</p> <p>Autumn 2018</p>
<b>West Midlands on the Move</b>			
Disability and Inactivity (Phase 2)	<ul style="list-style-type: none"> <li>Evidence and Listening event and independent review started</li> </ul>	<ul style="list-style-type: none"> <li>Improved life chances for disabled people in the West Midlands</li> </ul>	<p>Draft issues paper 25 July 2018</p> <p>Final Report August 2018</p> <p>Sept 2018</p>

	<ul style="list-style-type: none"> <li>• Developing Early implementers inc. Mental Health First Aid 5000 campaign.</li> <li>• Campaign to gain Stakeholder support</li> <li>• Government Disability Champions briefing</li> </ul>	<ul style="list-style-type: none"> <li>• West Midlands an exemplar region for active disabled people.</li> <li>• Stakeholder commitment to joint working.</li> <li>• Delivery informed by national cross sector expertise</li> </ul>	<p>Sept 2018</p> <p>Autumn 2018</p>
Physical activity and social inclusion	Support the targeted rollout of Goodgym. This includes testing the good deed incentive to get people active and working with adult social care to provide vulnerable older adults befriending programme.	More people active and improved outcomes for vulnerable adults. Pilot will aim to get 120 additional people active and 100 vulnerable older people befriended over 6 months	<p>Solihull Summer 2018</p> <p>Coventry Spring 2019</p> <p>Wolverhampton Summer 2019</p>
Systems leadership in the physical activity sector: e.g. bid for the European Communities of Sport	<ul style="list-style-type: none"> <li>• Development and implementation of a collaborative leadership programme to develop system leadership across the physical activity space.</li> <li>• Preparatory work to gain agreement for a West Midlands bid to be</li> </ul>	<ul style="list-style-type: none"> <li>• Improved collaborative leadership across the sector with a commitment to working at scale to get the people of the WM more active.</li> <li>• Gain International status for collaborative approaches to</li> </ul>	<p>Consultation, agreement and commitment to programme by Sept. 18 and delivery by end of Oct 18.</p> <p>Consultation and agreement for bid by October 18.</p>

	European Community of Sport in 2020	getting more people active and contributing to inclusive economic growth	
Sport England Partnership Framework	A plan for WMCA and Sports England to work together on policy, influence and investment on specific interventions in the areas of leadership, housing, disability, insight	More people taking part in physical activity that aims to reduce inequalities and generate social good	Proposal developed by July 2018  Agreement with Senior WMCA and Sport England officers by end of Aug 2018
Wider Partnerships	<ul style="list-style-type: none"> <li>A partnership agreement for the WMCA to work with UKactive on engaging their membership and influencing members policies</li> </ul>	<ul style="list-style-type: none"> <li>More people taking part in physical activity with a focus on targeting groups to reduce inequalities and generate social good.</li> </ul>	Proposed developed in July 2018  Agreement by early September 2018
Wider Partnerships	<ul style="list-style-type: none"> <li>A partnership with West Midlands Combined Universities for targeted work e.g. academic research; mental health first aid</li> </ul>	<ul style="list-style-type: none"> <li>Building the academic evidence base for the benefits of physical activity in improving wellbeing, economic and social outcomes</li> </ul>	Launch Mid September 2018

### System Collaboration

Area	Action	Outcome	Delivery Date
<b>Support for System Change</b>			
Population Health Management	<ul style="list-style-type: none"> <li>To provide support to the development of Population Health Management in</li> </ul>	<ul style="list-style-type: none"> <li>To improve our understanding of the health needs of the population and identify the opportunities to</li> </ul>	Ongoing

	line with the work on improving population intelligence in the West Midlands	transform health and wellbeing outcomes for people in the West Midlands	
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**Digital Innovation**

Digital Social Referral Pilot	To support the delivery of a three month pilot to test out a social referral model for older people using a housing provider	To improve the health, wellbeing, social connections of a group of older people	End of August 2018
Building the digital healthcare offer	Building the links between the WM NHS Digital agenda and the WMCA digital agendas	Improved care of people within the West Midlands and maintenance of WM strengths on digital healthcare	Ongoing

**Workforce and Leadership**

Mayors Leadership Commission	Using the outcomes of the Leadership Commission to support better system leadership, collaboration and delivery across the health and care system.	Improved and innovative approaches to supporting vulnerable people in our communities	Ongoing
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Live healthy  
Live happy  
Birmingham and Solihull



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## Our Vision



“Helping everyone in Birmingham and Solihull to live the healthiest and happiest lives possible”

Our partnership represents a dynamic and diverse place at the centre of the nation. Birmingham, a vibrant city, the most youthful core city in Europe; the UK’s second biggest metro economy. Partnered with Solihull borough, a leading driver of economic growth in the region; ranked one of the best places to live in the country, with a green, high quality environment. Together, greater than the sum of our parts. A place that attracts talent from around the world, as well as developing our own. A place of creativity, connectivity and culture. A place of knowledge, knowhow and education, with six universities in one city. A legacy and a future in sporting excellence. A place with fast new transport links and technological possibilities. A place that led the way in the industrial age and that will do so again in the digital era. Innovative, inventive and international. A place for economic growth and social mobility.

A place of limitless ambition.

## Our challenges and opportunities

Health and social care are often and rightly regarded as amongst the jewels in the crown of our public services. We want to ensure that this remains the case for future generations. We recognise the essential need for our local public sector organisations across Birmingham and Solihull to work in closer partnership than ever before in order to focus collectively on the challenges and opportunities ahead.

In recent years, health and social care have come under growing pressure in Birmingham and Solihull, as in the rest of the country. The funding for these services has not risen in step with demand.

As part of the national attempt to address the structural deficit, funding growth has slowed sharply for the NHS, and for social care it has actually reduced. However, the major underlying reasons that demand has outpaced affordability in our current model of care are driven by longer term, societal changes:

- **Our ageing society:** people are living longer, which is a great success, but it means we need a system that helps many more people to live well and independently in later life, and to meet their varied care needs.
- **A shifting burden of disease:** the last century has seen a major shift from death and illness being caused mainly by infectious diseases to non-infectious diseases, such as cancer, heart disease, diabetes, dementia and mental illness. This reduces somewhat the fear of sudden, catastrophic illness, but increases many-fold the chances of people living more years with ongoing, complex and expensive care needs.
- **Technological advances:** science and digital technologies are transforming every facet of modern life. We can introduce new treatments and innovations to improve clinical care and quality of life, but, whilst some may be cost saving, the net effect is to add to the cost of care, especially in the most specialised services.

These far reaching, societal changes are not unique to our region or our country; they are the challenges of all developed health and care systems around the world.

We need to find the most safe, effective and compassionate ways to manage the health and care needs of our population within the available resources; **to make high quality health and care sustainable now, and for future generations.** This will require action at national and local levels. We believe it is both essential and possible to do this whilst making things better for patients and citizens because higher quality care is more cost effective than poor quality, inefficient care.

We seek a greater emphasis on the **promotion of health and wellbeing** to keep people active and productive for longer, with a particular focus on supporting the most disadvantaged in our communities; we want to continuously **improve the quality of care** that people experience; and we want to **maximise efficiency** in how we use public resources.

That is why, locally and nationally, health and social care geographies have been formed together as “sustainability and transformation partnerships” (STPs).<sup>i</sup> These are not new organisations, but important partnerships of the existing health and social care organisations. They have been established to focus collectively, rather than separately, on the needs of the local people they serve.



## Our Partnership

The map shows the geography of our local health and care system. It includes all of the Solihull Metropolitan Borough Council and much of Birmingham City Council. West Birmingham is included in a neighbouring STP, with which

we work closely. In addition to the two local authorities, our partnership includes:

- 177 general practices, many of which are within one of four large GP groups: Midlands Medical Partnership, MyHealthcare, Our Health Partnership, General Practice Solihull Healthcare
- Birmingham Community Healthcare NHS Foundation Trust
- Birmingham and Solihull Mental Health NHS Foundation Trust
- NHS Birmingham and Solihull Clinical Commissioning Group
- Birmingham Women's and Children's NHS Foundation Trust
- University Hospitals Birmingham NHS Foundation Trust
- The Royal Orthopaedic Hospital NHS Foundation Trust

West Midlands Ambulance NHS Foundation Trust is an associate member. We also have close relationships with neighbouring areas, such as the Black Country, Staffordshire, and Coventry & Warwickshire, in some cases providing services for each other's citizens. w

We serve a large and diverse population. The Birmingham area has a population of c.1 million, making it the largest local council in the country, and Solihull has c.210,000 residents. Over a hundred different languages are spoken in Birmingham and in some wards of the city up to 80% or residents are from Black, Asian and Minority Ethnic groups. We are, at once, young and ageing. Birmingham is a growing city that has the youngest average age of the core cities of Europe, with almost half of the population under 30 years of age. Some 90% of the adult population owns a smart phone, which is the highest coverage in Europe. Solihull has an older population, on average, with 21% aged over 65.

In common with other developed countries, the overall structure of society is changing as people live longer lives. Ageing societies are one of the great challenges for health and care systems across the developed world, and we are no exception. In three decades, the number of people over 65 years of age is expected to increase by a third. The number over 85 years of age will double, as will the number living with cancer and dementia, diseases that are often associated with ageing. This will increase costs significantly because, on average, the health costs for someone over 65 are four times higher than for a working age adult, and they are eight times higher for a person over 85.

Both Birmingham and Solihull have stark inequalities in terms of the health and wealth of their citizens. In Birmingham, 440,000 people, or 46% of the population, live in the 10% of most deprived areas in England, which accounts for some very poor health outcomes. The city has a level of homelessness that is more than three times the national average, long-term unemployment two and a half times higher, and one in three children live in poverty. One in four people live with a mental health condition that started in childhood.

Solihull has sharp contrasts in wealth and deprivation across different areas, although on average is more affluent than England as a whole. In the most northerly part of the borough, around one in three children live in a household without work or reliant on benefits. Whilst improving, there is a relatively high rate of homelessness.

People born in the most affluent parts of Birmingham and Solihull will live, on average, nine years longer than those born in the most deprived wards. This unacceptable gap drives our relentless determination to put at the forefront of our strategy the reduction of inequalities in health and outcomes.

## Our progress so far

Our first task, after the STP was established in 2016, was to stabilise under-performance in the health and care economy. We had some strategically significant organisations providing variable quality of care and whose expenditure was far exceeding income. Unless we could stabilise these organisations, we would not have firm foundations for our ambitious transformation plans.

Notably, this has involved the successful mergers of Birmingham Women's and Children's hospitals, the three clinical commissioning groups (CCGs) coming together in a new, single commissioning organisation, and the merger by acquisition of Heart of England NHS Foundation Trust by University Hospitals Birmingham NHS Foundation Trust.

We are one of the most advanced places in the country for developing general practice at scale. Within the STP we have four substantial and formally constituted GP organisations offering opportunities locally that have not been available before. We are working hard to provide high quality primary care, with the ambition for all GP providers to have achieved a Care Quality Commission rating

of 'good' or above in 2018. We are also involved in the national programme to recruit additional GPs from overseas to help fill gaps in the workforce.

Birmingham Community Healthcare has begun to develop community services to care for people at home, including local integrated multidisciplinary teams, a rapid response nursing service and, most recently, 'virtual beds' to provide extra support in the most pressurised winter period.

We have made significant progress in mental health. Reach Out offers a new model for secure care. The MERIT programme aligns partners providing urgent care. We have also transformed access to community services for perinatal mental health. We have the only mental health global digital exemplar in the UK.

The health and local authority partnership, Solihull Together, is helping people to retain their independence through 'SupportUHome', which provides more timely support for people leaving hospital. The partnership has achieved significant reductions in delayed transfers of care. In its efforts to sustain and improve services, Birmingham City Council has set out a new vision for adult social care and health and the formation of a dedicated Children's Trust to lead services for some of our most vulnerable children.

In the first national ratings of STPs, Birmingham and Solihull was rated as 'Advanced', the second highest on a four point scale. This progress has laid the foundations for the more transformational next phase of our strategy.

## Our vision and aspirations

**Our renewed vision is to help everyone in Birmingham and Solihull to live the healthiest and happiest lives possible.**

We want to be the best place in the country for health and social care. We recognise that many of the factors that affect people's health and happiness are not within the direct responsibility of the NHS or social care, such as family life, employment, environment, transport and accommodation. But we define our ambition in terms that we believe matter to our citizens, rather than in terms of institutional responsibilities. We want to do everything that is within our considerable, collective power to contribute to our people's health and happiness.<sup>ii</sup> In particular, we want to help address the stark gap between the outcomes

of the most and the least advantaged.

We see our vision for Birmingham and Solihull in the context of a wider regional mission. We will work closely with our partners in the West Midlands Combined Authority (WMCA) whose stated aim is to 'build a healthier, happier, better connected and more prosperous West Midlands'.<sup>iii</sup>

We are entering a new phase in which our city and region will once again be at the forefront of technological innovation and economic growth. Health, research and the life sciences sector can be major contributors to regional economic growth and inward investment. We must make sure that our citizens connect with these opportunities, and that the benefits for individual health and wealth are shared more evenly in the future.

As a health and social care system, there are five aspirations that we stand for:

**1. Independence and resilience** – we want to play an enabling role that helps individuals and families to live long, fulfilling and independent lives, taking personal responsibility for their health and well being, and with the physical and emotional resilience to cope with the stresses and strains of life and to recover from setbacks. Public services need to complement individual and community efforts, rather than substitute for them.

**2. Equity, equality and inclusion** – overall gains in health and prosperity have not been shared evenly, so we want to reduce the unacceptable gap between the health and well being of the most and the least advantaged. We want parity of esteem between mental and physical health. And we want to promote inclusive communities, reducing social isolation.

**3. Integration and simplification** – many of the problems of health and social care exist at the misaligned joins between separate organisations, services or professionals. We want to integrate our services around the paths that people want or need to take, making best use of technology and personal health budgets to do so, rather than expecting them to navigate a complex and disjointed offer for their health and care. They should not have to tell their story many times over because the system should be joined up and enabled by technology.

**4. Promoting prosperity** – better health and life outcomes are closely correlated to prosperity for individuals and communities. We want to make our contribution to economic growth and stable employment by supporting people and communities to be active and productive.

**5. Social value** – when we use our scale and act collectively, we have the potential to deliver social and economic benefits that are far broader than health and social care alone. We recognise that our vision and aspirations are complex and multifactorial, and we cannot achieve them alone. But we can and will be role models who provide leadership in some important areas, such as how we affect and interact with our environment, how we care for our many staff, how we tackle inequalities and the impact we have on people’s diet and activity. We will hold ourselves to high standards in terms of the social value we create collectively.

***How will we operate differently to achieve our bold aspirations?***

**Our approach: born well, grow well, live well, age well and die well**

We know that people’s social and economic circumstances substantially affect their health status and life chances, and that their course is often set very early in life, whether positively or negatively.<sup>iv</sup>

We want babies to have the best start in life; to have a healthy and happy transition through childhood and adolescence; to live well through adulthood; to age well; and, when the time comes, to reach the end of their life in a manner that meets their wishes and preferences.

For those people whose lives do not follow a smooth course because they are stuck in a cycle of disadvantage, we want to support them to break out of that cycle and to enjoy health and happiness.

We want to rediscover the benefits for society, education, health and happiness of different generations mixing together, which has become less common in an age when families may be dispersed for reasons of employment, migration or mobility, and in which loneliness has become endemic.

All of this requires a much more joined up approach to health and care, as well as wider public services.

**The transformational change we propose is to work on the basis of ‘place’ rather than ‘institution’.** In essence, this means understanding in detail the needs of the people in each of the parts of Birmingham and Solihull and marshalling our collective assets in those localities to best meet those needs in a much more coordinated way. Those assets might be financial investment, professional time, the way we use public buildings, digital infrastructure, or knowledge and information. We can achieve more for our citizens, patients and staff, and their experiences of public services should feel more seamless, if we work together in much closer partnership to deliver place-based care.

This might sound obvious but it is not the way that public services have typically worked, so it represents a fundamental change in our ‘operating model’ as a health and social care system. It means we will focus primarily on what matters to people in the places where they live and work, rather than what may appear convenient for the public institutions with which they interact when they are unwell or in need of care.

It means our organisations, which are already under significant pressure to meet demands for care within the finances available, will have to be prepared to move resources to where patients and citizens most need them. In fact, precisely because we are under such pressure, now is the time to take bold and outward-looking decisions to transform our system of health and care to better meet demand, rather than to retreat into organisational or professional silos.

One of the examples of where we will take this approach is in **East Birmingham and North Solihull** which is the focus of major regeneration programmes involving both councils and under the auspices of the West Midlands Combined Authority. These will tackle some of the most entrenched socio-economic problems in our region, building on the successful regeneration work already completed in North Solihull. The focus will be on improving health, connectivity, education and skills for the people in that large urban area, in which some 300,000 people live. The new metro linking HS2 with the city centre, via the Eastern suburbs, will be a major catalyst for change, and we will play our full partnership role in addressing the health challenges as part of this place-based approach.

For Birmingham and Solihull as a whole, **we are completely committed to operating in partnership**

with a sense of common purpose. We see this as part of the essential path towards sustainability of high quality health and care services now and for future generations. The leadership roles and professional behaviours we encourage in the future will be about working collaboratively as a system and a local community, not guarding organisational boundaries.

We will embrace innovation, particularly in the realm of digital technologies and capabilities. Almost all aspects of our daily lives are changing dramatically in the digital era, but health and social care have lagged behind some other sectors in harnessing the possibilities of new technologies. For everything we do, we will look at how **technology can support integration** of services, professional communication and how it can support individuals to be informed about and manage their own health and wellbeing.

We will move from operational to strategic commissioning for outcomes. Local government and NHS commissioners will set out the health and social care outcomes that we want for the population, and providers will work together to deliver the **highest standards of care**. We will optimise personal budgets and empower people to be in charge of their own care.

We will work with our local academic institutions, such as Birmingham Health Partners and the West Midlands Academic Health Sciences Network, and take decisions on the basis of the **best available evidence**. This will ensure that our actions are addressing the issues of greatest need in health and care, reducing inequalities in outcomes and variations in care, and delivering the best return on investment in both the short and long term. We will also examine rigorously the evidence base so that we support interventions that are most likely to be effective in addressing those issues. We will publish our evidence base and evaluate periodically our actions for their effectiveness. Where new evidence or evaluation shows we should change tack to deliver better outcomes or cost-effectiveness, we will do that rapidly and pragmatically.

The best form of evidence about where to focus our efforts will come from the citizens of Birmingham and Solihull themselves. We will carry out a programme of **open and inclusive public engagement** so that we hear from the people directly about what matters to them and how we can best meet their needs. Details of how to have your say are included at the end of this document.

Health and Well Being Boards will continue to have democratic, strategic oversight of our health and care system developments and the impact on the people we serve.

## Our resources

The overall intentions of this multi-year strategy are to improve the health and well being of our population, reduce inequalities, maintain and improve the quality of care we provide, and to live within our means financially.

The NHS is a national service funded through general taxation. Social care is funded through a combination of general taxation, local taxation and individual payments according to means. A more sustainable model for social care funding, in the context of our ageing society, will be the subject of an HM Government Green Paper later this year.<sup>v</sup>

For both services, therefore, the level of funding available is substantially affected by central Government decisions. Numerous Parliamentary and independent expert groups have now recognised that both the NHS and social care will need funding increases well above the levels of recent years, as soon as the economy can bear it.<sup>vi vii viii ix</sup> That will be an essential element of securing the long term sustainability of high quality health and social care for future generations. It is particularly significant for Birmingham's and Solihull's health services, which are in the lowest ten per cent of areas in England for the fairness of their funding according to the national, objective assessment of the population's needs.<sup>x</sup>

Nevertheless, we also have an important role to maximise our potential and productivity in Birmingham and Solihull. Local authorities are expected to fund many services through the retention of business rates, so economic growth is integral to our strategy.

Benchmarking data shows that we have some opportunities to deliver high quality care, more efficiently, if we achieve the best practice amongst our peers.<sup>xi</sup> We can also take a more proactive approach in certain areas to moderate the demand for our services, such as preventing people from becoming acutely unwell. These opportunities include:

- **Health promotion** – a system that supports people to maintain their health and well being can reduce substantially the costs of treating preventable diseases, such as type II diabetes, lung cancer and many other conditions linked to unhealthy lifestyles. Benchmarking shows that if we achieved best practice in the NHS we

could save around 70 lives per year that are lost to cancer or respiratory illnesses. We could also save around 8% of the £46m we spend per year on treating respiratory conditions. There will also be multiple wider benefits for economic productivity in supporting people to stay health and active.

- **Independence and work** – as the structure of society is changing, so is the dependency ratio, which is the number of people in work relative to those who require support from public services. We want to support people to maintain their health, independence and productivity for as long as possible. We will be active in supporting local skills and employment opportunities to tackle the anomaly that we have pockets of high unemployment in Birmingham and Solihull, whilst also having vacancies at most skill levels in our health and care organisations.
- **Right care, right place** – the current model of care too often defaults to hospitalisation. In many cases, more preventative care in the community, or swifter discharge from hospital supported by a package of community support or social care, would be better for patients and more economical. This is particularly relevant for the care of older people and for those at the end of their life. Analysis has shown that we could save around £40m per year locally by caring for older people in the most appropriate settings, with enablement support, and by reducing clinically unnecessary stays in hospital. There are also opportunities for stable patients to have more of their follow up care in primary or community settings, rather than in hospital outpatients.
- **Reducing variation** – we want citizens to receive the best quality care wherever they live, but there is too much variation in care and outcomes. There is ample evidence that higher quality care, with fewer errors, is both better for patients and more cost effective. Benchmarking data shows that if we achieved best practice in the NHS we could save each year £20-27m on non-elective admissions, £14-16m on elective admissions and £15m through more consistent primary care prescribing.<sup>xii</sup>
- **Harnessing technology** – whilst the net effect of technological advances in healthcare has been to increase costs, especially for new medicines and in specialised services, technology can also reduce costs in other ways, for example by delivering services virtually, removing inefficiencies and automating repetitive tasks. We will seek out the potential productivity gains from new

technologies, so that they support, rather than threaten, the sustainability of high quality care.

- **Economies of scale** – we can deliver substantial efficiencies by working together to merge some corporate and back office functions, and by using our considerable purchasing power to make procurement savings and to deliver social value.<sup>xiii</sup> This will be one of the major advantages of using our scale to work in partnership, and it will release significant savings to reinvest in direct care.

In other parts of the country, some STPs have become associated with potential closures of A&E departments or large scale reductions in hospital beds. We are clear that is not what we are proposing for the NHS in Birmingham and Solihull. As demand for our services grows, we will work continuously to provide high quality, responsive care to local people within available resources. For the most specialised services, it will often be the case that they are best delivered at scale in order to concentrate specialist clinical skills and equipment. Less specialised clinical or care services, however, can be delivered more locally to people and communities.

Our most important resource is of course our many thousands of staff. Their skills, expertise and commitment to public service are the lifeblood of high quality health and care services. We want Birmingham and Solihull to be a great place to live and work.

But the funding squeeze in health and social care of recent years has taken its toll on staff. Their workload has increased due to rising demand for services. This is damaging to the well being of our staff, with too many suffering from burnout and considering leaving their professional vocation. The lack of a long term national plan for the workforce has been described as the greatest threat to the NHS,<sup>xiv</sup> and the same could be said equally for social care.

There are shortages in all parts of the sector: from GPs and other primary care practitioners who deliver the great majority of patient contacts; to nurses, midwives and allied health professionals who are integral to all parts of the sector; to psychiatrists, psychologists and therapists providing comprehensive mental health services; to hospital specialists delivering advanced and specialised care; and to carers and social workers who support people's independence and quality of life at home or in residential settings. We understand these very real pressures, which is why many of our priority actions will be about supporting

current staff and encouraging the future supply of our workforce.

The other crucial contribution we will seek is the energy, knowledge and resourcefulness of our citizens, patients and carers. We know that individuals have the greatest motivation to look after their own health and many become experts by experience, especially when they have long term conditions. We will increase significantly the availability of personal health budgets, across all age groups, to help people to manage complex, chronic and terminal conditions more effectively and efficiently.

## Our priorities for action

We have identified below a number of high priority areas for action. We now want to hear the views of our citizens and those who use our services about whether these feel like the right ones based on their knowledge and experience.

These are by no means the only things we will be doing across health and social care in the months and years ahead. We will of course continue to pursue numerous other goals and initiatives within our own organisations and services to meet national and local priorities as part of business as usual.

However, the proposals listed in this strategy are those things where there is the greatest gap between how things are now and where we aspire to be in terms of people's outcomes and our services. They are also the things where we believe we can deliver the greatest benefit by working together in partnership as a health and social care system, rather than those things that should happen within a single organisation.

## 1. CHILDHOOD AND ADOLESCENCE

**A healthy start in life** – Birmingham and Solihull is home to one of the youngest urban populations in Europe. There are 330,000 children and young people here, nearly 20% of the total population. One in ten mothers suffer mental health problems in the first years after giving birth. One third of children are deemed to be living in poverty and one in ten have a mental health problem. The impact of a difficult start in life can be very harmful to children's chances in life. In Birmingham, on average, children's overall health and well being, development at the end of reception, levels of obesity and rates of emergency hospitalisation, are all worse than the national average. By contrast, the average in Solihull is better than the national picture for childhood health and wellbeing, poverty and obesity. However, that average masks stark inequalities within Solihull. There are some unacceptably poor health outcomes, particularly in the north of the borough, and the rate of children in care is higher than the national average. We want all of our children to have the best start in life, from birth through to adolescence. To deliver this priority, we will:

- Implement a single local maternity system for Birmingham and Solihull that will increase choice, enhance maternity care and support, and improve the experience for mothers. This will help to reduce neonatal mortality rates and adverse childhood experiences, and will give babies the best start in life.
- Roll out community perinatal mental health support for mothers through multi-disciplinary teams.
- Integrate health visiting services, children's centres and other support services, creating local early years hubs where families can access the help they need from pregnancy until their child starts school.
- Develop an integrated, strategic commissioning plan for children's and young people's services across Birmingham and Solihull, involving schools, public health, NHS services and social care. Priorities for action will be delivered through place-based plans and will include Special Educational Needs and disability services.
- Pilot a transformed model of healthcare for children through community-based, multi-disciplinary teams (virtual and physical) across primary and social care. These will have a clear focus on the prevention of key risk factors and will provide support for self-management

from an early age, including diet, exercise, mental well being and school readiness.

- Promote opportunities in our schools, youth centres, workplaces, and other services for which we are responsible, for increasing daily exercise, such as 2,000 step routes and the 'run a mile' schools programme, and post- and pre-natal exercise programmes. In this we will harness the unique opportunity of Birmingham hosting the 2022 Commonwealth Games to build a legacy of physical activity and sporting participation, especially for our children and young people.
- Increase access to children's and young people's mental health services by 35%, in line with the national ambition; and reduce the number who have to go out of the area to be admitted to hospital for psychiatric care, saving in the region of £2.7m per year and providing a better experience for our young patients and their parents or carers.
- Address variation in access and clinical provision across our urgent and emergency care pathways for children by implementing a single integrated clinical advice and guidance service, and rolling out a standardised pathway of care for the most common conditions.

## 2. ADULTHOOD AND WORK

### Promoting health and well being, and managing

**chronic disease** – we know that modern lifestyles are contributing to an increase in chronic and non-communicable diseases, such as type II diabetes, cardiovascular disease, cancer and dementia. Many of the risk factors are similar or linked for these diseases, including social isolation, smoking, excess alcohol consumption, high calorie diets and low exercise leading to overweight and obesity. These unhealthy behaviours are quite often established early in life. There are close correlations between these risk factors and socio-economic status – with the least advantaged being at most risk – and between people’s physical and mental health. People with a severe mental illness have a life expectancy 20 years below the average. We want to ensure that everyone has a fair chance to enjoy good health and well being. We will take a proactive approach to identifying and preventing illness, and to supporting people to manage their chronic conditions. To deliver this priority, we will:

- Put GP social prescribing at the heart of our support for citizens to access health and well being initiatives, such as exercise, diet and opportunities to reduce isolation, and ensure our staff have the skills to support behavioural change.
- Utilise the skills of GPs and their teams to manage patients holistically, developing a consistent offer from general practice for enhanced services for patients across multiple chronic diseases.
- Work with our partners, including the West Midlands Academic Healthy Science Network (AHSN), to analyse large datasets (with appropriate and statutory safeguards for how identifiable data is used) to identify those people at greatest risk of major diseases, including type II diabetes, cardiovascular disease and cancer. We will then target screening programmes accordingly.
- Offer targeted services, such as health checks and other preventative services, to promote well being and early identification of symptoms for high risk groups, such as people with diabetes, mental illness or learning disabilities.
- Implement the 2015 NICE cancer referral guidelines<sup>xv</sup> and redesign access and referral pathways, increasing the use of digital access points, to reduce unnecessary steps or delays in the pathway.

- Set a ‘zero suicide’ ambition, supported by evidence-based, preventative actions and high quality crisis support. Reduce stigma around mental health and improve access through early intervention services.

**Staff health and well being** – as the health and social care organisations of Birmingham and Solihull, we are major regional employers, with some 45,000 staff between us [note: check figure. All NHS and primary care staff comes to c.40,000 but need to add relevant sections of local government and social care]. There is certainly room for improvement in terms of our staff health and well being. The most common reasons for sickness absence are stress, musculoskeletal conditions and cold and flu (the latter predominantly in the winter). We lose an average of 6.6 days each year in sickness absence per member of staff, 40% of which is related to mental health. The health and well being of our staff is extremely important for its own sake, and to support those for whom they care. Most of our staff have families and dependents, so our ability through them to influence lives for the better extends to many thousands more people. A healthy and happy workforce is also more productive. We want to play our part in Birmingham and Solihull being an attractive place to work and live. To deliver this priority, we will:

- Work together to scale up an overall staff health and well being offer to support each other’s staff as if they were our own, making full use of the resources we have available, such as clinical services, gyms, leisure facilities, online resources and support forums. This will apply to all staff directly employed in the NHS, general practice and council run social care.
- Extend progressively the scope of staff clinics by pooling the specialist expertise across our organisations and encourage staff to have check-ups.
- Identify innovative practices for promoting staff health and well being within our organisations and spread them more widely across our partnership.
- Adopt a common engagement standard to promote best practice in how we engage with staff and respond to their wishes and feedback.
- Make mental health first aid widely available within workforce training and ensure our managers have the skills to support staff with mental health problems.

- Ensure that canteens and food available to staff encourage healthy choices and cut down on high fat, sugar and salt content, and that we make available a range of structured exercise options for staff.
- Aim for best practice levels of uptake of the seasonal flu vaccine for all staff, and undertake local research into the most effective methods of encouraging uptake.
- Support our staff to volunteer and mentor within approved schemes that have social value in our local community.
- Improve significantly the retention rates of GPs each year by developing a workforce plan for general practice, including training hubs and opportunities for flexible working.
- Support our staff to gain experience in different parts of the sector through work shadowing and placements, including in primary care centres.
- Develop a joint staff bank and agency protocol, building on work that is already taking place.

**Promoting skills and prosperity** – nationally and locally there is a significant shortfall in the number of health and social care professionals required to meet the demand for our services. This can impact on the well being of existing staff, the quality of care we are able to provide and can raise costs when we have to hire locums or from agencies rather than directly employed staff. Our organisations provide secure jobs for all skill levels in the formal economy and with long term career prospects. The majority of our staff live in Birmingham or Solihull, as well as working here, and they contribute positively to the local economy. We will invest in recruitment and retention locally, from entry level posts supported by the Apprenticeship Levy, through to the highest skilled posts, so that we, as major local employers, can support a virtuous cycle of employment and economic growth. We will target this effort to areas that have greatest scope for economic regeneration, such as East Birmingham and North Solihull. To deliver on this priority, we will:

- Develop a staff training passport so that staff who undertake core induction and training can have that experience recognised and not repeated when they move between our organisations.
- Take a collaborative approach to recruitment and appointments: using our collective scale and reputation to attract the best candidates to Birmingham and Solihull, for instance through careers fairs; making more joint appointments to promote system working; and deploying staff more flexibly across our organisations, for example to address critical shortages or skills gaps.
- Maximise the possibilities for new professional roles, such as nursing associates, to meet the service needs of the future.
- Develop and enact an STP social value policy, building on the good work of Birmingham City Council; increase social value weightings in our contracts for procurement, in line with best practice, and include common indicators on apprenticeships and recruitment from vulnerable groups.
- Provide mentoring, coaching and work experience, and offer apprenticeships and entry level employment opportunities, to people with mental health conditions, young people in the care system and other vulnerable people within our communities, so that they are supported to find work. This will building on initiatives such as the University Hospitals Birmingham Learning Hub and Birmingham and Solihull Mental Health Trust's Integrated Placement Support for new routes to employment.
- Commission a workforce economic analysis of traditionally lower paid roles (e.g. care workers) to assess the potential of systematic pay progression to deliver off-setting savings through better retention and development of people and skills, reduced agency spending and improved quality of care.

**Breaking the cycle of deprivation** – whilst there is quite widespread economic and social disadvantage in Birmingham and areas of Solihull, there is a relatively small number of people who are stuck in a cycle of chronic and severe disadvantage. Often the cycle starts before birth because their parents were in the same cycle, and they may have had one or more of the recognised Adverse Childhood Experiences (ACEs). They may have dysfunctional families, poor educational outcomes, low employment prospects, and suffer poverty, unhappiness and poor mental and physical health as a result. Some may have been traumatised through exploitation or trafficking. There are about 2,500 people with at

least three markers of extreme disadvantage, including homelessness, severe mental illness, substance misuse, or having been offenders. Approximately 750 looked after children leave care every year, 60% of whom have emotional and mental health problems. Nine out of ten people in prison have a mental health or drug problem. About 1,500 supported adults with a learning disability live in unsettled accommodation and their life expectancy is lower than the average by 19.2 years for men and 14.9 years for women. We will take a targeted approach to support people in severe disadvantage to break out of the pernicious cycle. To deliver on this priority, we will:

- Commit our full support as partners to delivering the aims of the Changing Futures and Fulfilling Lives initiative for people with the most entrenched and severe problems, which is led by the voluntary and third sector in Birmingham.
- Work in partnership with the voluntary and community sector in Solihull on a joint investment strategy to make the best use of our resources and target them to specific challenges in Solihull.
- Support local social enterprises that share our aim of helping people build skills, independence and resilience, and finding work, to break out of the cycle of disadvantage.
- Expand our efforts to help people in severe need get back on their feet through our hospital-based food and clothing banks.
- Roll out the Red Thread programme across our hospital A&E departments to help prevent gang-related and other serious youth violence and to support young victims of violent crime.<sup>xvi</sup>
- Commit to the delivery of the Transforming Care Programme by 2020 to support people with learning disabilities as close to home as possible, in the least restrictive environment.
- Increase significantly the proportion of people with learning disabilities who receive their annual health check from the current low level of 28%.
- Implement the WMCA Mental Health Commission concordat and deliver the Thrive West Midlands action plan across our organisations to improve mental health

and wellbeing.

- Support the MERIT programme to reduce the number of people who are placed out of their area for acute psychiatric care, and to improve their recovery and outcomes.

### 3. AGEING AND LATER LIFE

#### Ageing well and improving health and care services for older people

– better healthcare and living standards mean more people are living longer. The number living beyond 85 will double over the next generation, and there will be a three-fold increase in those reaching 100. People over 85 account for 11% of our NHS budget, despite only representing 1.8% of the population locally. When the NHS was founded 70 years ago, people lived an average of only five years beyond the state retirement age. Even with a higher pensionable age, that average is now 15 years. Longer lives are a major success overall, but they present challenges too. Many people reach older age in relatively good health, but with an ageing population there will be more people living with dementia, musculoskeletal problems and frailty. We need to enable older people to stay healthy, active, independent and with meaningful engagement for as long as possible. When people do need assistance and support, they should be able to access it easily and promptly, from skilled and caring teams and professionals, and receive help as close to their own home and support networks as possible. To deliver on this priority, we will:

- Develop and implement an Ageing Well strategy. This will support people to manage their own health, well being and social participation. It will signpost community opportunities and activities to citizens and carers and to GPs as social prescribers. It will establish the concept of ‘supportive communities’, involving businesses, educational institutions and the voluntary and community sector. It will support people to remain healthy, engaged in society and reduce loneliness and isolation. It will take a life course perspective to educate children about how living well in earlier life can help with good ageing, and to support inter-generational opportunities.
- Promote awareness so that our community becomes more dementia friendly.
- Coordinate health and social care into a locality framework, aligning mental health, and primary, secondary and community care with the local authorities, independent social care providers and third sector.
- Establish multidisciplinary teams to remove barriers in the care system that cause delays when people need care urgently. When a person is unwell they will receive a comprehensive assessment by an expert team of professionals to make an accurate diagnosis, and a plan

will be made for treatment and care, including their physical, mental and social needs. This will be accessible at the front door of hospitals seven days a week to avoid unnecessary hospitalisation and promote the ‘home first’ ethos, building on developments such as SupportUHome.

- Establish specialist care centres for older people in Birmingham to bridge the gap between hospital and home. These community-based centres will provide enablement beds, therapies, mental health support and specialist clinics, as well as wider services from voluntary and community groups.
- Revise local authority contracts for home care services over a phased period to incorporate the need for care staff to deliver an enabling approach, supporting people to maximise their abilities and remain as mobile as possible.
- Take a joint approach to commissioning and supporting high quality residential and nursing home provision and associated services, so that people in residential care have the same access to multidisciplinary teams as those who remain in their own homes.
- Test and take up current and emerging assistive technologies, especially in settings where they have the most potential to enhance care, such as care homes and extra care housing.
- Recognise the vital role that 135,000 unpaid carers play across Birmingham and Solihull, by establishing a Carers’ Commitment to help them access the support that they need.

#### Creating a better experience at the end of life

– When most people reach the end of their life, they would prefer to die in their own home with their family and loved ones around them, rather than in unfamiliar or overly medicalised surroundings. Yet hospital remains the most common place of death, and people spend an average of six weeks there in the last year of their life. The amount of time people at the end of life spend in hospital in their last year of life is greater in Birmingham and Solihull than the national average. Emergency attendance and admission to hospital often peaks in the month before death. This is rarely what people want and is a costly use of resources. We will support choices for those at the end of their life to achieve what for them is

a good death and to make sure this period reflects their wishes. We will create a centrally co-ordinated system for all end of life services that will ensure better and more timely identification of needs, as well as a greater focus on patient centred care, designed according to people's priorities and choices. This system will reduce unwanted hospital admissions that add little clinical benefit, offer equitable access to services with fewer gaps in provision and ensure more robust information sharing. To deliver on this priority, we will:

- Focus at all times on the person and their wishes, promoting advance care planning, including advance directives, lasting powers of attorney, 'living wills' and Respect Forms.
- Use technology and other mechanisms to ensure those wishes are known and adhered to wherever an individual enters the health and care system. Agree effective systems to transfer data (including health records where appropriate), share intelligence and remove duplication.
- Support those caring for people at the end of their lives, whether they are professionals or family members, so that they can do so confidently, with the ability to access practical and emotional support when needed.
- Embody the Compassionate Community<sup>xvii</sup> ethos of working in broad and varied partnerships with our diverse communities, rather than simply delivering services to those communities.
- Support open and honest conversations about death across the diverse communities we serve through engagement, education and communication, leading to a significant increase in the number of people actively articulating their wishes for end of life care.<sup>xviii</sup>

#### 4. ENABLING PRIORITIES

##### Improving air quality for a healthier environment –

air pollution has a harmful impact on health throughout life,<sup>xxix</sup> from before birth to later life. It is the fourth greatest risk to public health, after cancer, obesity and cardiovascular disease, and is a significant cause of premature mortality. Children, pregnant women, older people and those with chronic health conditions are among the most vulnerable. Each year air pollution costs the city economy c. £1bn and a 4% loss in productivity. Tackling it is a priority for Birmingham<sup>xxxi</sup> and Solihull<sup>xxxii</sup> councils and for the WMCA. As with so many other things, air pollution disproportionately affects those who live in more deprived and congested parts of the city. As health and social care organisations, we cannot transform air quality on our own, but we can make an important contribution. Five per cent of all the traffic on the road in England is related to the NHS.<sup>xxxiii</sup> We can provide leadership on this vital issue, create social value through our scale, and avoid or mitigate pollution hot spots around our estates. We will also advocate for clean air and green transport policies with other partners. To deliver this priority, we will:

- Assess ourselves using the Sustainable Development Unit's Health Outcomes of Travel Tool<sup>xxxiv</sup> to measure our environmental impact and to support prioritisation.
- Champion the development of Green Travel Districts to improve air quality, transport safety and physical exercise.
- Operate 'green fleets' across our organisations, ensuring that any new vehicles that we purchase or lease are electric or hybrid, where those options are available and practical, and that we phase out diesel engines in our fleets.<sup>xxxv</sup>
- Initiate a 'no idling' policy for vehicles outside all of our premises to reduce emissions in the vicinity of our patients, visitors and staff.
- Set progressively lower emissions standards for any external suppliers from whom we procure services, such as non-emergency patient transport, and buy products locally where possible to shorten supply chains and promote the local economy and social value.
- Remove unnecessary physical journeys by using digital technologies, such as virtual consultations for some primary care or outpatient appointments.

Support flexible or home working and cycling to work, where practical, to prevent unnecessary journeys and emissions and to improve staff productivity and well being.

##### Broadening access to urgent care –

in recent years, the demand for hospital based urgent and emergency care has increased substantially.<sup>xxxvi</sup> A significant factor has been the increase in people living longer with more complex needs, many of whom are so ill by the time they reach hospital that they need to be admitted for treatment. However, more proactive management of their care needs in primary, community or social care settings may be able to prevent the need for hospitalisation in many cases. That will be a major area of focus for our work with children, people experiencing severe disadvantage, older people and people at the end of life, as described above. There are also many people who attend a hospital Emergency Department for conditions that could have been treated more appropriately in another setting. Estimates suggest that between 1.5 million and 3 million people nationally who attend A&E each year could have had their needs met in other parts of the urgent care system; in Birmingham and Solihull that would equate to between 75,000 and 150,000 attendances [note: can we use actual BSOL data?]. Patients often see urgent care services outside hospital as fragmented and confusing, so, understandably, they default to A&E. By working as a system across our hospitals, primary care, community and care services, we will set out a much clearer, stratified system for urgent care with a greater focus on keeping people out of hospital when their clinical needs do not require them to be there. To deliver on this priority, we will:

- Increase access to general practice, including more evening and weekend appointments.
- Work with local people and communities to ensure that everyone understands the importance of registering with a local general practice, particularly for those people who are not currently registered.
- Use technology in ways that are clear and simple so that people can obtain advice and support through apps and online consultations at times that are convenient for them.
- Develop a wider network of primary urgent care, including urgent treatment centres with access to diagnostics out of normal business hours.

- Analyse large datasets, combined with local knowledge, to understand demand and plan capacity for urgent care, both at a strategic level for the whole of Birmingham and Solihull and at a detailed level in localised places.

**Digital innovation and integration** – the pace of change in digital technologies has been phenomenal in recent years. Just a generation ago, smartphones seemed like a work of science fiction; now 90% of the adults in Birmingham own one and people manage much of their daily lives through them. We live in a world of genomic sequencing, big data analytics, artificial intelligence and autonomous vehicles. We have some centres of excellence in Birmingham and Solihull, with two NHS Global Digital Exemplars in our partnership. However, in general, health and social care has not yet been at the forefront of the digital revolution. Systems have developed in a fragmented way, which makes it hard for professionals to communicate smoothly with each other, and means patients have to tell their story many times to different organisations. This is both frustrating and inefficient. Many of the opportunities that lie ahead for better services, more convenience for citizens and patients and greater efficiency will depend on our ability to lead the way in the digital era, just as we did in the industrial era. We will harness digital technologies in ways that improve the experience for patients and the workflow of clinicians, and all of our developments will be driven by clinical engagement and patient participation. Our digital platforms and use of data (with appropriate safeguards) will exemplify our aspiration for integration and simplification, and our major commitment to working in partnership. To deliver on this priority, we will:

- Create a single electronic entry point (a ‘digital front door’) to make it easier for citizens and patients to access the right care, in the right place and at the right time.
- Empower people to be active partners in managing their care through secure online access to health advice, their records, test results and prescription and appointment details.
- Roll out the same leading edge and locally developed clinical information system to all of our hospitals, so that there will be a single, electronic patient record for all hospital based care. We will also work towards interoperability with patient records in primary and community care and in mental health.

platforms between primary and secondary care clinicians, and other professionals, so that patients can be managed in the most appropriate setting by virtual multi-disciplinary teams.

- Move towards secure electronic document transfer for communications between GPs and hospitals.
- Explore the potential application of artificial intelligence to provide reliable and efficient diagnostics, such as reading scans, and for the analysis of large data sets to inform business intelligence on local services and utilisation.
- Pilot a ground-breaking approach to using digital signs around the city for health campaigns and information.

**Making the best use of the public estate** – there are hundreds of separate health and social care sites across Birmingham and Solihull, ranging from large hospitals to localised clinics and care homes. Our NHS sites alone cover nearly 725,000m<sup>2</sup> of land. These sites have been built, acquired or leased over many decades, sometimes in a rather patchwork manner. Fifty six per cent of the NHS buildings are at least 25 years old and several are over 50 years old. Many are ill suited to the requirements of modern care and are in need of substantial maintenance. The way we plan, manage and use our public estates will be pivotal to our transformation from working as separate institutions to working as a single place in the best interests of our citizens and patients. The spread of our buildings give us huge reach across our geography and into our many communities. We need to use these public assets efficiently and in the collective interest. We will be much more innovative in how we use our estates, as well as other assets such as technology and our workforce, to make co-location of services the norm, so that citizens and patients do not have to trek from A to B, when they could have multiple needs met in a ‘one stop shop’. To deliver on this priority, we will:

- Develop a single estates strategy for health and social care in Birmingham and Solihull.
- Use that strategy to prioritise the finite major capital investment that will be available in the coming years, both for new builds and the maintenance and redevelopment of existing sites.

- Support the development of real time communication platforms
- Compile a single, comprehensive dataset on our health

and care estates, so that we take decisions based on the best available evidence.

- Make best use of void or unoccupied space on our estate, where it is financially practical to do so, whilst recognising that we have relatively little unused space compared to other parts of the country.
- Increase the proportion of our major NHS sites that are used for clinical purposes, as opposed to non-clinical, making best use of shared back office arrangements and technological solutions.
- Develop the care centres in the community for older people to provide enablement support and a broad range of other services, as described above.
- Promote innovative and flexible practices in delivering services out of our current buildings and co-locating services around the needs and convenience of our citizens and patients, following the ethos of 'one public estate' and multi-disciplinary working.
- Ensure energy efficiency is a key design criterion in new build and major renovations.

and venues are included on our website.

We will also approach directly representatives of some of the groups in our community who have been harder to reach by traditional consultation methods, so that we ensure everyone's voice is heard and so that we act on our commitment to tackle inequalities in health outcomes.

Once we have heard from as many people as possible in the summer and collated their views, we will publish revisions to this strategy based on that feedback in the autumn of 2018.

This strategy is about the health and happiness of everyone in Birmingham and Solihull. Please help us by having your say.

**Live healthy Live happy  
Partnership  
Birmingham and Solihull**

## Have your say

This updated strategy sets out our main proposals for how we will work together in a health and social care partnership across Birmingham and Solihull to meet the challenges and seize the opportunities ahead. Versions of this document are available on our website in other languages, or as an audio version on request.

It is most important now that we hear from everyone with an interest, including citizens, patients, carers, staff and community and stakeholder groups. There are a number of ways that you can comment on these proposals: face to face, in writing and online at the Live healthy Live happy Partnership website:

[www.livehealthylivehappy.org.uk](http://www.livehealthylivehappy.org.uk).

The website gives you the options to comment on the proposals by answering a series of questions in our structured survey, by typing free text comments or by uploading a document with your response.

We will hold a series of public engagement events across Birmingham and Solihull in the summer of 2018. The dates

## End notes

<sup>i</sup><https://www.england.nhs.uk/systemchange/>

<sup>ii</sup>There is a growing body of academic literature that promotes the measurement of subjective well being, or 'happiness' in more recognisable terminology (for example <http://www.pursuit-of-happiness.org/science-of-happiness/measuring-happiness/> and <http://www.happycity.org.uk/measurement-policy/about-measurement-policy/>)

<sup>iii</sup><https://www.wmca.org.uk/>

<sup>iv</sup>Fair Society Health Lives. Sir Michael Marmot. February 2010.

<sup>v</sup><https://www.gov.uk/government/news/government-to-set-out-proposals-to-reform-care-and-support>

<sup>vi</sup>The Office for Budget Responsibility (OBR) estimates that spending on the NHS and long term care will need to increase from a combined 8.3% of GDP now to 10.7% of GDP in 20 years' time and 14.6% in 50 years' time. Office for Budget Responsibility. Fiscal Sustainability Report. January 2017.

<sup>vii</sup>Nuffield Trust, the Health Foundation and the King's Fund. The Autumn Budget: Joint Statement on Health and Social Care. November 2017.

<sup>viii</sup>House of Lords, Report of Session 2016-17. The Long-term Sustainability of the NHS and Adult Social Care.

<sup>ix</sup>House of Commons, Communities and Local Government Committee. Adult Social Care: Ninth Report of Session 2016-17. March 2017.

<sup>x</sup>Source: 2017/18 CCG Allocations, NHS England. April 2017.

<sup>xi</sup><https://www.england.nhs.uk/rightcare/>

<sup>xiii</sup>NHS RightCare

<sup>xiii</sup>Best practice suggests that large procurements can deliver additional social value of at least 20% of contract value. <https://socialvalueportal.com/>

<sup>xiv</sup>House of Lords, Report of Session 2016-17. The Long-term Sustainability of the NHS and Adult Social Care.

<sup>xv</sup><https://www.nice.org.uk/guidance/ng12>

<sup>xvi</sup><http://www.redthread.org.uk/>

<sup>xvii</sup><http://www.dyingmatters.org/sites/default/files/user/documents/Resources/Community%20Pack/1-Introduction-1.pdf>

<sup>xviii</sup>[https://www.ageuk.org.uk/globalassets/age-uk/documents/booklets/talking\\_about\\_death\\_booklet\\_final\\_version.pdf](https://www.ageuk.org.uk/globalassets/age-uk/documents/booklets/talking_about_death_booklet_final_version.pdf)

<sup>xix</sup>Prof. Dame Sally Davies. Annual Report of the Chief Medical Officer 2017, Health Impacts of All

Pollution - what do we know? February 2018.

<sup>xx</sup>NICE Air pollution: outdoor air quality and health. NICE guidance. 30 June 2017

<sup>xxi</sup><http://www.makingbirminghamgreener.com/>

<sup>xxii</sup>[http://webtest.solihull.gov.uk/Portals/0/Planning/Green\\_Prospectus\\_2017-18.pdf](http://webtest.solihull.gov.uk/Portals/0/Planning/Green_Prospectus_2017-18.pdf)

<sup>xxiii</sup><https://www.sduhealth.org.uk/areas-of-focus/carbon-hotspots/travel.aspx>

<sup>xxiv</sup><https://www.sduhealth.org.uk/delivery/measure/health-outcomes-travel-tool.aspx>

<sup>xxv</sup>For ambulances and emergency vehicles, speed of response and turnaround will remain paramount, although this will become less of a barrier as battery technology advances.

<sup>xxvi</sup><https://www.kingsfund.org.uk/publications/hospital-activity-funding-changes>



