directors of adass adult social services West Midlands

west midlands ACADEMIC HEALTH SCIENCE NETWORK

West Midlands Digital and Data Enabled Collaborative Scoping Findings

WM ADASS Safina Mistry

March 2019

www.wm-adass.org.uk

Foreword

We are excited to share this report, the first from our new collaboration which recognises digital and data technologies as enablers of change, creating new opportunities that improve social care outcomes for citizens.

WMADASS and WMAHSN have established a unique partnership which recognises the importance of supporting the adult social care sector. This partnership is further strengthened through a shared lens emphasising the benefits of data and its potential as an asset driving innovation and transformation that can be scaled in adult social care.

For far too long social care has been an afterthought for the health community in planning future services and adult social care leaders have not always articulated clearly where the most benefits might accrue from collaborating more effectively with academia and industry to seek innovative solutions to the key challenges, we all face.

This report identifies areas of focus for adult social care which this partnership will take forward through advances in the use of technology and data to meet the ever more complex requirements of people living longer complex lives and retaining levels of independence.

This scoping report and plan has been produced following extensive consultation with leaders in adult social care and health systems in the region to establish some key areas for future collaboration and to identify some clear themes for where resources should be sought to effectively engage and influence this key area of policy and service delivery.

Safina Mistry an experienced adult social care and public health professional has been commissioned to bring together this report which both WMADASS and WMAHSN see to start to extend the reach of digital technology and data science to adult social care services in the west midlands.

This report begins to collaborate across our respective specialist areas of knowledge to identify some key areas for future focus, attracting investment and shared endeavour to ensure the most vulnerable people in our communities benefit from the opportunities presented by new technology and the digital revolution which we cannot afford to ignore.

Andy Begley,
Director of Adult Services & Housing & Public Health, Shropshire Council

(Co-Chair, WM ADASS; National Regional Policy Lead Trustee, ADASS)

Michael Sheppard
Regional Advisory Board Chair

Introduction

Setting out his vision for the future, Health and Social Care Secretary Matt Hancock stresses the crucial roles for digital, data and technology, the importance of streamlining products and services and the need for systems to talk to one another all are considered vital to the delivery of effective health and social care. Digital technologies are changing the way we do things, improving the accountability of services, reducing their cost, giving us new means of transacting and participating. Increase in demands for services, constrained funding and a multitude of workforce challenges require us to think differently about the way we deliver health and care services to meet the future care needs of people. The 2017 NHS *report 'Facing the Facts, Shaping the Future* states that patient and citizen expectations continue to change, making interactions with health and care professionals very different from 20 years ago. The easier access to web-based information means that many people now have as much knowledge about their own health conditions as some of the clinicians they see, with views of how they would like to be supported in managing their own health and well-being.

The Adult Social Care (ASC) sector in England continues to face a range of challenges; with growing unmet care need and estimates showing that 1.2 million people are not receiving the help they need, an increase of 18% on last year. The Local Government Association (LGA) estimates that ASC services face a £3.5 billion funding gap by 2025 just to maintain existing standards of care. Recent figures suggest Councils in England receive 1.8 million new requests for ASC a year – the equivalent of nearly 5,000 a day. A briefing note Published by The Institute for Fiscal Studies in 2018 further highlights the financial pressure on the ASC sector '*social care has risen as a share of local authority service spending (excluding education and public health) from 34% in 2009–10 to 41% in 2017–18.' There is a need to think and act differently to when and how ASC responds to the future needs of the population.*

There continues to be a strong national policy emphasis on enabling self-care and the shift towards preventative provision, it is important to support people and communities to have greater control and choice over their own health and wellbeing. The dependency in the relationship between social care and NHS capacity continues to be highlighted in the Five Year Forward View recognising NHS efficiency targets rely on "*sustaining social care services*" and that high-quality ASC and prevention services are vital to managing NHS demand. Both sectors face the same demographic challenges and pressures and success of each sector is dependent on integrated approaches and established relationships.

At the same time, the research and evidence from behavioural insights and technological approaches can enable the wider public sector workforce and citizens to seek innovative solutions promoting independence, however the full potential of these opportunities have not yet been fully understood or maximised.

A central role of the West Midlands Academic Health Science Network (WMAHSN) is to identify and mobilise the various assets that will drive productivity of health and social care contributing towards the growth of the economy at both regional and national levels. The focus of improving health and creating wealth will be a key feature of the work undertaken by this collaboration.

Background

ADASS and AHSN acknowledge the scale of the current and future financial challenges which local authorities are collectively facing across the West Midlands region. In the ADASS 2017 annual report a commitment was made to continue building on relationships with NHS and other regional partners, seeking new opportunities to support delivery and management of services. The proposed work programme between ADASS and AHSN is an example of taking forward a new partnership relationship based on shared values and agendas. AHSNs are well placed to work with social care as they are flexible and responsive to emerging opportunities and challenges which improve health and generate economic benefits. They are uniquely placed as ASHNs understand the 'push and pull' of demand on innovation at scale. This collaboration through its defined work programme will contribute to promoting economic development across the region. Our approach will actively communicate innovative activities and best practice impacting on increasing productivity. This provides an opportunity to create a shared narrative, one which strengthens the value of working with wider industry and harnessing expertise from across sectors.

This initial piece of work between the two organisations was commissioned in November 2018 focusing on undertaking a scoping phase. The findings of this scoping phase will shape the content of a two-year programme of work with defined mutual benefits impacting on best value for the public spend and drawing down sources of external funding opportunities.

The communication through WMADASS and WMAHSN chairs launching the programme had been extremely successful generating a high level of interest. There was a huge response from a wide range of partners all keen to understand and contribute towards this new collaboration, including contributions from acute providers, academia and independent sector. The range of stakeholders involved in the scoping phase were clear that Adult Social Care (ASC) is a critical player in shaping the development, delivery and commissioning across the region.

Methodology

Project methodology was applied to ensure successful delivery of scoping phase within time, cost and quality. Stakeholder analysis was completed identifying a range of key players who would be contacted to contribute in shaping the programme. To reduce any bias a short questionnaire was developed to aid discussions and ensuring a level of consistency across ASC and NHS interviews. The methodology was based on a qualitative approach involving a high level of face to face interviews. Flexibility had been built into the scoping phase to respond to some participants via telephone discussions as well as the offer of Skype.

Interviews and telephone discussions were conducted throughout the period November 2018 to February 2019.These conversations involved exploring the future challenges, issues and potential areas of innovation. The outputs from these conversations have been captured within the body of this report. A total of twenty-six colleagues (APPENDIX 1) across health and social care contributed towards this scoping phase.

Findings

I found there to be a real appetite and high level of energy from those that were interviewed wanting to remain involved in the collaborative relationship between ADASS and AHSN. The interview discussions have highlighted that the majority of colleagues who participated consider having a formal defined work plan to be a positive way forward. Many believed it is needed as currently they view this as a gap across the region. There has been an overwhelming response with over 75% of those interviewed suggesting that this collaborative work plan should also tackle some of the future focus challenges including an emphasis on some of the prevention aspects of population health management.

Research and Evaluation: Several directors shared their thoughts and experiences regarding the importance of robust research and evaluation, which some of them considered has been an afterthought in previous work programmes. There was a high level of consistency from NHS and ASC colleagues in articulating that evidence-based research should form part of the defined delivery of outcomes for all the workstreams. To enable this to happen, the programme will engage with the NIHR School for Social Care Research, NIHR CLAHRC proposed ARC West Midlands, as well as forming partnerships with other appropriate academic institutions. This work will also include ongoing discussions on getting agencies to share data and information.

Economies of Scale: There has been recognition from a wide range of colleagues including the WMAHSN Safety Service and Safe and Timely Transfers of Care networks that developing a formal programme of work between ADASS and AHSN would be an opportunity to bring some aspects of the two existing work streams together. This would enable swifter sharing of information and relevant data including best practice examples across the region. This has the potential to generate efficiencies in the current systems erasing unnecessary duplication in processes. It has been also been suggested from those interviewed that one immediate benefit would be a more coherent joint approach in working with the same care providers saving time and resources for everyone. The ADASS research report on The Long-Term Future for Residential and Nursing Care provision within the West Midlands 2019 stated *'There is strong evidence of a technology gap within the provider market with little understanding of the potential for technological solutions.'.* This creates some opportunities to work with the provider market and workforce and bridging this gap and offering some tailored show and tell sessions.

Data and Predictive Analytics: Emerging themes from the discussions emphasised an appetite to explore greater use of data and predictive capabilities to shape commissioning and delivery of services including targeted solutions diverting future demands and understanding the impact of these diversions. There was a call for completing a road map for Big Data in the region. This is also underpinned by the Government's white paper '*Industrial Strategy: building a Britain fit for the future*'.

Innovation Pipeline: The interview findings highlighted an aspiration for ASC to create an innovation pipeline approach working with industry and others to shift current focus from assistive technology to artificial intelligence (AI) and use of more creative approaches with voice recognition devices with predictive alerts functionality. There is the real potential for this technology to be transformative, but it is important to question how much of it is likely to be only funded by statutory bodies, therefore the development of relationships with industry is critical as wider funding opportunities including international are often industry led.

There was an openness and eagerness to learn from industry colleagues with requests to facilitate sessions to view what was available. The feedback from interviews highlighted a willingness to access new technologies which could harness the power of data, presenting huge opportunities to transform health

and social care and improve the quality of people's lives. There is an appreciation and understanding for the need to test solutions ensuring they are safe and effective and which ones are likely to be successful in uptake and adoption at scale. Several senior leaders during the interview process believed that the collaboration was an opportunity to also support a region-wide culture of innovation stimulating creative solutions to improve the health and well-being outcomes of the population. Evidence of successful outcomes need to include peoples experience and shared stories of how it has improved their circumstances, this was a clear message from all participants.

Behavioural Change: This emerged as of area of high interest across both ASC and NHS colleagues with a preventative focus including changing attitudes and behaviors of the workforce as well as citizens featuring high in the discussions. Some feedback from interviews has highlighted how much time leaders across ASC and NHS are spending thinking about how they can influence changing the way people behave and how to influence the poor uninformed choices people make. People may make decisions based on immediate impact without knowledge of the longer-term consequences on their health and well-being. Several of them raised specific cohorts such as working aged adults with co-morbidities or people approaching retirement whose health would be at risk of deteriorating as key priorities for future focus. There was an appreciation of the importance of understanding and applying appropriate behavioural change approaches.

Scalable best practice: The current focus of assets based, and resilient communities provides an opportunity to strengthen the contribution of behavioural change influencing health and well-being outcomes. There continues to be an increased effort of time and resources spent concentrating on community enabled focus to divert away from the front door access points. There were some shared examples of good practice which could be scaled up at pace if resourced appropriately. It could be feasible to connect aspects of this workstream into specific placed based and community resilience requirements which feature high on both agendas. The NHS Long Term Plan has increased its emphasis on delivering place-based approaches as a target for STPs which is being translated into local delivery plans as part of wider personalisation. This provides a window of opportunity to identify scalable best practice which should be baselined and tailored further for local needs addressing rural and urban differences. There have been some discussions on how the programme could support future work on outcome-based commissioning and any learning from international work. The discussions with NIHR CLAHRC have identified areas where they can be contribution into the proposed future two-year programme. Their specialised skills in undertaking evidenced based research and evaluation will provide independent evidence of both impact and outcomes on each workstream and overall programme. The interview discussions highlighted a recognition by directors of ASC that working with the AHSN will assist in harnessing expertise and knowledge across the wider NHS, research institutes and life science industry supporting the delivery of defined outcomes and articulated through a social care lens.

Impact

The two organisations will organise the delivery of the proposed future workplan which has been influenced from the findings of discussions held with DASSs, STP chairs, AHSN Membership Innovation Council chairs and other partners. There are several defined outcomes that will be delivered as part of the work programme captured below. These include, testing solutions with industry that reduces future predictive demands. Tools produced which enables individuals and communities to be resilient and impacting on increasing levels of well-being. Delivering on scalable interventions for rural and urban

settings, a suite of evidenced based research and evaluation identifying what "good" would look like for each work stream which will be co-produced with a wide range of citizens. The collaborative work plan will bring a range of benefits and measurable outcomes as well as a defined impact across the region and beyond which are captured below.

Inputs	Activities	Outputs	Outcomes	Impact
Business and Clinical Leads from AHSN Medilink Meridian Innovation Exchange 14 Directors of Social Services Safe and Timely Transfers of Care IEWM WMAHSN Safety Service NIHR CLAHRC/ARC	Collaborating for influence and change Digital exemplars Communicating success Stakeholder engagement Behavioural insight embedded not population health Data into predictive analytics Evidenced based Research Systematic reviews Co-production / Public patient and carer involvement)	MOU between ADASS and AHSN Two-year programme of work 4 defined work-streams and plans Dummy Data runs using health and care data Workstreams embedded by Co-production Involvement in outcome-based commissioning sessions Show and Tell Workshops Stories of peoples lived experience	Developed Algorithms that can perform various tasks e.g. calculation, data processing, automated reasoning. Show and tell Workshops Robust evaluated interventions Academic publications Range of best practice tools and resources SToC and PSC Quick Wins and reduced duplication. Diverting demand from ASC Evidence based Best Practice reports Shift of existing workforce behavior to more innovative solutions focus. Positive stories of people's experience.	Regional Influence with Partners National Profile Established links with Industry Sustainable health and well-being interventions Increase in available tools and resources Scalable initiatives Better integrated support between NHS and ASC

Using strengths-based practice, digital tools and prevention models will enable more people, including unpaid carers to take care of themselves, improve their choices and remain as independent in a safe as possible manner. Digital technology can be scaled and demonstrate measurable, meaningful outcomes enabling people to increase and maintain levels of positive well-being. People with *lived experience* including carers will share their stories of how this work has contributed towards increasing their health and well-being outcomes and feeling connected locally in the community.

Recommendations

The successful achievement of these increasing levels of health and well-being is based on a collaborative approach, rather than individual driven plans. Based on the scoping findings it is recommended that a two-year programme of work is taken forward which will consist of four specific workstream which have been identified as key touch points and areas of defined mutual benefits:

1. **Prevention and Self-Management Workstream.** This work will include a focus on primary and secondary prevention with targeted approaches for particular cohorts, for example those at high risk of diabetes type 2 as this group can become future high users of both health and ASC. The workstream will also explore the growing concerns of reported loneliness and social isolation and impact on the individual's health and well-being. The workstream will explore digital capabilities to facilitate an increase in the range and level of evidenced based products, tools and innovations. This might be as simple as the use of Skype to speak with users / carers as opposed to workers having to always do home visits. This could also be applied to consultant out-patients which often only last 15 minutes but can take several hours of the individuals time. This will include methods for evidencing, comparing and selecting appropriate technologies for health and wellness and learning from technologies and tools used in other countries. This will also include a focus on how we can apply the evidence from machine learning and Artificial Intelligence (AI) based approaches, generating innovative solutions to address the health and social care challenges. The workstream will also explore areas such as voice recognition and activation devices supporting people remaining in their homes for longer. This work will involve wider industry colleagues testing new ideas that can be scaled in rural and urban settings, facilitating and presenting innovative show and tell best practice. There will be active involvement from citizens and carers capturing impact and quality outcomes. There will be a menu of options from industry addressing some of the key future challenges through increasing the range of prevention and self-management innovations for citizens and carers diverting future demand from public sector.

2. **Behavioural Change Workstream**. This will include identifying and accessing appropriate national and international evidence-based models and behavioural insights research and practical tools to support the delivery of sustainable placed based and community resilience. Looking at community resilience and self-reliance as part of behavioural change which could relate to the NHS primary care networks which will cover a population of between 30 to 50,000 patients creating some area of scale. There will also be a focus on promoting a cultural shift prompting key behaviours of both the workforce and local population from a dependency to independence model underpinned by choice and control principles. The workstream will build on existing population health management analysis and future challenges, enabling targeting of specific cohorts with tailored interventions that divert away from requiring high cost care and support and improve levels of well-being. An outcome of this would be a reduction in the numbers of people requiring future care and support and more people making informed life choices for themselves.

3. **Transfer of Care Workstream.** This will focus on bringing together the two existing pieces of work currently operating independently across the region but targeting the same population. The workstream will contribute towards improving adverse events by formalising the synergies between existing health and social care schemes. This would encompass work from the WMAHSN

Safety Service SPACE Programme, My Home Life and Red Bag; with flexibility to tailor for differences in rural and urban settings. There would be robust independent evaluations which highlighted the impact of these schemes and demonstrated effectiveness. The workstream plan would include the approach to scaling up good practice and securing funding opportunities.

The SPACE Programme delivered through WMAHSN is particularly focusing on upskilling care home staff in quality improvement techniques to allow them to make sustainable improvements in their organisation. An independent evaluation will explore how these could be combined and scaled up demonstrating early wins as part of the collaborative programme. Key outcomes will include efficiencies such as a reduction in duplication at key touch points of care pathway, increase in the use of existing resources and improved citizen experience.

4. **Data Modeling and Isolation for Delivery of Care Workstream**. This will involve working with a range of organisations including third sector and industry, to access population level, dummy data sets created by the utilisation of anonymised NHS and Social Care data. This activity would provide an opportunity to develop and test predictive analytics, undertake risk stratification and the development of algorithms. The workstream would also work with both existing network stakeholder organisations on areas such as improved data visualisation which will clearly identify future service demand and enable the effective deployment of resources. A key outcome of this workstream will be the capability to bring together and test health and social care data in a safe environment as well as being able to identify characteristics that will require future interventions at critical points.

Each of the four work priorities identified will be underpinned by robust research and academic involvement creating a knowledge library of evidence based best practice. As part of this collaboration, there will be support from NIHR CLAHRC/ARC. All four work streams will have access to independent academic evaluation capacity. All workstreams will demonstrate flexibilities in approach enabling tailoring for rural and urban needs. A memorandum of understanding (MOU) will be developed between ADASS and AHSN. A governance framework will be implemented with reporting arrangements into both ADASS and AHSN through existing channels and programme management resources provided to ensure the four workstreams are delivering on the key deliverables within time, cost and quality. It is important that this work programme is transparent and maintains good communication with all its stakeholders.

Next steps

- Approve the report and recommendations
- Develop an MOU for the collaborative two-year programme
- Define programme management structure
- Define four workstreams and measurable outcomes
- Define the level of academic research and evaluation for each workstream
- Agree resources to implement the programme
- Identify and make appropriate funding applications
- Agree governance and reporting arrangements.

APPENDIX 1

Stakeholder Participation and Contributions

Name	Role	Organisation
Jacqui Ashdown	Director of Public Health	Stoke Council
Andy Begley	DASS	Shropshire Council
Chris Bell	Digital Programme Manager	Hereford CCG
Graeme Betts	DASS	Birmingham Council
Paul Bird	Head of Programmes	NIHR CLAHRC
Lucy Chatwin	Head of Innovation Implementation and Adoption	WMAHSN
Sarah Dugan	Herefordshire & Worcestershire STP Lead, Chief Exec Worcestershire Health and Care NHS Trust, MIC South Chair	Worcestershire Health and Care NHS Trust
Jacky Edwards	Safe and Timely Transfers of Care Lead.	IEWM/WMADASS
Peter Fahy	DASS	Coventry Council
Paula Furnival	DASS	Walsall Council
Andy Hardy	Coventry and Warwickshire STP Lead, Chief Executive Officer, University Hospitals Coventry and Warwickshire NHS Trust	University Hospitals Coventry and Warwickshire NHS Trust
Richard Harling	DASS	Staffordshire County Council
Deborah Harkins	Chief Officer Health and Wellbeing (Director of Public Health)	Dudley MBC
Helen Hunt	Patient Safety Collaboration Lead	PSC
Paul Jennings	Birmingham and Solihull STP Lead, Chief Exec Birmingham and Solihull CCG	Birmingham and Solihull CCG
Clive Jones	DASS	Telford& Wrekin Council
Paul Edmondson Jones	DASS	Stoke Council
Nigel Minns	DASS	Warwickshire County Council
Neil Mortimer	Head of Digital Health	WMAHSN

David Stevens	DASS	Sandwell MBC
Sebastian Trudgian	STP Implementation lead	Herefordshire and Worcestershire STP
Stephen Vickers	DASS	Herefordshire Council
David Watts	DASS	Wolverhampton Council
Andy Williams	Accountable Officer, Sandwell and West Birmingham Clinical Commissioning Group, MIC Central Chair	Sandwell and West Birmingham Clinical Commissioning Group
Avril Wilson	DASS	Worcestershire Council
Jenny Wood	DASS	Solihull MBC

References

- ADASS Annual Report 2017
- A fork in the road: Next steps for social care funding reform; the costs of social care funding options, public attitudes to them – and the implications for policy reform; Simon Bottery, Michael Varrow, Ruth Thorlby, Dan Wellings The Health Foundation / Kings Fund 2018
- Changes in councils' adult social care and overall service spending in England, 2009-10 to 2017-18 IFS Briefing Note BN240 David Phillips, Polly Simpson, 2018 IFS
- Facing the Facts, Shaping the Future A Draft Health and Care Workforce Strategy for England to 2027, Public Health England, 2017
- NHS Five Year Forward View NHS England, London; 2014
- Industrial Strategy Building a Britain fit for the future HMS OGL 2017
- The NHS Long Term Plan**.** NHS England, London; 2019
- Supersized The impact of adult social care on jobs, growth and regeneration in the West Midlands Sherman Wong November 2018
- The Long-Term Future for Residential and Nursing Care provision within the West Midlands Christine Lewington 2019
- West Midlands Adult Social Care Regional Account; March 2017