Health Innovation Wessex

The Dorset Innovation Hub
A case study
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Full report

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Disclaimer

This report presents the findings of an independent evaluation of the Dorset Innovation Hub.

Declaration of Interest Statement

Health Innovation Wessex supports innovators to bring their innovations to the NHS as well as providing an evaluation service more broadly to our members and others. On occasion, we evaluate innovations that we have also supported. Whilst these evaluations are independent, for transparency we disclose our dual role where applicable.

Health Innovation Wessex was a partner in the original bid submission to The Health Foundation and contributed in-kind funding to lead the local evaluation and to support other activities as part of the initial setup and development of Dorset Innovation Hub.

Acknowledgements

We would like to thank the staff of Dorset Innovation Hub, members of the Evaluation Working Group, patient and public involvement representatives and all those members of staff across the Dorset ICS partnership that contributed to this evaluation for their participation. We would also like to acknowledge the specialist contribution of Dr Emily Rowe in designing the Social Network Analysis (SNA), Business school, University of Warwick and Mark Outhwaite, consultant for conducting the analysis and producing the SNA output.

Health Innovation Wessex

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This is the full report of the Dorset Innovation Hub case study. There is an accompanying short report.

1. Introduction

The Dorset Innovation Hub, one of four innovation hub models funded by The Health Foundation Adopting Innovation programme, started from September 2021 was formally launched 29 March 2022. This evaluation report covers the period from 1 June 2022 to 31 March 2024.

1.1. The Health Foundation Adopting Innovation programme

This programme aimed to support faster and more effective uptake of innovations and improvements across the NHS by funding four regionally located innovation hubs. The Health Foundation (THF) provided ongoing support and the hubs worked together to share learning throughout the funded period of the programme. Hubs were expected to work through key system partnerships, and provide matched in-kind support and funding, develop links into existing governance structures and gain leadership support, and identify local evaluation capability (Clayton, DIH Rapid Insight Event 2024). The RAND organisation has separately conducted a broader evaluation across all four hubs on behalf of The Health Foundation.

THF guided hub development using six principles. These principles were:

- Develop culture where innovation can happen
- be flexible when managing change
- support your people
- the development and deploy innovation with people that use it
- adopt the best ideas and share learning
- and focus on impact and outcomes.

Each hub was allowed to evolve their approach to establish a hub model tailored to their context. Dorset Innovation Hub (DIH) aimed to facilitate the discovery, development and deployment of proven innovations and create an innovation culture within their integrated care system (ICS) with the expectation that it would result in greater uptake of innovations. Alongside NHS innovation priority categories that are mandated for local uptake (e.g. MedTech funding mandate), DIH also sought to identify local priorities through open calls as a key strategy.

1.2. The Dorset Integrated Care System

Integrated Care Systems in England were in early development at the beginning of this programme[1] and THF expected the hubs to be hosted by a provider organisation; for the Dorset Innovation Hub (DIH) that was University Hospitals Dorset NHS Foundation Trust (UHD). Throughout the lifetime of the programme, discussions occurred with respect to transferring DIH from UHD to the ICB (Integrated Care Board), NHS Dorset. This occurred post evaluation and before completion of this report - DIH [ourdorset.org.uk].

2. Case study approach

A case study approach was chosen to describe the results of this local system-based evaluation of DIH because it was a single innovation in a single site. DIH can be described as a social intervention that seeks to influence people via social structures and therefore use social skills to accomplish this. Complex social systems, such as the ICS, have certain characteristics that assumes both the influence of human activity as well as levels of self-organisation beyond the control of individuals (Braithwaite et al 2018a, Byrne 2013, Byrne and Callaghan 2014). Therefore, this assumes that change processes seeking whole system transformation will inevitably meet challenges to adoption (take up), spread (diffusion across a system) and sustainability because of the properties or characteristics of complex health and care systems (Braithwaite 2018).

A simplified version of the original logic model (**see Annex 1**) sets out the strategy and underpinning assumptions. The DIH 'mechanisms' were to facilitate, connect and network across the ICS and develop capability in the workforce, and encourage co-operation and greater integration between the ICS partner organisations. Based on successful outputs and outcomes the expected longer-term impacts were improvements to the innovation adoption culture within Dorset ICS demonstrated by greater interest and knowledge within the workforce, and improved uptake of innovations *at pace*.

Data collection activities (e.g. qualitative interviews, surveys, social media analysis) focused on whether workforce attitudes changed over time, tracing of specific innovations and whether DIH has influenced ICS culture on innovation adoption. This also included noting adaptation to the planned strategy and other unexpected consequences. However, in the absence of baseline information about the state of innovation adoption in the ICS when DIH was launched, multiple types of data were captured to understand 'signals of change' in the system and how these might relate to the activities

[1] https://www.kingsfund.org.uk/insight-and-analysis/long-reads/integrated-care-systems-explained

of DIH. The evaluation sought to demonstrate the impact of proven innovations supported by DIH by following 2-3 individual innovation cases to observe whether expected benefits were replicated and whether DIH support of proven innovations had accelerated adoption.

Data collection activities for this longitudinal case study to capture these signals of change on the ICS potentially attributable to DIH were:

- **Attitudes to Innovation Survey (ATIS)** – For details of this survey and findings (see technical appendix 1). This was distributed as widely as possible through local organisational channels (communication teams) with the objective of gaining a measure of the wider workforce's attitudes to innovation. Two timepoints were planned and one round completed.
- **Social media analysis** – Communication and awareness raising activities were important elements of the DIH strategy and therefore to understand reach and engagement an analysis was undertaken of the communications activity on social media platform X (formerly Twitter), (see appendix 2 for details).
- **Understanding influencers and their influence** – Interviews with senior leaders in influential roles (see technical appendix 5) and a social network analysis were undertaken (see technical appendix 4).
- **DIH activity measures** – Details on specific events were captured, such as innovation education events (Fundamentals of Innovation Adoption training), community of practice events (see technical appendix 6) and other events related to activities undertaken by DIH. This information was collected by internal data collectors who supported the evaluation (see technical appendix 3).
- **Identifying local priorities** – Interviews were undertaken with leads of the first tranche of submissions for the first call to identify innovations to meet Dorset ICS priorities (see technical appendix 5).
- **Innovation specific cases** – One innovation case from the first local priority call was observed and detail is provided in this report.
- **Patient and Public Involvement and Engagement (PPIE)** – Reflections were gathered from PPIE representatives to provide a patient viewpoint because a patient perspective was not drawn from the proposed innovation cases as originally planned, (see appendix 7).

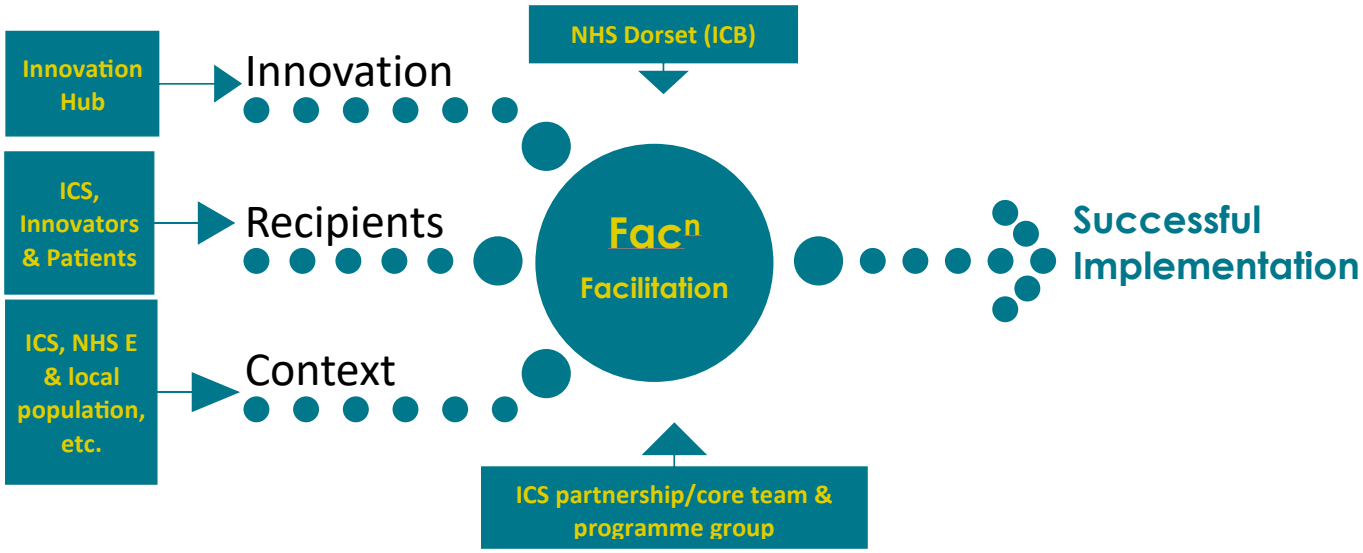
2.1. Applying an implementation framework

Implementation frameworks offer ways to explain implementation, that is, *how* to implement evidence-based innovations into practice. The most used frameworks have a particular focus and incorporate key elements such as impact on those receiving an innovation, those delivering an innovation and the wider context of the organisation, and other stakeholders involved in the success of an innovation's adoption and spread. Implementation requires effort and entails proactive planning, strategies and facilitation to provide the

opportunity for successful implementation. I-PARIHS (integrated – Promoting Action on Research Implementation in Health Services) was selected as a guiding framework to explain the findings of this evaluation because of its central focus on facilitation of innovation to enable effective implementation (Harvey and Kitson, 2015).

Successful implementation results from facilitation. Briefly, this is where one or more individuals (Fac^n = facilitators) are assigned to support others to navigate complex transformations in complex health systems (C = Context). This requires a comprehensive understanding of the innovation (I = Innovation) and those receiving (R = Recipients) it (e.g., staff, patients, service commissioners and other key stakeholders). In this instance, as shown in **Figure 2**, DIH is both **the innovation in the system** and **the facilitator for innovations**.

Figure 2 The role of Dorset Innovation Hub in successful implementation of innovation (i-PARIHS framework)



Key concepts of the framework are described further in **Table 1** aligned with the key evaluation components. i-PARIHS authors describe the framework in simple terms – what is being implemented, who is being targeted, where and how. 'How' is the key construct.

Table 1 i-PARIHS constructs and related TWC programme elements

I-PARIHS component	Description of key elements (Harvey and Kitson, 2015)	Application to DIH
What? **The innovation** (expanded since original)	Any activity to mobilise knowledge and research evidence into practice	The concept of the innovation hub (DIH) to facilitate innovations in local health systems is the innovative solution in this context.
Who? **Recipients** (new construct 2015)	Both individuals and teams (collective)	The recipients of the innovation are both innovators, patients receiving innovations and the wider ICS which includes the wider workforce and the wider system. DIH provides a service to that system.
Where? **Context** (original construct)	Both inner context (immediate setting e.g., hospital ward, general practice, unit, or department) and outer context (wider health system e.g., policies, regulatory frameworks, political environment)	NHS Dorset, the Dorset ICS and its partner organisations, NHS England (NHS E), the population of Dorset.
How? **Facilitation** (Activates implementation engaging with the other constructs)	Ranges from individual to groups of facilitators Ranges from novice to expert facilitation Involves participation of key stakeholders Takes ownership and control of the implementation process Empowers and enables others Provides feedback	Facilitation enables the process of implementation. Facilitators proactively navigate and negotiate between the delivery of the innovation (proven) and its context, both iteratively and in an interactive way (Harvey and Kitson, 2015). DIH operates across Dorset ICS connecting the partner organisations to improve innovation adoption.

The DIH role was to provide expert facilitation to improve uptake of innovations in the Dorset ICS. Expert facilitation is not necessarily provided by a single person. Facilitators need to promote trust, respect and willingness from others as well as feel they too are supported (Harvey and Kitson, 2015). Expert skills cover supporting other less experienced facilitators, working with systems to improve implementation success, working across organisational boundaries to integrate facilitation and research activity, evaluating innovations and generating new knowledge and aiding others through educational

approaches on facilitation approaches (Kitson and Harvey, 2015). More specifically, facilitators will (Ritchie et al, 2020):

- build relationships and create a supportive environment
- change the system of care and the structure and processes that support it
- transfer knowledge and skills and creating infrastructure support for ongoing learning
- plan and lead change efforts, and
- assess people, processes, and outcomes and create infrastructure for programme monitoring.

2.2. DIH context – the starting point

Between June 2021 and March 2022, DIH established a strategic programme group to oversee the delivery of the programme, and a core team who would provide direct support to DIH team to aid planning to deliver key activities. The process of establishing group terms of reference and bedding down these support structures involved defining and agreeing the scope of innovation from inventive to proven and that innovation was not confined to technology.

Innovation is the intentional introduction of new approaches, practices, treatments, technologies and services within a health and care role, team, organisation, or system, which are designed to improve the health of the Dorset population.[2]

The local NHS at this time was moving into Covid recovery and managing multiple pressures. NHS Dorset was established as an ICS on 1 July 2022 and needed to establish its own strategy and future five year forward plans.

2.3. DIH strategy – the plan

The DIH mission statement, as agreed by partner organisations via the programme group, states:

> *"We support and sustain the adoption of the world's best health and care innovations for the benefit of all citizens of Dorset."*

This mission is delivered through ten key distinguishers (objectives – **Annex 2**). These consider a focus on priorities to improve care for people in Dorset which align with ICS strategic priorities. Evidence-based innovations will be identified both inside the ICS and beyond. Innovations include new ways of working, new models of care, social, digital and technological innovations. All activities will be informed by patient and public involvement and engagement. These

[2] Internal documentation

distinguishers or objectives included a focus on creating the innovation climate to nurture the right conditions. This included encouraging staff engagement as well as providing the tools and support to enable innovation adoption. These tools involved encouraging rigorous approaches to testing, monitoring and managing risks. Evaluation was embedded in DIH activities with a focus on people's experiences and outcomes and wider system benefits. Finally, impact and long-term sustainability of innovations are key deliverables.

The DIH programme of activities to deliver on its mission was focused on engagement and awareness raising, the transfer of innovation adoption knowledge to the wider workforce, networking and connecting people at different levels within Dorset ICS to foster the influence of senior leaders across partner organisations. A community of practice was also established to affect the innovation culture within Dorset and improve uptake of innovations. Also, DIH sought to identify and address skill gaps amongst staff to increase innovation uptake and reduce the burden of regulatory and information governance approvals to enable innovation to be adopted and spread.

2.4. People and organisations in Dorset

The process of integrated care system development and the simultaneous embedding of an innovation support service – DIH, has involved navigating and negotiating a wide range of partner organisations. Both needed to create connections and partnership arrangements to move work programmes ahead. **Table 2** lists the current partners of both Our Dorset (Dorset ICS) and DIH illustrating the broader scope of DIH across academia and local enterprise partnerships for example. For DIH, these partnerships will continue to evolve. The integrated care partnership to support NHS Dorset and Our Dorset also incorporates a broader group of partners across both lists.

Table 2 Key partner organisations in Dorset

Partner organisations – Dorset ICS	Partner organisations – DIH
Dorset County Hospital NHS Foundation Trust	Dorset County Hospital NHS Foundation Trust
Dorset HealthCare University NHS Foundation Trust	Dorset HealthCare University NHS Foundation Trust
University Hospitals Dorset NHS Foundation Trust	University Hospitals Dorset NHS Foundation Trust
South Western Ambulance Service NHS Foundation Trust	Dorset Council
Dorset Council	Voluntary and Community Care sector assembly

Voluntary and Community Sector Assembly	Bournemouth, Christchurch and Poole Council
Bournemouth, Christchurch and Poole Council	Dorset Police
Public Health Dorset	Dorset Local Enterprise Partnership (LEP)
People and communities of Dorset	AECC University College
Primary Care Network services	Arts University Bournemouth
Dorset Police	Bournemouth University
Dorset and Wiltshire Fire Service	NHS Dorset
NHS Dorset	Other supporting partners:
	NIHR Applied Research Collaborative Wessex
	Health Innovation Wessex

3. Implementation of Dorset Innovation Hub

The following narrates the journey and implementation process for the DIH and its achievements during the evaluation period. Key threads will consider scope and scale of the task, time and effort needed, and the reality of achieving the original THF innovation hub objectives.

3.1. Governance and infrastructure set up

Between April 2021 and March 2022, the focus was to establish the internal infrastructure and set up of the DIH team. A programme group of representative partner organisations provided oversight and a core team to support the staff team more directly as they undertook day to day activities. Staff team set up was not at full complement throughout most of the life of the THF funded phase of the project. Project parameters were agreed, such as group terms of reference, providing clarity on innovation as defined within the context of DIH activity and developing a communication strategy. It is noted that the DIH team was not at full complement for the full duration of the project.

3.2. Navigating the system

Once key governance structures were in place the focus moved to what provision DIH could provide to the system. This included establishing a process for supporting implementation of the medical technology (MedTech) funding mandate policy and identifying what innovations were already in place. The development of an innovation education programme and a first call for local priorities for DIH support were key starting points. Other key activities were a community of practice, that evolved from core team and programme group support to events open to the wider workforce from 2022.

At the beginning of 2022, the core team described DIH as at the 'delivery stage' (technical appendix 6) moving to 'a period of consolidation' (technical appendix 6) in the second half of the year. The year ended with current activities described as 'a period of development and delivery of priorities' (technical appendix 6). Priorities for 2023 were a second call for local priorities, setup of the DIH summit, recruiting patient and public involvement and engagement (PPIE) representatives and further development of the innovation education programme. There were also significant efforts to engage and draw into collective action those who were representing the partner organisations of the Dorset ICS. These were represented on the programme group and the core team that supported the DIH.

3.3. Building for collective action – the people

Alongside DIH staff, important contributors to the work of DIH were the core team, the programme group and the PPIE representatives (see technical appendix 7) and other senior leaders across the partnership organisations. DIH facilitated these organisational structures, their meetings and engagement activities. The importance of developing strong social networks as a mechanism for change and influence was recognised. This required a network of collaborators to collectively agree and conduct activities to support the progress towards a more effective uptake of innovations within Dorset ICS.

Senior people across partner organisations

Twenty-three virtual interviews via Microsoft teams conducted over two timepoints one year apart provided information on the background and experience of these leaders, their circle of influence and their perspectives on the DIH implementation and impact. Second, a social network analysis was undertaken to map the influence of these leaders within the system and how they connected as a network. From the interviews these leaders came from Dorset County Hospital, the unitary council Bournemouth, Christchurch and Poole, Bournemouth University, the Community Action Network, NHS Dorset, AECC University College, University Hospitals Dorset, Dorset Local Enterprise Partnership, Dorset Council, and Dorset HealthCare. They brought a diverse background to their roles; see **Table 3.**

Table 3

Senior leaders background	Senior leader roles
Life sciences	Strategy and transformation
Health sciences	Operating in the innovation environment: job creation, business (case) development

Behavioural science	Negotiating data and intellectual property (IP) sharing between academia and NHS
Medical services – armed forces	Economic and strategic business development
Healthcare consultancy	Science and technology (university)
Community development	Fostering partnerships and collaborative working between voluntary and statutory sectors
Software engineering	Research commercialisation
Economic development consultancy and business development	Chief medical officer and medical director roles
Business experience	Digital lead
	Investment manager
	Operational delivery
	Facilitation of business for skill development working with education providers
	Identification of funding for research
	Raising funds through social enterprise or social value bonds
	Leading and managing strategic partnerships including research networks
	Establishing links with external companies
	Innovation and research across community hospitals

Within the Dorset ICS innovation space these leaders brought a range of expertise and experience and are situated in positions of influence on innovation adoption. Many leaders were involved in either the programme group or core team that directly supports DIH activity. They were also involved with key activities such as the innovation education programme, the local priorities programme, community of practice, Nutrition in Ageing People project and supporting delivery of MedTech Funding Mandate innovations. In the second set of interviews, senior leads were asked how they would define their role specifically in relation to Health Education England's innovation-based archetypes for artificial intelligence (AI) and digital transformation[3]. These archetypes for innovation cover those that shape, embed, drive, create, or use innovations. Eight were 'drivers,' that is they champion and lead innovation development and deployment at a regional/local level, identifying

[3] Introduction | Digital Transformation (hee.nhs.uk)

and making decisions about which innovations to use. Four were shapers in that they set the direction for innovation policy and governance at their ICS level with influence at a national level. One was an embedder in that they implement, evaluate and monitor innovations deployed within health and care settings.

Mapping senior leaders' sphere of influence

In the first 11 interviews leads were asked to identify, people, roles or organisations within their sphere of influence, that were most connected to DIH objectives and activities. Subdivided by those they were currently connected to, plan to connect to (or in development), and those they should be but are either not currently connected to or were difficult to connect to.

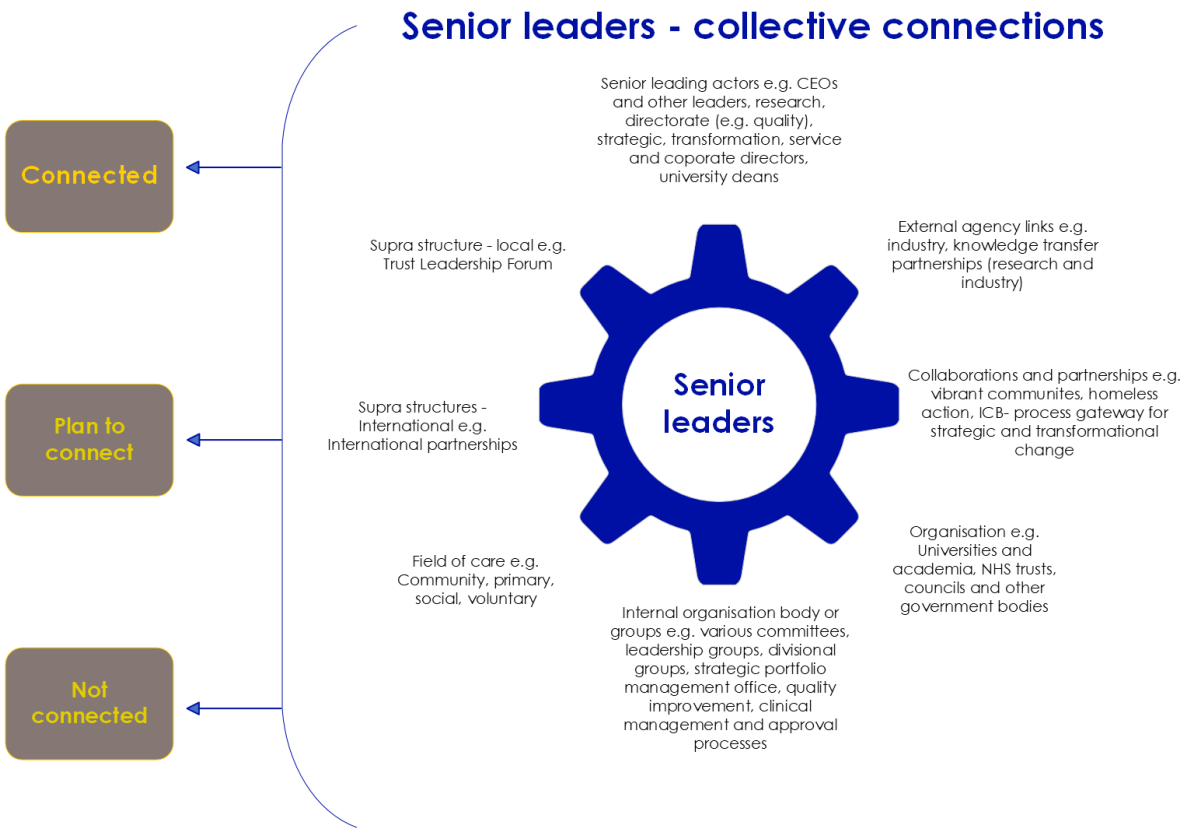


Figure 3 Sphere of influence – people, organisations, social structures

The above diagram presents this sphere of influence from the different individuals who may either connect or not connect to the same category (e.g., Trust leadership forum, committees and leadership groups, making links across organisations e.g., universities). Therefore, the connected, plan to connect or not connected groupings are not presented separately. From this initial mapping of influence and connection, those interviewed recognised that although they connected with a wide range of people across multiple

organisations and forums where individual organisational representatives gathered, they knew they needed to develop further links with others with whom they were not automatically connected. Some considered the exercise itself useful for their own purposes.

Senior leaders' social network

An exploratory social network analysis was conducted with this cohort of senior leaders. For details of this approach see technical appendix 4. The aim was to understand how senior leaders connect in a network across Dorset ICS and specifically how they foster a culture receptive to innovation adoption. The findings are limited to a single round instead of the planned two because insufficient time was available for a second round due to various factors that inhibited progress at the time. It should be viewed as illustrative rather than definitive of the possibilities of this method. Fifteen leaders (coded CD) took part out of 35 (non-responders coded ND) invited (all entered into a dropdown menu), a response rate of nearly 43%. Two survey submissions were removed as information was incomplete. Forty-six new names were added (coded FT). In total, from this initial response there were 81 named people in the network. **Figure 4** is an example of the mapped output from the analysis. It shows the leaders declared connections based on how they responded to the two following statements:

- I believe this person is influential regarding sharing knowledge about innovation adoption within Dorset ICS.
- I believe this person is influential in promoting innovation adoption within Dorset ICS.

All individuals are anonymised, but each node has a code and represents a single individual.

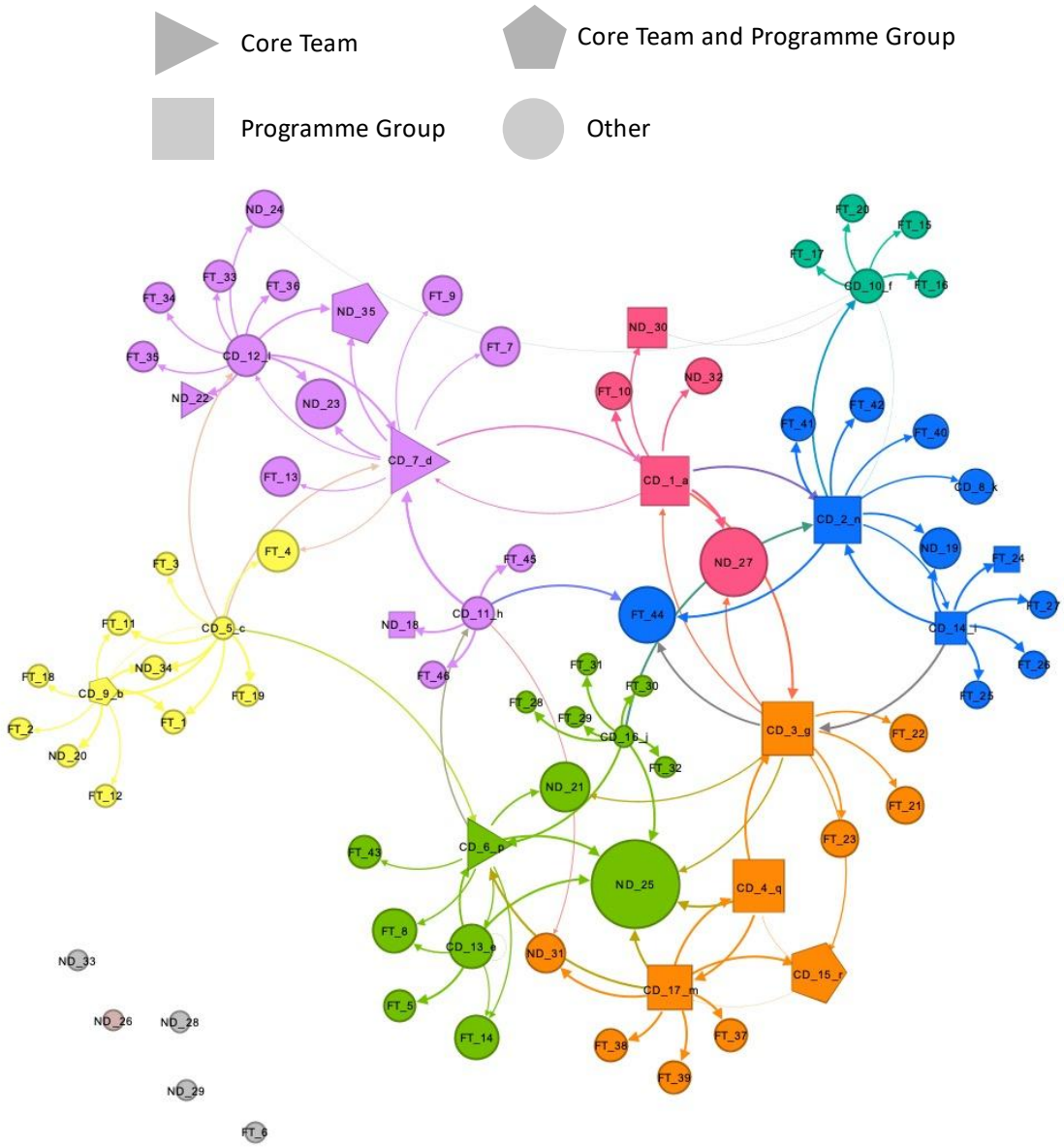


Figure 4 A social network of influencers

The shape of the node indicates the group to which leaders belong and the size is a measure of the influence of that individual within this network. The lines are the declared relationship between those who took part. The arrow declares the direction of the relationship. The purpose here is to detect clusters and establish the connectivity in the wider network represented by participants. Therefore, it can also demonstrate those less connected or separate from a main network. This is demonstrated in **Figure 4** with the grey cluster of individuals who are mainly survey non responders.

These measures (see technical appendix 4) consider not just the quantity of individual's connections but the quality of these connections; that is, how well-connected a person is to other well-connected individuals. Someone who is connected to many highly influential people would have a higher score. This

helps to identify key influential people in a system who might be very influential in identifying and bringing others together. In **Figure 4** ND_25 and ND_27 both show a similar level of influence and connectivity. Interpretation needs to be cautious; however, there is a rich structure of connection in this demonstration.

The findings indicate the role of network connectivity to potentially influence innovation adoption. However, the loss of one or more of these people in the network might have a significant impact on the clusters to which they belong and a loss to that connectivity and capacity for influence. Therefore, this is just a glimpse at the network. Nevertheless, it demonstrates potential for further use and exploration to understand better the social networks that NHS systems rely upon.

The wider workforce

The Attitudes to Innovation Survey (ATIS) (Sibley et al, 2023) developed by HIW is an outcome measure designed to assess the general attitudes among healthcare staff towards innovation. ATIS explores an individual's attitude to innovation, their view of their colleagues' attitudes and their view of their organisations attitude to innovation. Scores are grouped into low, moderate, high and very high levels of attitude (acceptability) towards innovation. In principle the wider workforce across the partner organisations is a very large number and not realistically calculable for this case study. The ATIS (see technical appendix 1 for details) was undertaken to gain a measure of the wider workforce's understanding and attitudes towards innovation and its awareness of DIH. One hundred and two responses were received. Distribution through internal organisation communication channels may have limited opportunities for a response. Therefore, this response rate may be relatively good but unknown (Draugalis et al 2009). This group of responses was identified as Group 1 – programme group and core team members only (n=15) and Group 2 – wider workforce responses (n=87). Of Group 2, 51 were not aware of DIH. Individuals in Group 1 (core team and programme) as expected showed a very high score for their personal attitude to innovation. A standalone question asked, "If you've been involved in implementation innovations, overall, how would you rate your experience?". For both groups, 22% did not have an experience to refer to, 57% had a somewhat positive or positive experience of implementing an innovation and those who had a negative experience was low (5%). Surveys are likely to be completed by motivated people particularly in this type of survey and how it was delivered. The results indicate this sample of people in the system are more receptive to innovation.

Patient and Public Involvement and Engagement (PPIE) representatives

Three PPIE representatives were recruited through a fair and equitable process to ensure they were able to bring lived experiences. Two were allocated to the Evaluation Working Group and all three provided advice and support to one of the hub's projects, the Nutrition in Ageing People project, as well as taking

part in the DIH Summit in June 2024. Given the planned tracer innovation cases were not able to provide any direct patient experience, the PPIE representatives reflected on their own engagement and experience of supporting DIH activities and the evaluation. For details see technical appendix 7. The influence of PPIE's backgrounds and experience are naturally variable, however, the current PPIE representatives brought valuable experience to their roles such as volunteering as patient support in a GP practice, providing health information literature and contacts for local support services, health literacy work, to a career working in community mental health, working at a strategic partnership level within a local authority to tackle health inequalities particularly in deprived areas, and working in educational settings supporting nursing students. They also understood as those living with health conditions, that they identified in different ways such as being an older person. They made the key point that 'patients', which we can all be at some point in our lives, are more than just their diagnosis.

> *"I think that's our message a lot of the time, there's always a thousand things going on for that one individual. We are not our diagnosis either. That's our message."*

They saw their task as "making it real" and to bring real life experience and challenge assumptions of people as a diagnosis rather than a whole person. PPIE representation brings people with compassion and empathy to be able to stand in another person's shoes. It is important it is not a just a 'tick box exercise'.

Their involvement was a journey and while they received support throughout by DIH staff, for them it was important to reach a point where they became independent and that others (e.g. chairs of groups) treated their contributions as independently viable and valuable. A valuable insight was first not to overwhelm representatives with information and technical jargon but likewise representatives should anticipate challenges for which they should be supported. This linked to who should be identified as a PPIE representative and that they need certain qualities and attributes, as well as a clear motivation for involvement. Projects need the right people who can manage challenging situations, possibly at times bringing up negative experiences and memories to enable a more positive service for future users.

> *"You need to have people who are up for being part of a meeting, really listen and engage and be brave enough to have your say and put your hand up."*

DIH PPIE representatives met with some initial challenges; however, they remain engaged and enthusiastic about their involvement.

"I feel we've been given a bit more of a platform or a space to speak."

The DIH team

DIH team experience over two and a half years was captured in end year one and end of year two interviews. To maintain the confidentiality of the interview data, this report only presents a summary of the key points made. Both staff brought a wealth of experience and expertise to their DIH roles in research and innovation, clinical audit and quality improvement. From the initial setup of DIH to its planned transition to NHS Dorset, a range of targeted activities and efforts were made to create the foundation of a multi-organisational partnership and make a start to influence the wider workforce in the ICS. This was undertaken with a small team needing to work at scale across the whole ICS system and its partners. The summary in **Table 4** indicates progress from end of the first year to the end of second year.

Table 4 Summary of feedback from the DIH team

End of year one summary	End of year two summary
To meet the vision of the THF grant, multi-organisational engagement and active participation involving in-kind support was needed to develop the impact. Co-operation between partner organisations involved both joint ownership and the development of a common perspective. Organisations come from different perspectives and priorities. Partners are often challenged by their time availability, capacity with home organisation competing priorities. This work along with the wider culture change piece needed more time than two and half years of the THF grant. Initial unrealistic workloads and not working at full capacity impacted on DIH's ability to make progress in a timely manner. The wider context of the ICS system involved a big new build along with various other system pressures and competing priorities that distracted the focus by partner organisations on DIH work.	Maintenance of the multi-organisation partnership (programme group) requires repeated efforts to manage change in personnel and bring newcomers up to speed – this is ongoing. Key activities such as the development day provides an opportunity to strengthen the partnership and build the collective. The programme of work realistically needs 5-10 years. Benefits of work achieved are beginning to filter through to demonstrate impact. These include a benefits realisation of the Medical Technology (MedTech) funding mandate projects (PLGF) and the Nutrition in Ageing People project. DIH team continues to work at below full capacity due to vacancies. The context of the ICS throughout the grant period reaches back to Covid, and Covid recovery. There are all year-round system pressures, and alongside these pressures UHD is undergoing a new build and transformation

The wider workforce is not yet aware of DIH as yet.	programme. Throughout the setup of DIH, NHS Dorset and the Dorset ICS and integrated care partnership (ICP) were also involved in structuring their boards, streamlining staff (from the previous clinical commissioning group) and restructuring the ICS etc. DIH was also required to negotiate and collaborate with other agencies covering the innovation space. The multi-organisation partnership continues to grow. With progress made and increased awareness continuing to impact on the wider workforce, some reflection is required on the use of innovation and whether it feels relevant to clinical staff in their context.

3.3.1. Activities and programmes of work

The DIH strategy to build collective action and effect change across the Dorset ICS was underpinned by the following activities:

Communication strategy

DIH developed a detailed communication strategy that included listing communication channels available e.g. Future NHS, X (formerly Twitter), LinkedIn, DIH website and newsletter, and outputs such as case studies and blogs. This has evolved over time. It was only possible within the limits of this evaluation to identify one channel to provide information on engagement and reach: X analysis. It was not possible to access LinkedIn data for the purpose of analysis in accordance with GDPR. The aim of the X analysis was to gain insight into the DIH's reach, engagement and potential impact. Data analysed covered February 2022 to March 2024. Appendix 2 provides details on approach and analysis.

In summary, content identified with the #dorsetinnovationhub hashtag was seen a total of 160,484 times over the reporting period (regardless of whether this was seen by the same individual multiple times or not). All the engagement and visibility metrics indicate that Dorset Innovation Hub received substantial attention on X. However, it did not foster ongoing discussions, but this may not have been the intention of X activity within its overall communications strategy.

Innovation education programme

An innovation education programme was developed to cover a range of educational opportunities. First developed was the Fundamentals of Innovation Adoption training, which has been revised in response to participant needs. Other educational initiatives include the community of practice events. These events were run three to four times a year. They target all staff in the Dorset health and care system and are widely advertised via social media, partner communications teams and via the DIH newsletter. These free events attract interest, although sign up is higher than attendance.

Fundamentals of Innovation Adoption training

The initial structure of the training programme, planned to run quarterly throughout the year. The training syllabus was developed in Q3 of 2021-2022 with Health Innovation Wessex and the first training session was delivered in May 2022. A major revision to the training delivery was recorded in Q4 of 2023-2024 to ensure sustainability and reduce impact on DIH core staff. A total of six Fundamentals of Innovation Adoption training sessions were recorded in the documents reviewed. Over two years, over 68 staff received Fundamentals of Innovation Adoption training as part of the innovation education programme. A senior lead who supported the evolution of the programme said,

> *"I think we all feel pretty confident and comfortable with what we're delivering, that it's at the right level for the people that are coming on the day. I mean you never know because that's such a mixed bag of people. But yeah. So, I think that's really helped in terms of the ..training"* (SI2 01)

Community of practice

The first iteration of community of practice sessions was in June and September 2021 under the theme of 'sharing best practice' as part of the DIH programme group monthly meetings. The DIH core team subsequently agreed to arrange future sessions as a community of practice, separate from the programme group meetings. The community of practice forum was also created on the FutureNHS workspace platform to allow online discussions. To date, there are no comments added by members. The first community of practice session was held in June 2022. Four subsequent sessions up were held up to January 2024 identified in documents (technical appendix 6) with reported numbers of participants registered and the actual attendance for each event. Over two years, a total of 127 staff participated averaging 25 people per event. Individual staff may have attended more than one event. Bookings did increase over time showing enthusiasm and awareness of the events. The community of practice events use a bite size element of training from the fundamentals of innovation adoption training and to date include the following topics: exploring innovation, working with stakeholders and understanding complexities of implementation.

MedTech Funding Mandate (MTFM) programme

The documentation review conducted as part of this evaluation suggested that local adoption of MTFM technologies was not consistent and (appendix 6) that the programme of technologies is not adopted consistently across systems. Efforts to 'speed up' adoption is not clear. Through DIH, efforts were made to support those willing to adopt MTFM innovations and DIH may have made a difference; however, this cannot be determined in this evaluation. DIH contribution comprised the co-ordination and promotion of MTFM innovations in Dorset ICS and the setting up of a governance procedure for allocation of funding for agreed activity. This was evidenced by data showing involvement in multiple activities related to MTFM totalling 23 events between January 2023 and January 2024. This is not considered a final number for that period. Several events cover certain technologies (Thopaz[4]+, gammaCore[5], placental growth factor[6]). Other events include other technologies and MTFM strategic and planning meetings attended by DIH staff.

Quarterly reports produced by DIH provided an overview and details of the status of different technologies under consideration at University Hospitals Dorset (UHD) and Dorset County Hospital (DCH). These technologies or rapid uptake products are either in use, under consideration (or piloted) or not going ahead in one or other of the two key providers, UHD or DCH. Fifteen innovations are recorded between June 2021 and December 2024 for take up at the two trusts. One of the MTFM products, placental growth factor (PlGF), received significant support from DIH including support and production of a benefits realisation plan. Several innovations remain under consideration for up to a year before a decision to implement or not. DIH undertook a review for two innovations, XprESS and Thopaz+. It is not clear whether either progressed following review of the documentation. HeartFlow has remained in setup at DCH for over two years with extensive work taken to move through approvals within DCHFT, radiology workflow set up and implementation, and currently Informatics workflow implementation.

In a senior leader interview, it was stated that one product expected to take two years took ten months. Another senior leader insight suggests the challenge in the UK context relates to the right of clinical decision making to override this mandate, which in their experience in private and insurance-based healthcare systems is not the case (technical appendix 5). Further work to understand the complexities of the issues with innovation adoption could be informative because they involve processes with clinicians, operational management and finance teams (technical appendix 5).

[4] Digital chest drainage and monitoring system for use after cardiac surgery
[5] Non-invasive vagus nerve stimulator for headaches
[6] PLGF-based testing to help diagnose suspected preterm pre-eclampsia

A senior leader supporting the MTFM noted the role of DIH to support this programme.

> *"NHS Dorset set aside money for the last few years to support the implementation of these. Policies are publicised and known within the Trust, so UHD and DCH in particular are applicable for the products and the policy. But without the Hub many of these products would not be picked up or considered, let alone implemented… DIH can reach the individual clinicians and managers more effectively who generally do not have the headspace … to look at the policy themselves and to drive the consideration [for] implementation of these products forward."* (SI 06)

Local priority calls

Local priority calls one and two eventually resulted in one live project out of five, the Nutrition in Ageing People (NaP) project (see 4.4.1). Four were not able to progress for different reasons. The first call aimed to identify innovations to support local priority areas of health and care need. The second call focused on levelling up and spread of excellence aligning with the NHS's Core20PLUS5 approach to reduce local health and care inequalities and resulted in one submission. This was considered in a discovery rather than proven phase and not ready for spread in Dorset. Interviews conducted with leads of the first call identified challenges for those submitting from outside the NHS context; however, the process was considered fair, broad and inclusive providing learning opportunities. There was a need for those submitting to have a better understanding of innovation maturity and readiness for implementation. Another point of view suggested expectations of those submitting to DIH for support was unrealistic,

> *"I think the expectations of the submitters were the hub will be able to do 15 things for me and that was probably never really the case."* LP 05

Moreover, **Figure 2** in appendix 6 demonstrates the effort undertaken to support the five submissions to arrive at a decision. A senior lead reflected,

> *"First round taught us that innovators did not connect within their own organisations, come back with an organisational priority for this. We just didn't get that in the first round as clearly as we'd have liked and probably because each organisation has got so many different priorities."* (SI2 08)

> *"Now in the second year the ICB has a very clear strategy and five priority areas, it's actually much easier to say we won't ask people what they think is a priority. We know that already.* (SI2 08)

A third local priority work programme awaits clarification from NHS Dorset once priority system projects are confirmed as identified by the five-year forward plan.

Other activity

A group that included DIH staff, programme group and core team members collected data over a year between January 2023 and January 2024 regarding engagements not captured routinely in other reporting mechanisms. This data would demonstrate the 'work' and 'effort' going on behind the scenes (technical appendix 3). Over the year 110 events were recorded on the online form, 82 were directly led by DIH. These involved planned and structured events as well as 26 informal conversations. Key partners were involved at many of these events. Both members of industry (n=27) and PPIE (n=20) representatives were involved in some of these events. Forty-six events involved 3-5 people with 32 events involving more than ten people. Sixty-four events were linked to adoption and implementation of innovation support. Sixty-three reported no challenges related to these events. Examples of challenges experienced with these events were related to difficulties with innovation adoption, organisational capacity, co-ordination of diaries, resourcing and prioritisation. Examples of 37 proposed enablers were motivation, common interest, agreed shared purpose and the opportunity to grow a network of connections. Reported outcomes of events suggest 66 were expected to lead to action and 21 referred to future events. Examples of events are listed in **Box 1**.

Box 1 Examples of events

- Dorset Local Enterprise Partnership One Health conference
- UHD innovation discussion and evidence for CQC discussion
- Follow-up on DIH engagement form completed by a company seeking to engage with local NHS
- Informal discussion with members of staff from Plymouth University NHS FT regarding setting up an Innovation Community of Practice at Plymouth.
- Meeting with lead clinician for gammaCore to discuss and plan clinical audit and benefits realisation
- Improving patient care by adopting medical technology webinar run jointly by DIH, N-QI-CAN, and the Health Innovation Network
- Advice/guidance on use of winter funds for technological innovation implementation
- Our Dorset ICS Engagement Leads meeting (monthly)
- Facilitation meeting - advice requested for a QI project
- Meeting to map innovation adoption stakeholders across UHD and DCH
- DIH delivery of workshop 'How to be more involved with innovation' at the Allied Health Professional Symposium
- Adopting Innovation Programme Learning Event | Culture Change & Storytelling for Adopting Innovation

3.4. Moving towards business as usual

From a period of development and delivery the DIH moved to a period of transition to sustainability" (technical appendix 6) from April 2023 to January 2024 with a focus to continue the activities that included national and local programmes, innovation education programme, PPIE development, and completion of support activities such as benefits realisation for supported MTFM projects e.g. placental growth factor.

The Nutrition in Ageing People project indicates a model for the work DIH can undertake and pursue. This project came through the first local priority call and has indicated a different process than originally planned, in that it started with mapping the problem and opportunities for potential innovation through to stakeholder engagement.

3.4.1. Nutrition in Ageing People (NaP) project – innovation development

The following describes how DIH demonstrated proactive facilitation to co-ordinate and support delivery of an innovative approach in response to a local priority. This organic and emergent approach, in contrast to the MTFM programme for example, has taken considerable effort and time. Whereas the original objective of THF hub model was to encourage faster uptake of innovations. This tracer case demonstrates an output from a local priority identification process that did not have any local focus or attention at the time. It demonstrates the opportunity and benefit of a cross-sector partnership in Dorset and an exemplar of DIH activity; however, it did not demonstrate implementation of an innovation within the timescale of this evaluation. Nevertheless, it provided an opportunity to demonstrate a development process starting from the point of identifying a local priority area of health need through to a decision for the development of a social community innovation, the collaborative lunch club model as modelled on the Food Friendly Club - see **Figure 8**. PPIE representatives reflected that involvement in the project provided a clear sense of purpose and opportunity for them to engage with the work of DIH (appendix 9). Senior leads involved in the NaP project described it as being at the *"great idea stage"* (SI2 08); however,

> *"I was so excited when I realised ….when I started in post…. that's what had been chosen because it is absolutely at the right point in the journey of our population, we know that it's a challenge for our older community. If we can look at the nutrition and the health earlier in the journey, we know that ……..[the] affect [on] overall health and wellbeing is enormous."* (SI2 02)

> *The potential to demonstrate a different way to integrate lunch clubs into the community to act as a nucleus for other things not just food [but] around community connection and bringing other services to the community.* (SI2 05)

Counter views suggest that there was only value to a small group of people and that it was not a joint venture with shared ownership. Some also identified that the project would require funding to meet its costs (SI2 13, SI2 17). The social and community innovation identified, the collaborative lunch club model was developed, and a particular approach was demonstrated by the Food Friendly club see **Figure 8** below. Various challenges were identified, and it was noted that it would need to be self-sufficient and run within the community.

NaP evaluation approach

Evaluation staff attended the two DIH NaP workshops which were co-facilitated by the Innovation Unit[7] and observed the decision-making processes in order to understand the development and progress of this project. Steering group minutes were reviewed, and an interview conducted with the DIH lead. The highlighted box summarises the project from the perspective of the DIH lead.

[7] The Innovation Unit https://www.innovationunit.org/

Nutrition in Ageing People development and programme of work

From the first local priority call the submission presenting the Nutrition Wheel* (Bournemouth University) to identify ageing people suffering malnutrition was pursued, to align with the local priority of malnutrition in ageing people. Support provided by the Innovation Unit (The Health Foundation support structure for grant holders) in collaboration with the Dorset Innovation Hub (DIH) scoped out this area of priority and investigated other innovative options. Previous work locally on malnutrition in ageing people was undertaken, however there were no Dorset agencies prioritising this health concern at the time of the local priority call (2021-2022).

The DIH (supported by the programme group) undertook to pursue this health priority as part of its remit. Previous stakeholders were invited to reengage via a steering group to provide oversight for project development. Establishing an effective steering group required several resets to ensure partner organisations were appropriately represented. It formed a framework to connect the partnership evolving as part of the DIH role and strategy.

Following the Innovation Unit workshop 1, a planning group was formed which discussed the output of this workshop and how to take the project forward. This planning group (now the Nutrition in Ageing People project) identified nine priorities to consider. This led to lunch clubs as an option alongside the nutrition wheel. These were considered alongside each other in the Innovation Unit workshop 2. A decision to pursue the lunch club concept followed this workshop. A delivery group formed to develop the concept of the lunch club model and apply for charitable grants. This involved considerable preparatory work undertaken by the DIH on behalf of the steering group. This work with support from the Dorset Intelligence and Insight service (DIIS) identified where within in Dorset a pilot collaborative lunch club was best located taking account of areas of deprivation and other services available within the area. Further work is planned with charities in the area on public engagement and to gain their views on the lunch club model.

This collaborative lunch club model aspires to involve a range of services to support attendees. For consideration are nutritional education such as cookery lessons and cookery demonstrations, and social activities such as music and singing. Also considered are opportunities for health screening, podiatry, blood pressure checks, and signposting to a range of health information. Citizens Advice may also provide other supportive information for attendees. The current plan will provide one lunch club twice a month in a targeted area of need within Dorset.

Setting up a lunch club is a considerable undertaking; however, there is a clear objective for this social community innovation to improve wellbeing, social connections and community cohesion. These were all factors identified in the initial scoping workshop 1. Following this initial development work, NHS Dorset now considers this a priority project in the joint five year forward plan, pillar 4 (NHS Dorset 2023). Other priorities within this local priority area of need may develop, such as for those who are housebound. See **Figure 6**, for overview.

Summary from interview with DIH lead (March 2024)

*Nutrition Wheel developed in partnership with Health Innovation Wessex (Nutrition Wheel (healthinnovationwessex.org.uk)

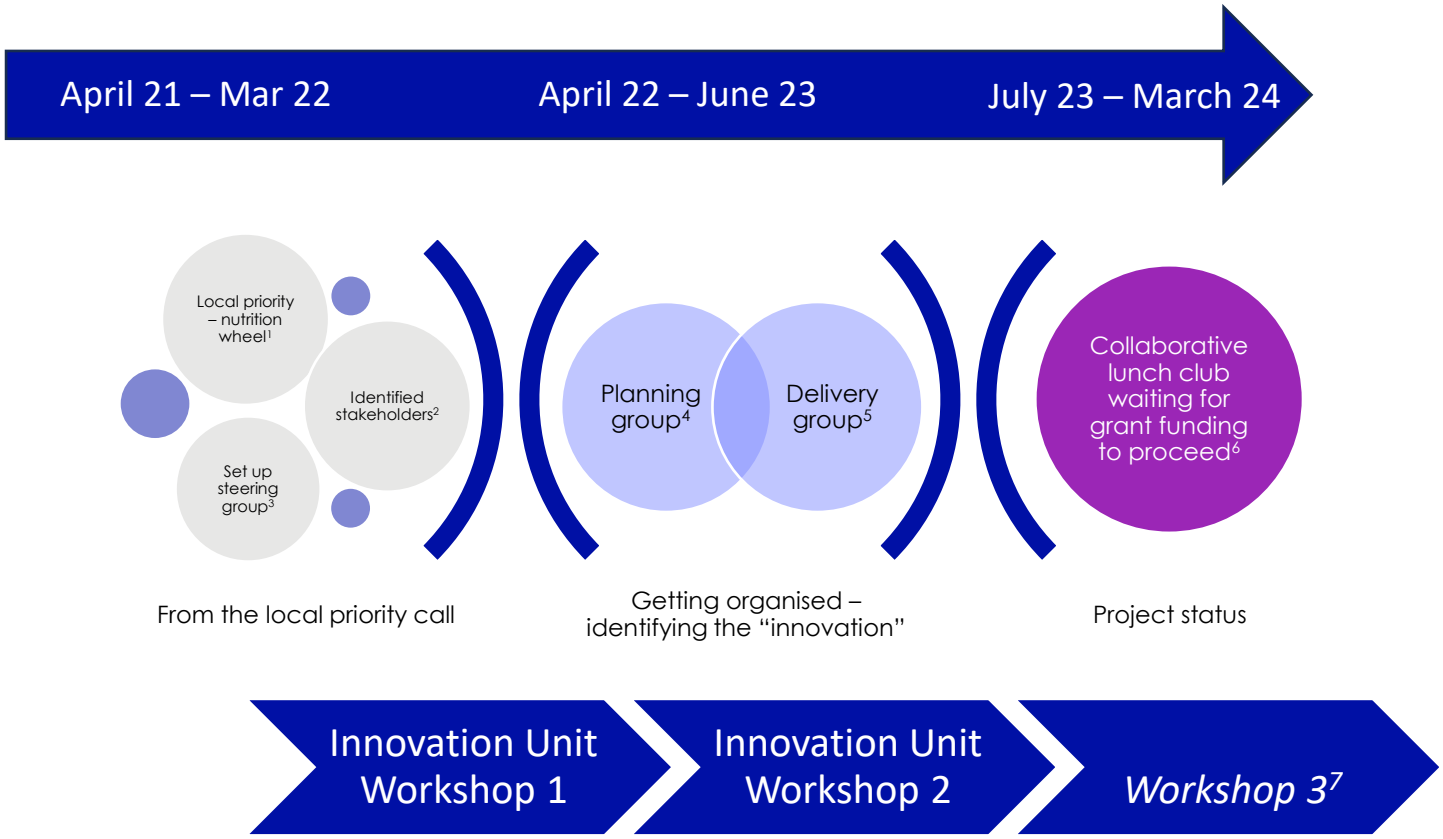


Figure 6 Tracer case: Nutrition in Ageing People (NaP) project development pathway

Notes

1. The first local priority call identified malnutrition in ageing people as a project and the Nutrition Wheel tool to identify individuals with nutritional needs.
2. A group of stakeholders was identified based on previous activity on this topic which ceased in 2018.
3. A steering group was set up with review of membership to establish the current group.
4. This planning group distils feedback from the delivery group working solely on this specific project back to the steering group.
5. The delivery group is tasked with seeking grant funding and to work with local charities.
6. This the first project to emerge from the prioritised NaP project to go forward (subject to receipt of grant funding) to test the model for this 'social and community innovation'.
7. An implementation and engagement workshop will occur once funding for the lunch club project is secured.

Observation of workshop 1 and 2

Both events (approximately six months apart) provided an opportunity to map the issues and start the decision process to identify a potential social and community innovation to address nutrition in ageing people. Events were well attended with PPIE representation. It was observed that everyone present seemed engaged with the activities. As part of the evaluation, the outputs were recorded and downloaded into an Excel file and organised into thematic categories (**Figure 7** and **Figure 8**). This was conducted as an independent exercise from the DIH which used the information gathered to inform its decision processes in the NaP steering group. Two main categories identified were 1) individual contact opportunities where individuals encounter other services for health reasons and 2) where people with nutritional needs might engage within social interactions within the community. These potential contact points provided an opportunity for intervention.

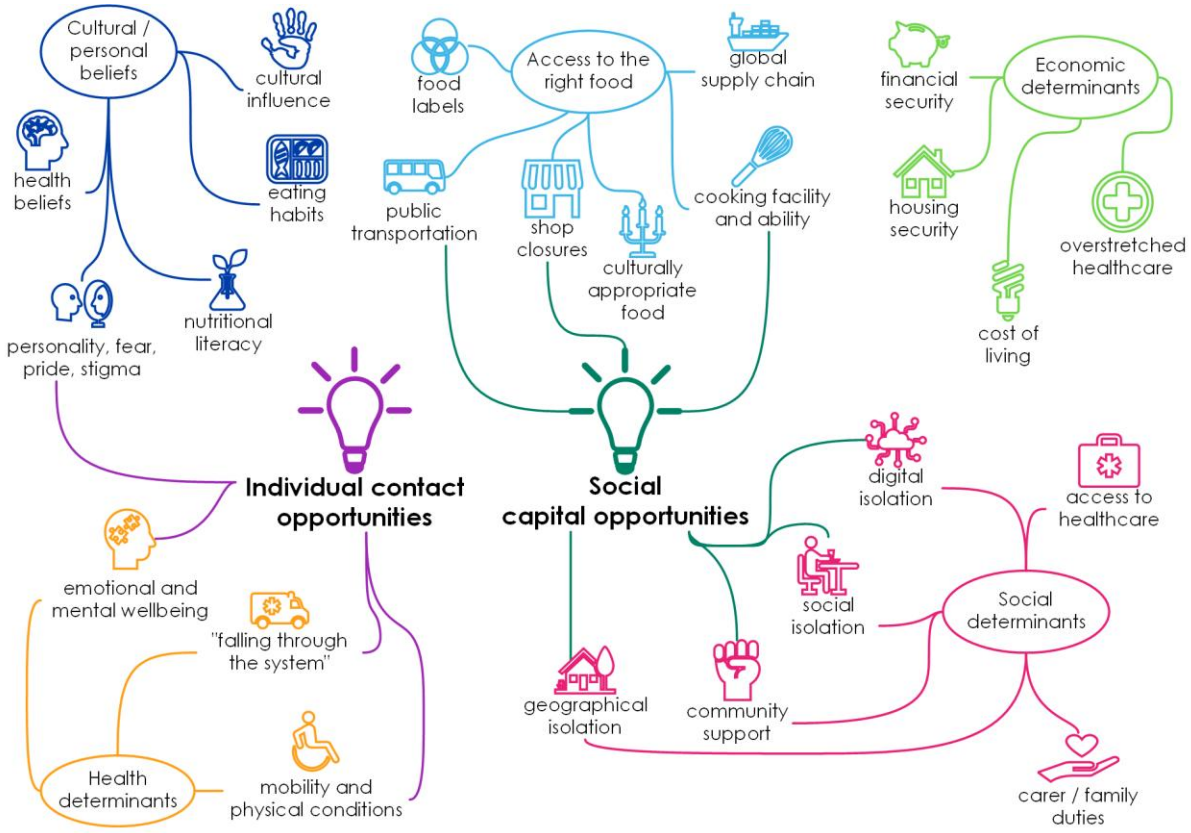


Figure 7 Individual and social contact opportunities for a social community innovation

In **Figure 7**, following Workshop 1, the evaluation team organised the feedback from the workshop. This was categorised using Excel. Individual opportunities that clustered into cultural and personal beliefs, and social opportunities clustered into access to the right food, health determinants e.g. mobility and social determinants and health beliefs. Separately, there were economic

determinants. These factors can impact on an individual's eating habits. Gaining access to the right food is a challenge for many and social isolation can impact on nutritional intake.

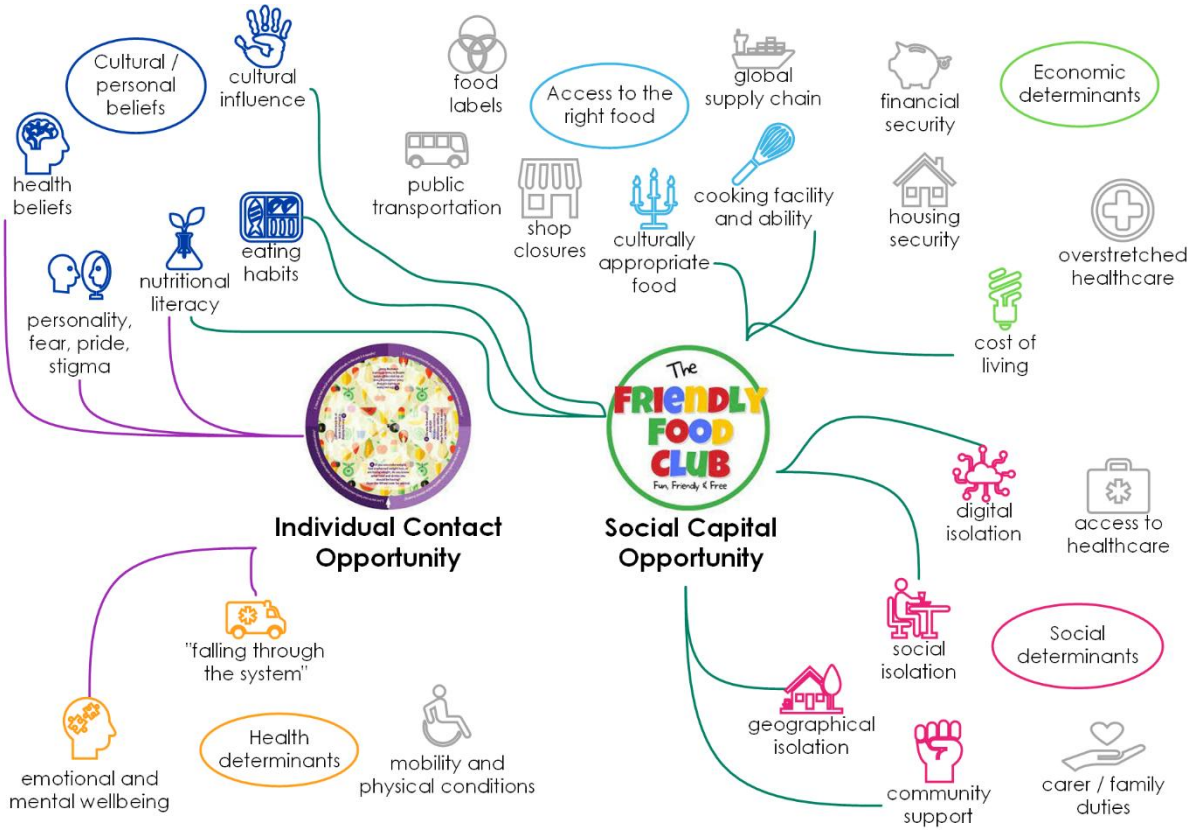


Figure 8 Mapping two potential innovations to either individual or social contact points

In **Figure 8**, following initial prioritisation an individual contact innovation (the Nutrition Wheel) and a social community innovation (the lunch club) were put forward for consideration in Workshop 2. Lunch clubs address some aspects of social isolation and eating habits and provide a nutritious meal. Subsequently as described and set out in the process in **Figure 7**, the lunch club was developed into a tangible project seeking grant funding. Note items in grey were described in workshop 1 but not repeated in workshop 2.

4. Facilitation in social systems

The innovation hubs were themselves innovations. Implementation of the DIH strategy has shown the complexity and scale of the task to negotiate, educate, raise awareness, identify priorities and engage busy professionals at multiple levels across different organisations, with different cultures and priorities in the ICS. Data collection activity focussed on answering the

questions (below) as proposed in the bid. DIH implementation due to its scope and scale required a greater focus on social communication and networks and ability to influence the ICS system on innovation adoption rather than measuring the uptake of innovations.

- Has the DIH supported the adoption of **proven innovations at pace** that respond to local needs and challenges?
- Has the DIH **enabled** Dorset ICS **to replicate the expected benefits from proven innovations** and if not, understood why not?
- Is there evidence of the **approach (DIH strategy) becoming sustainable**?

4.1. Facilitation

Facilitation was a key role undertaken by DIH to achieve its objectives. DIH has responded and adapted its approach following shared learning events supported by THF via the Innovation Unit. The i-PARIHS framework indicates the role facilitation has in mediating recipients, context and in this context multiple innovations, and the processes to support innovation adoption. Senior leads interviewed who provide a core support structure for DIH elaborate on the role of DIH and how it has met that challenge.

> *"The role is very much […] facilitation. That's all it can be"* [SI11]

After the first year, senior leads reflected on DIH progress up to that point. Views suggest there were benefits to having someone who engaged beyond health organisations with local authorities, and through projects like NaP which engage a wider group of stakeholders, allowing organisations to work together towards a common goal. It is important to maintain these relationships and connections, so they do not "wither away" [SI10]. Facilitation also includes activities working in the background supporting key processes (e.g. communication and briefings) [SI12]. This networking towards collective action identifies DIH as the driver to keep up momentum and to keep innovation adoption progressing. DIH provides an opportunity through its activities and organisational remit to facilitate connections with different people in different organisations that may have not occurred otherwise. DIH provides expert facilitation to connect and co-ordinate across different organisational boundaries, enabling opportunity for innovation adoption. This wide-ranging role of DIH was further described by senior leaders,

> *"Role of DIH is at 3 levels – Develop and deployment of MedTech or other innovations, integration into system and align with five year forward plan of the ICS. The must haves as well as considering the nice to haves. From the top of the system and those that are coming up from the bottom of the system (local priorities)."* [SI06]

"DIH provides a "learning system" to investigate how things can be built – a development cycle rather than "parachuting in" a solution. (NaP). Provides a representation of the system partners at that level….. and provides added value in showing how the system can work together." [SI05]

"Hub's focus is not on technology as such but more "facilitative enabling cultural development of people ……Great addition to the landscape]…….. Importance of driving innovation adoption "centrally as cultural revolution". Important for industry to know there is a "centralised innovation cluster Hub"." [SI02]

"Hub might need to expand but not get too big and the local priority calls demonstrated some of the barriers – scope of the call – better to drill down to specifics – however, it has facilitated what the future focus might need to be." [SI07]

By the end of year two senior leads reflect more critically on the DIH. However, the ability to connect different agencies remained a positive outcome,

"[DIH] cuts across all organisations and [is] far reaching linking in with councils and universities (and wanting to engage police and ambulance), which I thought was impressive, [so] partnership working really came across." (SI2 16)

"The hub is the right thing to do and I think it's a system asset […]but a year on it's not established itself as a fundamental part of the system to deliver an innovation function that is widely recognised that's required." (SI2 10)

"Unclear of role of ….. DIH and its partners [that] does not feel connected in but can understand specific elements like NaP and training. Good relationship with staff useful exchange of information but [I] cannot see the bigger picture." (SI2 04)

A comment on the programme group indicates a work in progress as do the other comments above,

"The programme group represents the partnership and all are signed up to promoting innovation adoption – more active and less active members – meeting has good attendance and this remains so after the initial excitement. It is currently a "loose partnership of things" as each organisation has its own approach to innovation and a common way of working is not yet established." (SI2 08)

As highlight by the i-PARIHS framework the role of facilitation to mediate between innovation adoption, those engaged in innovation adoption and the

multiple contextual factors illustrates the challenge of the facilitation effort required. As stated previously, in applying this framework DIH was also the innovation in this context and therefore other facilitators were involved and important to support the adoption of DIH. These were the members of the programme group and the core team, as well as other advocatory individuals within the partner organisations. Therefore, the development of the multi-organisation partnership was an important element in the facilitation process.

4.2. Transforming systems and culture

To foster a more innovation adoption-ready system, the following insights from senior leaders are highlighted as they provide the context within which DIH operates and needs to negotiate. These insights express the task of managing change and influence in complex social systems.

These statements are paraphrases with dome direct quotes from the interview transcripts but attributable to an individual.

People

"Change transformation is very much about people……and how they can be influenced by others. And it's not just about well, if this is the right way of doing things, why aren't we all doing it? It's not that simple, is it? You know, you have to take people on a journey." (SI2 16)

ICS is still "very NHS focused" on relating to engagement of community, voluntary and academic sectors [SI09] and "The NHS can only afford to really work with people that are very complex these days, or serious." But other sectors could work with those less serious and complex on the "lower rung of the pyramid" of need and so "impact behaviours and [give] Information." [SI 09]

Systems

"There is a limited interface between acute, primary and social care (has a big interface) and this interface does not work well together to avoid people going into acute care. Could work better and more proactively together to manage "colossal costs" together. Culture and language a factor social care is not going to get excited about a diabetes pathway." (SI2 13)

"If we're really serious about doing things on an integrated care partnership basis together so that we would do something in social care even if the benefit was only seen [in that system]. Systems working together that you'd be completely unselfish and where the benefits were to be realised, but you'd put effort into it." (SI2 13) "If financial flows followed that then there is probably a role for a central hub." (SI2 13)

"Innovation adoption in the NHS is more challenging than in other healthcare systems – It appears as one organisation – the NHS. But in fact innovations need to persuade multiple Trusts and individuals within those Trusts - to mandate does not really have "the teeth" to ensure that the innovation is delivered." [SI11]

"LEP [Local Enterprise Partnership] sits at the nexus of multiple local organisations (different providers and different types of organisations) and has a mirror role to DIH…….and bring councils and business together …" (SI2 03). "…..we've got lots of independent organisations here making,… making a difference. Because that whole collaboration piece in business and the same way that collaboration in healthcare for innovation works, it's the same model that works across everything." (SI2 03)

"What do successful innovative companies do and have in common – they free up people's time, it is part of their day – given permission to fail fast and learn what works or not."[SI01]

"The Hub has engaged with "fast followers" (early adopters) it needs to position itself in such a way that it moves into more mainstream activity with greater influence and aligning itself to the needs of the system (ICB) and its partners. This shift should enable better funding. This requires demonstrating that the DIH is fulfilling a system need priority and demonstrates that regularly. It needs to identify a specific area to reach the "early majority" and become mainstream. Needs to focus on ICB must do's rather than want to do. System is going to focus on Medical technology (MedTech) funding mandate and DIH can help there. For DCH areas of need are: innovative workforce models, health and social care co-ordination, complex patients. The Hub could say it has the capability to bring partners together (broker) around these areas of strategic need and be the "think tank" for "really wicked problems"." (SI2 10)

Data collection activities sought to capture signals that might indicate change or progress. Key signals are summarised in **Table 5.** In summary, and with the last insight above DIH has engaged with those already receptive to innovation and is building and sustaining that network. Senior leaders play a critical role in supporting and facilitating the change to innovation adoption in Dorset. Key activities in building knowledge and learning are being established and built into the system. Nevertheless, impact on the wider workforce will take time. Support to MTFM and development of innovation (Nutrition in Ageing People project) indicate avenues where DIH has shown what is achievable. A stable DIH infrastructure (programme group, core team, NaP project groups) has been effectively established.

Table 5 Signals and their data sources

Signal	Data source
Core team and programme group members and others indicate that they are already receptive to innovations and innovation adoption and view their colleagues as also having a high score towards their attitudes to innovation. Other staff indicate they are motivated and receptive to innovations.	ATIS (appendix 1)
Senior leaders provide a rich background of expertise across different science, business and international sectors and most were leaders that could champion and deploy innovations.	Interviews (appendix 5)
Senior leaders indicate that they can build networks of influence within the system to support innovation adoption.	Social Network Analysis (appendix 4)
Senior leaders are in positions where they can provide a 'helicopter' view of a system. They share a range of views from different perspectives and provide insights again from their standpoint. Views provided map out the ICS context, addresses the 'innovation space' and how DIH fits in. Overall, the DIH has an important role to play; however, areas for reflection in relation to greater consideration on its future development and role were identified.	Interviews (appendix 5)
Activities such as innovation education and community of practice have become routine and are capturing a regular stream of staff.	Documentary review (appendix 6)
The MTFM programme indicates challenges remain in adoption of these technologies. This case study indicates implementation of MTFM innovations continues to take time. However, the role of the DIH to provide oversight, co-ordination and engagement to facilitate and assist where possible (e.g., PIGF) seems to indicate potential impact although not measurable.	Documentary review (appendix 6)
Other activity captured provides a picture of DIH engagement and work behind the scenes to network, co-ordinate innovation events and activities, and make contacts. Informal conversations made by DIH and others on their behalf also provide opportunities not fully realised yet, but there are some indications of potential benefit. Under reporting of these events is likely.	Internal event reporting (appendix 3)
Communication, raising awareness and providing the opportunity for engagement was measured via data from social media platform X (formerly Twitter). This suggests DIH has become visible, and reposting is strongly suggesting a network of communicators has developed. However, most tweets are informative and do not invite wider engagement and conversation.	X analysis (appendix 2)

The Nutrition in Ageing People (NaP) project has provided a demonstration of possible innovation development activity involving multiple partners across the ICS. Further progress is at least partly reliant on funding.	No appendix - reported here
PPIE representatives with support from the DIH staff have become embedded within the DIH workstreams and consider they have reached a point of independence, adding value and feel comfortable in their role.	PPIE Reflections (appendix 7)
Organisations come from different perspectives and priorities and are often challenged by their time availability and capacity. This can hinder multi-organisational engagement and the active participation needed to gain cooperation between partner organisations. Also, personnel changes require repeated efforts to maintain the partnership and build the collective. However, the multi-organisation partnership continues to grow.	DIH team interviews
This programme of work is likely to require more time than two and half years to achieve the impact on innovation culture across Dorset ICS as planned.	DIH team interviews

Three tracer cases were planned to understand the effectiveness of innovation adoption support. However, the Nutrition in Ageing People project was the only case available for study and this provided an example of co-ordination of colleagues across the ICS partners to identify a local priority for future innovation development. The Health Foundation focused originally on *accelerated* adoption of innovation, and although DIH provided several mechanisms to evolve the conditions for more efficient innovation adoption, it was not feasible to establish attribution between innovation uptake and the influence of DIH. Further evaluation might explore and capture the reach of these activities more directly. Further consideration is needed to consider how to measure acceleration of innovation adoption and spread within a local system. Information on MTFM technologies (appendix 6) suggests that the programme of technologies is not adopted consistently across systems and that efforts to 'speed up' adoption are not clear. In addition, the need for more time as well as how activities can become protracted countered this need to accelerate innovation adoption. The identification of local priorities and making decisions to take a project forward took a significant amount of time over the two and a half years of the grant funded period. Regarding the established activities of the innovation education programme to influence and educate the workforce, slow progress is made given the scale of the challenge.

4.3. Post evaluation: The Dorset Innovation Hub Rapid Insight event

Health Innovation Wessex undertook a Rapid Insight (RI) event post evaluation. Rapid Insight events were designed initially in response to the Covid pandemic to enable systems to gain insight and intelligence rapidly (Chandler et al, 2023). The DIH RI event was held in April 2024 to bring people together from across Dorset Integrated Care System (ICS) to reflect on the progress of its Innovation Hub. This was an opportunity for NHS Dorset, Dorset ICS and partners to share their experience of the Dorset Innovation Hub, its development, impact and learning. Nineteen attendees represented the ICB, local councils, academics from local universities, University Hospitals Dorset, community services, Dorset HealthCare and DIH staff and patient and public involvement representatives. They were closely involved in DIH's key activities e.g., Nutrition in Ageing People project (10), community of practice (13), core team (10) and Fundamentals of Innovation Adoption training (12). Those present saw DIH's rationale was to bring people together, undertake support activities and make an impact by improving accessibility of innovation to service users and create an innovation culture (full report at appendix 10). Thus far, the impact of DIH has enabled staff to learn and share about innovations, connect people and enable collaboration and raised awareness across the system. Many of the comments and feedback reflect the findings in other evaluation data sources. Lastly, when asked about opportunities and challenges the following were identified:

- Opportunities
    - Improving culture e.g. opportunity created by good collaboration between partner organisations
    - Improving ways of working e.g. to move to ICS central function
    - Building networks e.g. supportive culture developing, building networks, joining up work across organisations, uses power of relationships that have been developed
    - Training and education e.g. help to bolster DIH work.
- Challenges
    - Financial pressures e.g. working in a financially challenged system
    - Operational pressures e.g. workforce capacity
    - Competing ICB priorities e.g. number of prioritised projects
    - Loss of momentum e.g. competing priorities across partner organisations and the challenges for DIH to maintain momentum.

5. Conclusions

The implementation of DIH has shown the scale and complexity of the original ambition to accelerate innovation adoption and affect innovation culture in an integrated care system. Facilitation as a core DIH activity supported by the multi-organisation partnership demonstrated both the effort and challenge of the multiple contextual factors that included ICS pressures and the time

needed to scale up innovation adoption in complex social systems. Clinical opinion and decision making also impacted on the uptake of MTFM technologies. 'Signals' of changes in innovation culture described in this case study indicate those involved in supporting this work could be described as early adopters (Rogers, 2003) who have a wealth of expertise and experience within the field of innovation adoption.

Core activities such as the innovation education programme and oversight and support to the MedTech Funding Mandate technologies are becoming routine. Efforts will need to be maintained to continue progress as well as to harness the benefits of the evolving multi-organisation partnership.

This programme was initially allocated only two and a half years to realise its objectives. This case study suggests that more time will be required to achieve the planned impact on innovation culture and adoption of innovations.

Appendices

Technical appendix 1: Attitudes to Innovation Survey
Technical appendix 2: Analysis X (formerly Twitter) data
Technical appendix 3: Internal event reporting
Technical appendix 4: Social Network Analysis
Technical appendix 5: Interview data
Technical appendix 6: Documentary review
Technical appendix 7: Public and Patient Involvement and Engagement reflections
Technical appendix 8: Rapid Insight event report April 2024

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Annex 1

Summary of pre-evaluation logic model

Inputs and Activities	Mechanisms	Outputs and outcomes
DIH staff team and local expertise in innovations to identify innovations and support decision making, identify local priorities and share success to encourage learning through various communication channels	Provide a receptive environment for stakeholders, engage PPIE, and maintain energy and momentum. Facilitate and champion the DIH's objectives making connections and networking to enable innovation adoption	Workforce response to DIH activities (training and education) leading to improved attitude towards innovation. Recording innovations supported by DIH. Implementation outcomes for individual innovations (acceptability, feasibility etc.)
Applied facilitation expertise and skills Training and education programme to provide training at different levels to need	Develop evaluation capability in the workforce Develop innovation knowledge and understanding	Successful delivery of training and education programme – planned reach and take up (numbers attended) and workforce demonstrate application
Expertise and support through ICS partners and DIH leadership group to provide evaluation and research input, provides for engagement between partners and develop strategic alignment between Hub and ICS partners	Develop close co-operation between ICS partners to negotiate greater ICS integration (governance), to manage operational capacity and influence individuals and organisations within Dorset ICS.	DIH reporting: partnership and strategic alignment HIW evaluation report to provide case for continued funding and demonstrate proven innovation adoption has become embedded and routine in Dorset ICS and that DIH becomes

		strategically placed within Dorset ICS and its partners.

Longer term impacts anticipated to be evidenced by:

- DIH has developed an innovation culture
- Workforce shows interest in and commitment to developing knowledge and skills in innovation adoption
- The DIH model and implementation of the innovation programme has impacted on local population priorities and health outcomes, including addressing health inequalities
- The workforce feeling empowered to engage with innovation adoption
- The DIH model foster innovation adoption at pace is embedded in ICS and operates as business as usual
- Improvements to ICS integration and connectivity.

Annex 2

Dorset Innovation Hub - Mission Statement & Key distinguishers

Innovation

The mission statement and key distinguishers were initially developed at the December 2021 Dorset Innovation Hub (DIH) Workshop run by the Innovation Unit. These were further discussed, revised and approved for use by the DIH Programme Group in March 2022.

Mission statement

"We support and sustain the adoption of the world's best health and care innovations for the benefit of all citizens of Dorset"

Key distinguishers

1. We always work **as a system** to identify and prioritise opportunities to improve **quality of care** for people in Dorset
2. We prioritise resources where there is a **clear problem** to be solved, that links to our **ICS strategic priorities**, and where teams have **energy & motivation** to engage
3. We look **internally & externally** for **evidence-based** innovations with high potential to meet our needs
4. We consider **all types of innovation**, including new ways of working, new models of care, social, digital and technological innovations
5. We embed **patient and public involvement and engagement** in all we do informed by lived experience
6. We work as a partnership to **nurture the conditions** needed to encourage staff to engage in innovation and adoption activity and value it as a **core aspect** of their role.
7. We signpost and provide the **tools and support** to **enable teams** to adopt innovation
8. We encourage staff to be **creative and open to new ideas** and to apply **rigorous approaches** to testing, monitoring and managing risks
9. We embed **evaluation** throughout our work, with a focus on **people's experiences** and **outcomes** and wider **system benefits**
10. We consider the **impact** and **long term sustainability** of innovations we adopt in the **changing** Dorset system

Version Control

Version	Status	Key Changes	Authorised by

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