NHS
Wessex
Cancer Alliance

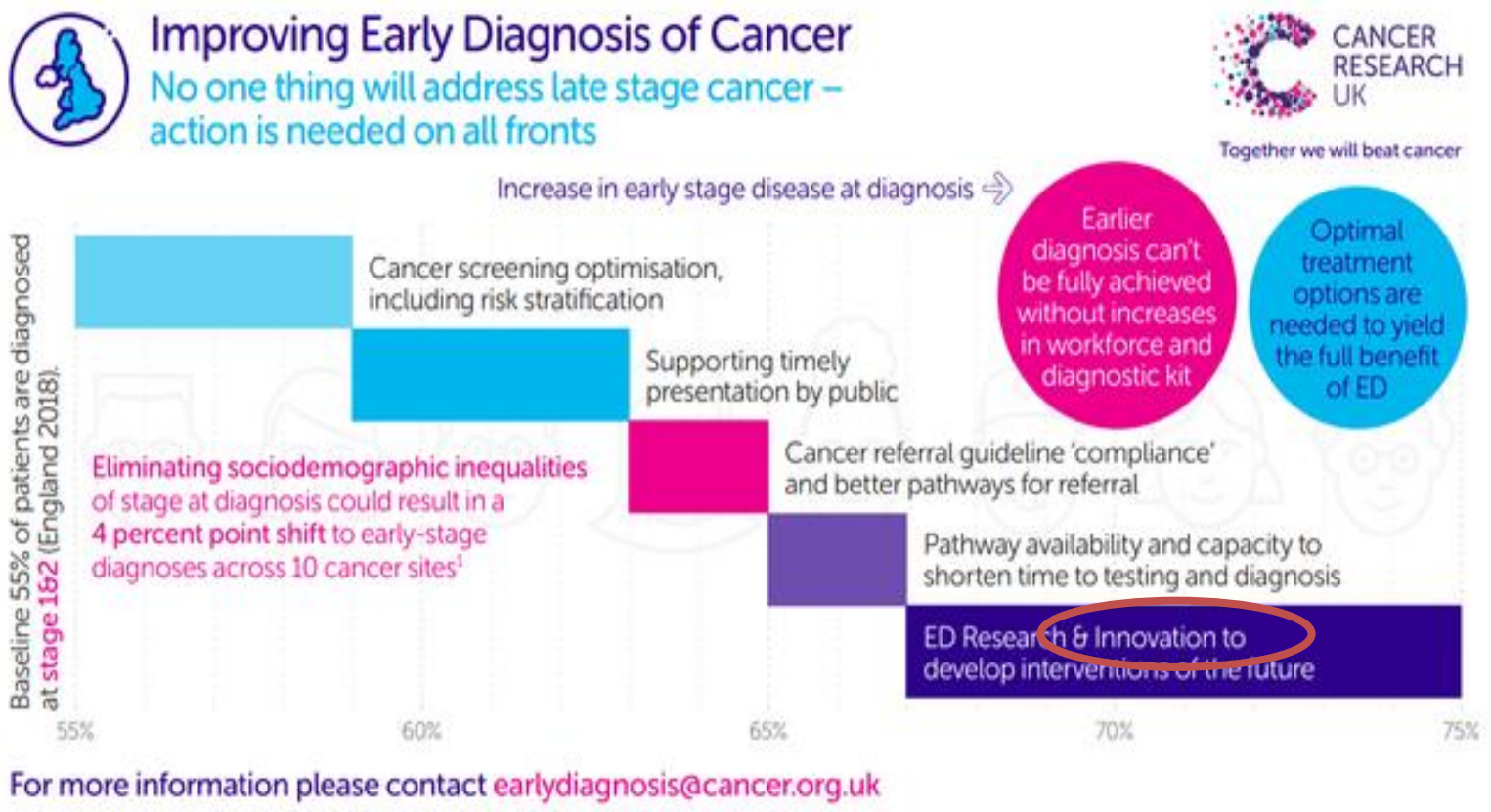
Innovation and Early Detection of Cancer

WCA Board Report

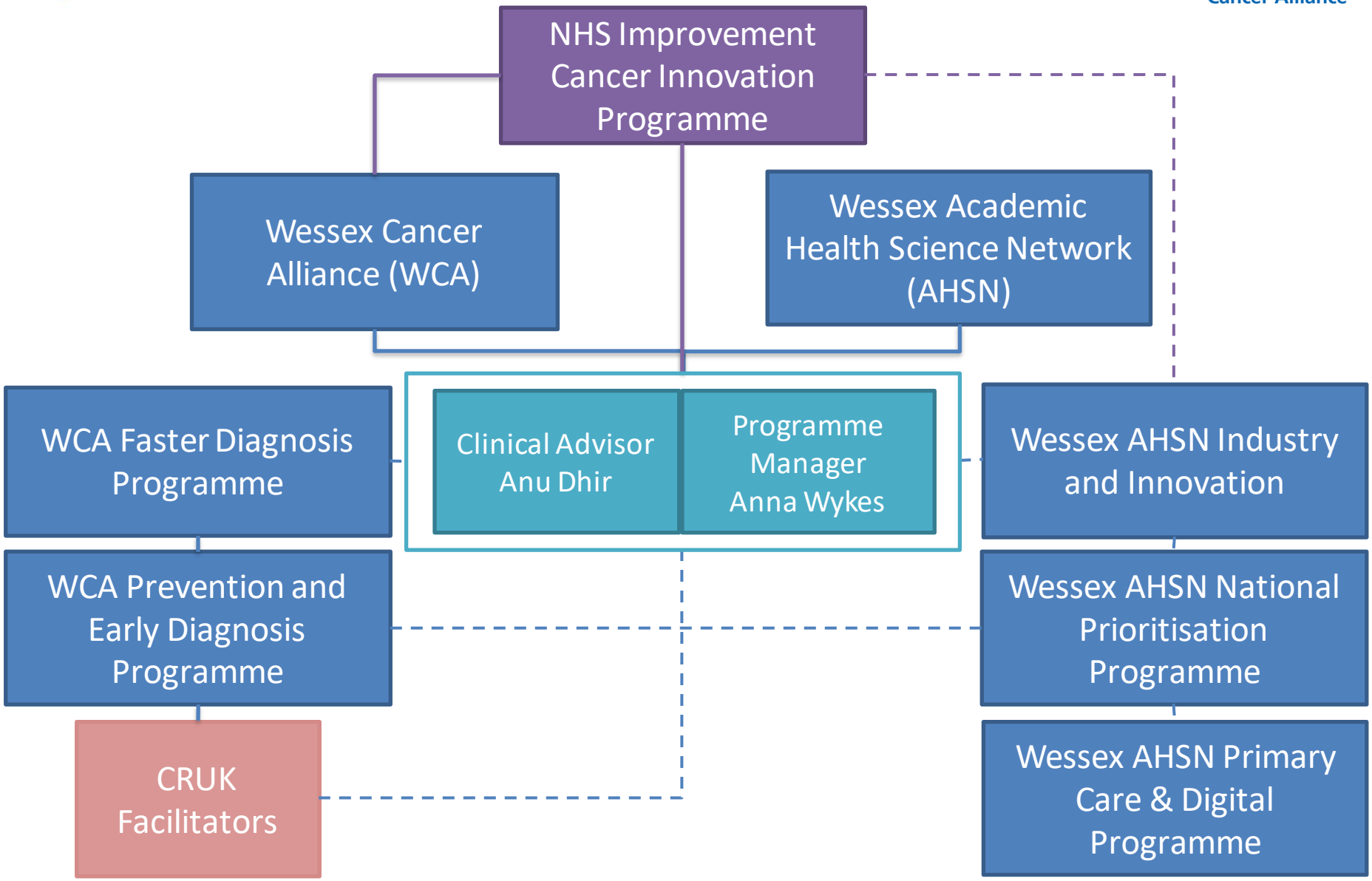
Report to the Wessex Cancer Alliance Board				
Title:	Innovation in the early detection of cancer			
Sponsor	Sally Rickard/Bill Gillespie			
Author	Anu Dhir/Anna Wykes			
Date:	22 September 2021			
Purpose	Assurance or reassurance	Approval	Ratification	**Information**
Summary of paper:	The Wessex Cancer Innovation Programme is a joint endeavor between WCA and Wessex Academic Health Science Network. The programme supports the Long Term Plan (LTP) goals of diagnosing 75% of cancers at stage 1 or 2. This paper provides an overview and update of work since December 2020. This includes challenges and successful of the programme's engagement with local teams and the learning the programme has had since commencing in December 2020.			
Implications: (Clinical, Organisational, Governance, Legal?)	This work is supported by an MOU between Wessex Cancer Alliance (WCA) and Wessex Academic Health Science Network (AHSN). Identifying suitable innovations for adoption is the responsibility of the programme team and all pilots are agreed by senior members of WCA, Wessex AHSN and affected Site Specific Group and primary care members.			
Key risks and mitigations:	The pandemic has delayed engagement opportunities with teams across Wessex. The programme team are working with senior members of WCA to discover opportunities for engagement and needs identification. There is a potential risk for a lack of "ready to go" innovations that meet local need. The programme team are maximising opportunities to find suitable innovations by using both horizon scans and local engagement to identify relevant innovations on different scales			
Summary: Conclusion and/or recommendation	The programme has started to make progress in several areas and the team continues to seek opportunities to engage with other teams			

Ambition

To support existing prevention and early diagnosis work through identifying proven innovations that will improve early cancer diagnosis and contribute to a stage shift of the number of cancers diagnosed at stages 1 or 2 to 75% by 2028.



Programme structure



Current position

- Programme has been active for 9 months
- 29 deep dives out of 51 innovations identified

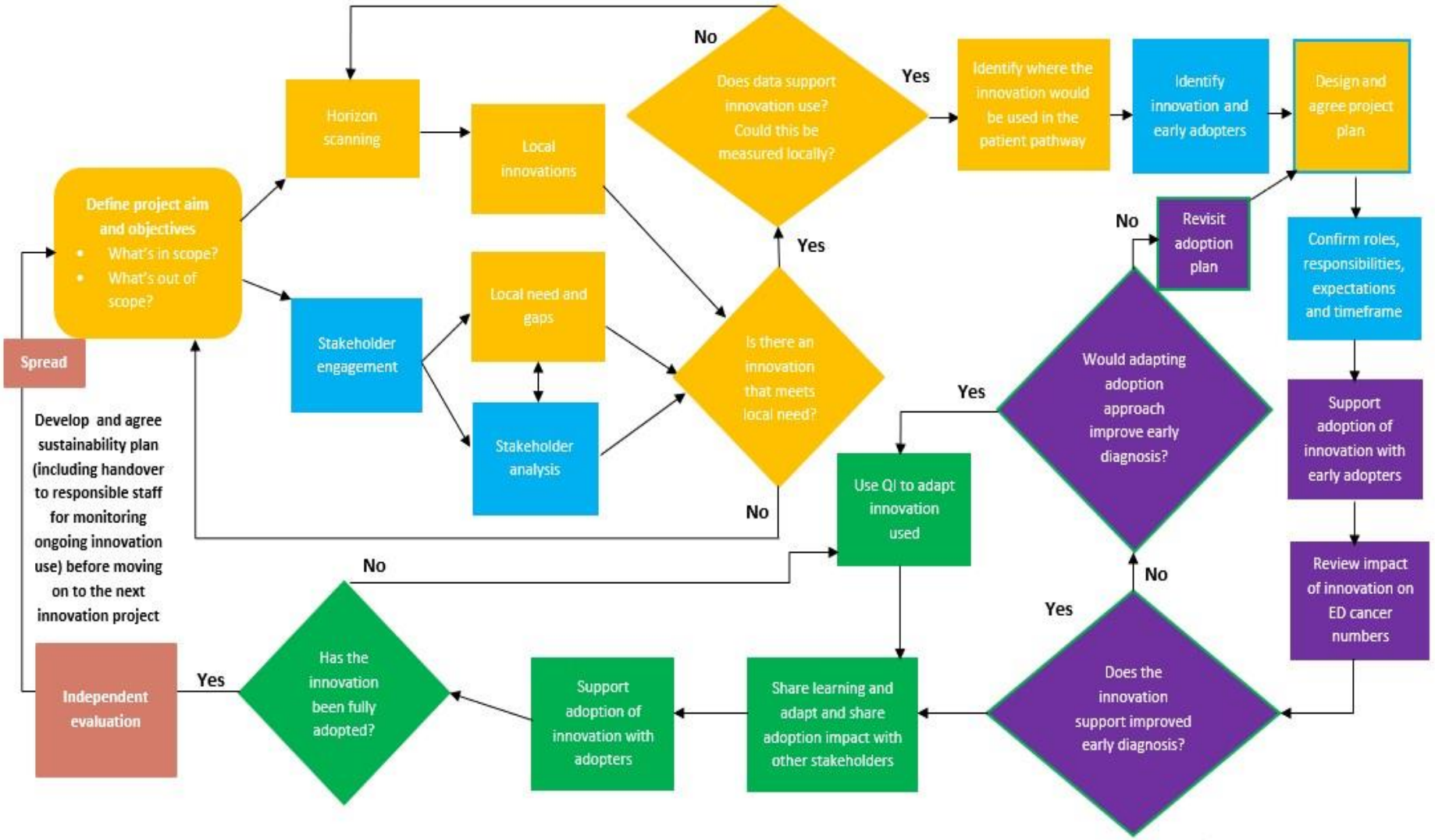
Examples of innovations we are exploring include,

Cancer/s	Innovation/s	Description of innovation	Funding support	Horizon scanning	Process Mapping	Options appraisal/ comparison	Staff engagement	Patient engagement	Project support
All	Clinical Decision Support tools	GP facing tool that supports clinical decision-making about potential cancer diagnosis	X	✓	X	✓	✓	X	X
Breast	Mia	AI mammography solution that identifies abnormal images	X	X	X	X	✓	X	✓
Colorectal	Idiom App	Digital app that helps predict cancers of colorectal cancer	X	X	X	X	✓	X	X
Lung	Electromagnetic Navigation Bronchoscopy (ENB)	Image guided approach to biopsing inaccessible lung lesions	✓	X	X	X	✓	✓	✓

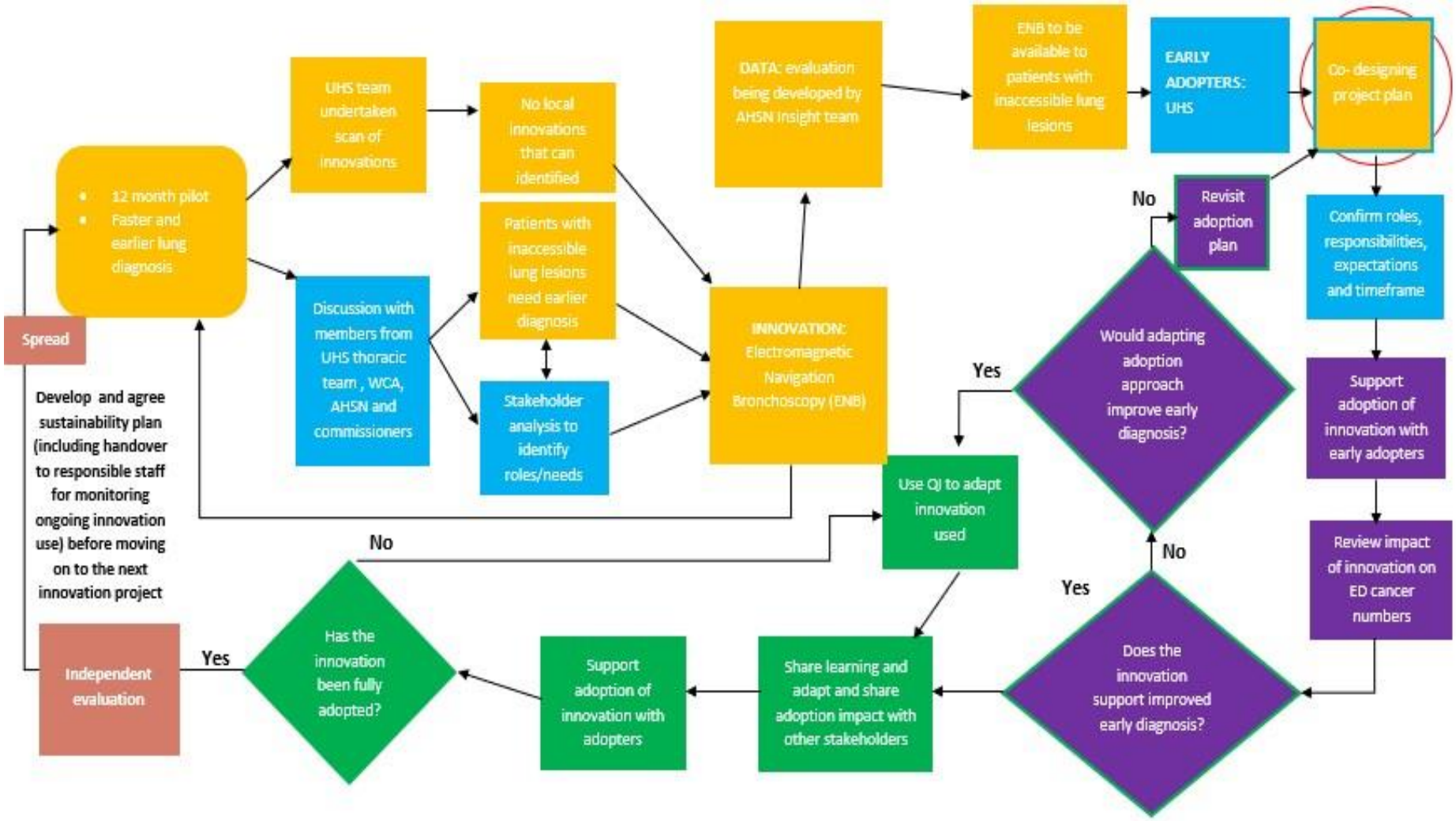
Current position (cont)

Cancer/s	Innovation/s	Description of innovation	Funding support	Horizon scanning	Process Mapping	Options appraisal/ comparison	Staff engagement	Patient engagement	Project support
Lung	Red dot	AI chest x-ray solution that identifies normal and abnormal images	✓	X	X	X	✓	X	X
Prostate	Paige	AI pathology solution that reads prostate samples to identify abnormalities	X	X	✓	X	✓	X	X
Skin	Teledermatology	Use of digital solutions to support remote monitoring and patient review of skin lesions	✓	✓	X	✓	✓	X	✓
Upper Gastro-intestinal	Cytosponge	Capsule that can be swallowed to collect cells from the lining of the Oesophagus and supportive diagnosis of Barrett's Oesophagus	X	X	X	X	✓	X	X

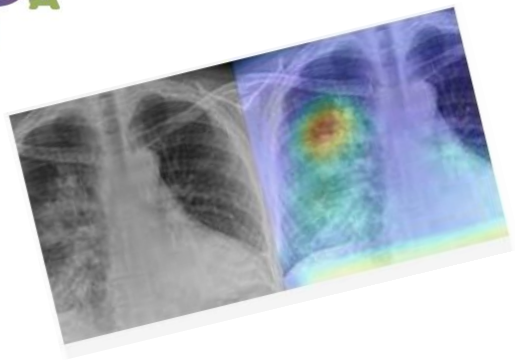
Outputs


Define project aim and objectives
What's in scope?
What's out of scope?
Horizon scanning
Local innovations
Stakeholder engagement
Local need and gaps
Stakeholder analysis
Is there an innovation that meets local need?
No
Yes
Does data support innovation use? Could this be measured locally?
Yes
Identify where the innovation would be used in the patient pathway
Identify innovation and early adopters
Design and agree project plan
Confirm roles, responsibilities, expectations and timeframe
Support adoption of innovation with early adopters
Review impact of innovation on ED cancer numbers
Would adapting adoption approach improve early diagnosis?
No
Revisit adoption plan
Yes
Use QI to adapt innovation used
Does the innovation support improved early diagnosis?
No
Yes
Share learning and adapt and share adoption impact with other stakeholders
Support adoption of innovation with adopters
Has the innovation been fully adopted?
No
Yes
Independent evaluation
Develop and agree sustainability plan (including handover to responsible staff for monitoring ongoing innovation use) before moving on to the next innovation project
Spread

Example – Electromagnetic Navigation Bronchoscopy



Case study
Behold.ai (red dot®)



What was the need?	To support the innovator with identifying test pilot sites for real world evaluation of their chest Xray lung cancer AI tool
What did we do?	Contacted all potential sites in Wessex and brokered initial conversations Prepared the company and a lead clinician at Southampton hospital for the NHSX interview to secure Stage 4 Phase 2 funding award
What happened?	Behold were successful in securing the NHSX grant Southampton hospital is a confirmed pilot site Ongoing discussion with two further potential Pilot sites – UHD and DCH
What did we learn?	1. Clearer idea of the needs of innovators (particularly in Radiology AI products) 2. Clearer idea of key stakeholders and decision makers in different trusts

Case study
Teledermatology

What was the need?	To develop teledermatology services to improve access to patients and support capacity of dermatology services
What did we do?	Horizon scanning, provided insight and options available, acted as a critical friend, offered project management support and provided opportunities for collaboration
What happened?	**HIOW:** Initial engagement and interest for support during bid process (Wessex AHSN named on bid). No requests for support post bid made. Team have recently been asked support north/mid Hampshire team to explore options. **Dorset**: Invited to participate in task and finish group. Options provided. Not involved in final decisions. Explored with both use of RIS - declined by both
What did we learn?	1. Don't assume anything – there's a need to be clear what's been done prior to request for support and how we can be best used to support the work 2. Understand local/regional alignment - need to understand and compare position of the ICS and clinicians and look for opportunities for collaboration

Focus

1. Confirm with Primary Care group focus for the clinical decision support tool work
2. Supporting delivery of 3 pilots (Electromagnetic Navigation Bronchoscopy, Mia and Red dot)
3. Development of patient and patient engagement approach
4. Collecting local cancer innovation case studies
5. Developing links with other AHSNs and Cancer Alliance teams to identify more innovations suitable for adoption
6. Share progress with national cancer innovation team

What we need more of:

Engagement with more specialist teams to understand innovation needs and system readiness

Identify opportunities for system wide collaboration and commissioning