NASSS-CAT (SHORT)
IDENTIFYING COMPLEXITIES IN YOUR TECHNOLOGY PROJECT

The questions below help you think about the various complexities of your project and how they all interact. Use your responses and notes as the basis for a team discussion.

Name of your project: …….

1. THE ILLNESS OR CONDITION

Think about the illness or other condition that the technology is designed for – and what sort of person has that condition.

	Agree	*Disagree*	*Not applicable or don't know*
There are significant uncertainties about the condition e.g. poorly-defined, variable manifestations, uncertain course			
Many people with the condition have other co-existing illnesses or impairments that could affect their ability to benefit from this solution			
Many people with the condition have social or cultural factors that could affect their ability to benefit from the technology or service			
The population with the condition, and/or how the condition is treated, is likely to change significantly over the next 3-5 years			
SUMMARY: The condition has significant complexity which is likely to affect the project's success	*Yes* ☐	*No* ☐	

2. THE TECHNOLOGY

Think about the technology (e.g. a tool or piece of software), and how it might affect care.

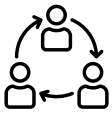
	Agree	*Disagree*	*Not applicable or don't know*
There are significant uncertainties in what the technology is (e.g. it hasn't been fully developed yet)			
There are significant uncertainties in where the technology will come from (e.g. supply chain issues, substitutability)			
There are significant uncertainties about the technology's performance and dependability (e.g. bugs, crashing, cutting out)			
There are significant uncertainties about the technology's usability and acceptability (e.g. key people don't trust the data it provides)			
There are significant technical interdependencies			
The technology is likely to require major changes to organisational tasks and routines			
The technology (and/or the service model it supports) is likely to change significantly within the next 3-5 years			
SUMMARY: The technology has significant complexity which is likely to affect the project's success	*Yes* ☐	*No* ☐	

3. THE VALUE PROPOSITION

Think about what kind of value the technology might generate for different groups of people. ('Value' can be financial, such as profit, or non-financial, such as control of symptoms)

	Agree	*Disagree*	*Not applicable or don't know*
The commercial value of the technology is uncertain			
The value to the intended users (e.g. patients, clinicians) is uncertain			
The value to the healthcare system (e.g. from efficacy and cost-effectiveness studies) is uncertain			
The value to this particular healthcare organisation, given the current situation locally, is uncertain			
The technology could generate a negative value (costs are likely to outweigh benefits) for some stakeholders			
The value proposition is likely to change significantly over the next 3-5 years			
SUMMARY: The value proposition has significant complexity which is likely to affect the project's success	*Yes* ☐	*No* ☐	

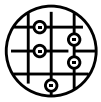
4. THE INTENDED ADOPTERS



Think about who is intended to use the technology and what changes it will bring for them.

	Agree	*Disagree*	*Not applicable or don't know*
There is uncertainty about whether and how patients/citizens will adopt the technology [if applicable]			
There is uncertainty about whether and how front-line staff will adopt the technology			
There is uncertainty about the implications for people who might be indirectly affected by the technology			
There will be significant changes to individual users' perceptions of the technology over the next 3-5 years			
SUMMARY: There is significant complexity relating to intended adopters which is likely to affect the project's success	*Yes* ☐	*No* ☐	

5. THE ORGANISATION(S) IMPLEMENTING THE TECHNOLOGY



Some organisations are better at taking up innovations than others. What about yours?

	Agree	*Disagree*	*Not applicable or don't know*
The organisation's capacity to take on technological innovations is limited			
The organisation is not ready for this particular innovation			
The organisation would find it hard to commission/purchase the innovation			
The work needed to introduce and routinise the innovation has been underestimated and/or inadequately resourced			
The organisation(s) involved are likely to have significant restructurings or changes in leadership, mission or strategy over the next 3-5 years			
SUMMARY: There is significant complexity relating to one or more participating organisations which is likely to affect the project's success	*Yes* ☐	*No* ☐	

6. THE EXTERNAL CONTEXT FOR INNOVATION

Think about external conditions that could complicate adoption and spread of the innovation.

	Agree	*Disagree*	*Not applicable or don't know*
The political and/or policy climate is adverse			
Professional bodies are opposed to the innovation or don't actively support it			
Patient organisations and lobbying groups are opposed to the innovation or don't actively support it			
The regulatory context is adverse			
The commercial context is adverse			
Opportunities for learning from other (similar) organisations are limited			
Introduction of the technology/innovation could be threatened by external changes that impact on the organisation			
The policy, regulatory and economic context for this innovation is likely to be turbulent over the next 3-5 years			
SUMMARY: There is significant complexity relating to the external context which is likely to affect the project's success	*Yes* ☐	*No* ☐	

THINGS TO EXPLORE OR DISCUSS: List the key things in each domain that you would like to look up or discuss with other team members or wider stakeholders

The illness or condition	The technology	The value proposition
The intended adopters	The organisation	The external context