



# **Artificial Intelligence in Health and Care Award 2020**

**Call for Applications** 



Artificial Intelligence in Health and Care Award 2020 Call for Applications

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### 1. About the Accelerated Access Collaborative (AAC)

The <u>Accelerated Access Collaborative (AAC)</u> was formed in response to the independently-chaired <u>Accelerated Access Review</u>. The remit of the AAC is to bring industry, government and the NHS together to remove barriers to uptake of innovations, so that NHS patients have faster access to innovations that can transform care. The AAC supports innovation at all stages across the development pipeline: from research and horizon scanning for innovations that address the population's needs, to support for adoption and spread of proven innovations.

The AAC aims to establish a globally leading testing infrastructure that provides the necessary opportunities for innovators to develop and improve their products, collaborate with the NHS, and establish the high-quality evidence that clinicians need for adoption and spread. The AAC Delivery Team at NHS England and NHS Improvement delivers practical innovation support funding in line with Her Majesty's Government's health innovation funding strategy.

### 2. About NHSX and the Artificial Intelligence Lab

NHSX is the digital, data and technology organisation for the NHS, bringing together teams from the Department of Health and Social Care and NHS England and NHS Improvement. As noted in the <u>Artificial Intelligence: How to get it right</u> report by NHSX, as the use of Artificial Intelligence (AI) technology for health and social care is at an early stage of development, there is considerable uncertainty around the likely benefits and the best way of integrating AI into existing pathways into care.

In August 2019 the Health Secretary announced <u>funding of £250m over three years</u> for the formation of an NHS Artificial Intelligence (AI) Lab to develop and adopt the technologies that are most promising for health and social care.

AI, including models based on statistical analysis, expert systems that rely on if-then statements and 'locked' or 'adaptive' machine learning, has the potential to make a significant difference to health and care. The AI Lab has been established to ensure the NHS is harnessing these benefits in a safe and ethical fashion that is supported by patients, the public and clinicians. As stated in the AI report, securing clinical understanding that AI will be used to supplement, and not replace human clinical decision-making is essential, as is realistic expectations of what AI technologies have to offer.

Given the ethical and safety concerns associated with the use of AI in health and care, the AI Lab will align to the principles of the NHS Constitution, addressing transparency, safety and privacy by building on the foundations already laid out, for example in the NHS Code of Conduct for Data-Driven Health and Care Technologies. The AI Lab will address barriers to adoption and development of AI, including an AI SWAT team, Skunkworks, Regulation Incubator, the Accelerating of Diseases programme, the Disease Clusters AI programme and an AI in Health and Care Award (AI Award). The AAC Delivery Team will lead delivery of the AI Award, working with NHSX and relevant AAC partners.

#### 3. The AI in Health and Care Award

The AI Award will deploy £140m over three years to accelerate the testing and evaluation of the most promising AI technologies that meet the strategic aims set out in the <a href="NHS Long Term Plan">NHS Long Term Plan</a>. The Award will support technologies across the spectrum of development: from initial feasibility to evaluation within clinical pathways in the NHS.

The AI Award is a crucial step in delivering the AAC's commitments to establish globally leading testing infrastructure in the UK – ensuring innovators have end-to-end support to develop, test and iterate their technologies and treatments, in partnership with the NHS. AI has the potential to transform health and care delivery, and deliver significant benefits to the wider economy, which is why the AAC has chosen to focus on improving the UK's support for this ground-breaking technology as a priority action to delivering its testing ambitions.

The AI Award Call for Applications will be run at least twice yearly through an open competitive process. AI technologies responding to the Call may have a variety of applications in health and social care: key areas of focus for this Call include screening, diagnosis, decision support and improving system efficiency (Figure 1).

Figure 1: Examples of health and social care areas in which AI solutions may be utilised1

### Health Promotion & Prevention

- Digital epidemiology and disease surveillance
- National screening programs
- Preventative advice
- Self-management

### Diagnosis & Treatment

- Symptoms checkers and decision support for differential diagnosis
- Risk stratification
- Prediction of deterioration
- Personalised treatments

### System Efficiency

- Optimisation of care pathways
- Identification of resource requirements
- Electronic roster system
- Natural Language Processing for administrative tasks

### The Al Award has two components:

- Phase 1-3 Al Awards: a Call for Applications for Phases 1-3 Al technologies (Figure 2) to support the feasibility, development and evaluation of technologies an early stage of development
- Phase 4 Al Award: a Call for Applications for Phase 4 Al technologies (Figure 2) to evaluate the initial adoption and testing of the most promising Al technology into routine health and social care settings.

<sup>&</sup>lt;sup>1</sup> While these represent the most common types of AI use cases for health and social care, we recognise that not all AI solutions may fall within one of these categories.

Initial Health **Real World Technical Development and National Scale-**System feasibility evaluation Testing Adoption Phase 1 Al Award Phase 2 AI Award Phase 3 AI Award Phase 4 AI Award i4i/SBRI i4i/SBRI i4i/SBRI NHSX via AAC team To show technical To develop and First real-world To facilitate initial To address barriers to and clinical feasibility evaluate prototypes of testing in health and systems adoption of adoption into routine of the proposed demonstration units social care settings to the Al technologies care of approved concept, product or prototypes and develop evidence of with market products with proven service generate early clinical efficacy and authorisation into the health system safety/efficacy data preliminary proof of NHS, evaluating the AI benefits, in order to Typically 6-12 towards CE marking effectiveness. technology within facilitate rapid uptake months including evidence clinical or operational nationally Typically 12-36 months for routes to pathways to Awards up to £150k implementation to determine efficacy or per product Not eligible for enable more rapid accuracy, and clinical Award amounts are research and adoption and economic impact uncapped\*, per development funding product Typically 12-24 Typically 12 months to through the AI Award months 3 years

Figure 2: Al Award Lifecycle Phases and Objectives

The **Phase 1-3 Al Awards** aim to develop a pipeline of products which are ready for wider testing in later years. The Phase 1-3 Al Award will be delivered through the well-established and robust mechanisms underpinning the i4i/SBRI Healthcare programmes, with an indicative budget of £2-7m in the first year. Successful applicants approved by the final Phase 1-3 Panel assessment will be required to sign up to the <u>DHSC Research Contract</u> which can be accessed online.

Award amounts are

uncapped\*, per

product

Awards are

uncapped\*, per technology

- Phase 1 is intended to show the technical and clinical feasibility of the
  proposed concept, product or service. Awards are for a maximum of £150,000
  over a 6-12 month period. If the Phase 1 project is successful, companies can
  bid for Phase 2, subject to budget availability.
- Phase 2 is intended to develop and evaluate prototypes of demonstration units and generate early clinical safety/efficacy data. Award amounts are uncapped, awards are per product, typically for 12-36 months. If the Phase 2 project is successful, companies can bid for Phase 3, subject to budget availability.
- Phase 3 is intended to support first real-world testing in health and social care settings to develop evidence of efficacy and preliminary proof of effectiveness, including evidence for routes to implementation to enable more rapid adoption. Award amounts are uncapped, awards are per product, typically for 12-24 months. If the Phase 3 project is successful, companies can bid for Phase 4, subject to budget availability.

Through the **Phase 4 Al Award**, the AAC Delivery Team will identify medium stage Al technologies that have market authorisation but insufficient evidence to merit

<sup>\*</sup>individual awards are uncapped but limited to within the total budget for each Phase

large-scale commissioning or deployment (Figure 2). Award amounts are uncapped, awards are per technology, with an indicative budget of £5-10m in the first year. Applicants for Phase 4 apply through the AI Award Call for Applications.

The AAC Delivery Team will facilitate initial systems adoption of the AI technologies into the NHS and evaluate the AI technology within clinical or operational pathways to determine efficacy or accuracy, and clinical and economic impact. **Phase 4** will support the development, testing and evaluation of suitable AI technology in health and social care by:

- Selecting and funding promising products: Working with leading experts
  across the NHS to identify innovations that are of value to stakeholders and
  align with our strategic aims (as outlined in the NHS Long Term Plan). A
  themed-approach may be taken where more than one supplier of an AI
  technology exists: in this instance multiple suppliers of the technology may be
  awarded a grant and supported by the AI Award to develop, for example
  suppliers of a screening AI technology. Key areas of focus include:
  - i. Diagnosis;
  - ii. Screening;
  - iii. Decision support and;
  - iv. Improving system efficiency.
- Providing implementation support: Working with AHSNs, our existing
  partners in the regions, as well as with leading experts and specialists such as
  CIOs and CCIOs we will identify NHS or social care sites that are ready for
  adoption of the selected AI products. Funding and support will be provided to
  a handful of sites per technology to support local testing, removing barriers to
  adoption and facilitating changes in clinical pathways where appropriate,
  including:
  - v. Funding for staff in adopting sites to undertake the training and change management required for implementation of these technologies;
  - vi. Support on project set up, programme management and procurement from the AAC Delivery Team;
  - vii. Specialist support from NHSX's AI Lab SWAT team in areas such as information governance and interoperability.
- **Developing a plan for long-term sustainability:** The AAC Delivery Team will support the development, testing and evaluation of innovative commercial models and reimbursement mechanisms that:
  - viii. Incentivise initial uptake of the innovation;
  - ix. Capture the efficiencies associated with adoption of the innovation and:
  - x. Are cost-neutral over a number of years, but not necessarily in-year.

These approaches will be trialled as part of the AI Award, preparing the reimbursement system to accommodate and incentivise use of these products and other innovations.

Evaluation: The AAC Delivery Team will hold an open, competitive process
to select delivery partners for robust evaluations of the successful AI
technologies. The evaluations will focus on generating the kind of evidence
that would support assessment through NICE Digital Technology Guidance in
future (accuracy, efficacy and cost impact) as well as qualitative data on the
impact on clinicians and/or patients; and the impact on groups protected
under the Equality Act.

Applicants approved by the final Phase 4 AI Award Panel assessment will be required to commit to working with our delivery partners to foster successful implementation, sustainable adoption and evaluation over the lifetime of the programme (up to three years). In addition, they will be required to:

- Enter in to the appropriate NHS Standard Terms and Conditions of Contract
- Be implemented in 3-5 health and social care Provider sites. We welcome applicant's suggestions on potential Provider adoption sites: the AAC Delivery Team will assist establishing such partner organisations/relationships;
- Undergo a comprehensive evaluation of the technology, throughout the programme: this will measure efficacy/accuracy, value, assess potential reimbursement mechanisms and aim to make recommendations on data collection for post-market surveillance;
- Complete an NHS England and NHS Improvement equality and health inequalities impact assessment;
- Complete a Data Processing Agreement (DPA).

Note that not all applicants approved by the Panel assessment will be funded, this is subject to budget availability and commercial agreement.

### 4. Application process

Al Award applications should describe Al concepts, prototypes or technologies that meet a clearly identified need which helps address the strategic priorities of the health and social care systems in England. If the Al technology is in current use, it is advisable to get support or advice from NHS organisations using your Al technology when completing the application form. Applications that do not meet the criteria for Phase 1-3 or Phase 4 Al Award competitions may be signposted to alternative support. Al technologies which are fully developed and ready for national spread and adoption are not eligible for research and development (R&D) funding through the Al Award.

<u>Phase 1-3 Al Award</u> applicants will be required to complete an Expression of Interest (EoI). <u>Phase 4 Al Award</u> applicants will be required to self-assess against a number of pre-requisites needed to progress to full application. If the pre-requisites are not met, the application will not be considered for the Phase 4 Al Award but may be referred to the early stage Phase 1-3 Al Award competition.

### The pre-requisites are:

- The AI technology utilises <u>artificial intelligence</u> to address a need or problem facing the NHS in a priority area, which may include those identified in the <u>NHS</u> Long Term Plan
- The AI technology has the potential for routine use in health and social care
- The testing and evaluating of the AI technology meets the requirements for categorisation as Research and Development under ESA10 (Annex C of the Consolidated Budgeting Guidance: 2019 to 2020)<sup>2</sup>
- Sufficient evidence that the AI solution has the potential to meet at least one of the following criteria at a level appropriate to the stage of development:
  - o Improvement in patient outcomes;
  - o Improvement in patient experience;
  - o Improvement in operational efficiency.
- Commitment to relevant standards: these will, where appropriate, include the <u>Al Code of Conduct</u> for data-driven health and care technology (for artificial intelligence systems used by the NHS), the <u>NICE Evidence Standards</u>
   <u>Framework</u> for digital health technologies, the <u>NHS Digital Standards</u> for commissioning or developing Personal Health Records
- Able to demonstrate interoperability with existing NHS systems or a commitment to work towards and fund any relevant product development required to achieve interoperability
- Has relevant approvals in place or, is working towards relevant approvals:
  - Regulatory, intellectual property protection, ethical framework or, any other relevant approvals
  - Conformité Européene (CE) marking and/or market approvals
  - Completed the <u>Digital Assessment Questions</u> / digital health technology standard (if the AI solution utilises digital technology or software)
  - Demonstrate Information Governance (IG) compliance in sites using the technology by having IG toolkits or a contract in place with applicable providers/commissioners
  - Not subject to any Medicines and Healthcare products Regulatory Agency (MHRA) safety alerts

<sup>&</sup>lt;sup>2</sup> In summary, under ESA10 R&D is defined as: "Creative work undertaken on a systematic basis to increase the stock of knowledge and, use of this stock of knowledge for discovering or developing new products, including improved versions or qualities of existing products, or discovering or developing new or more efficient processes of production". The application needs to demonstrate it meets the five criteria which define R&D:

aimed at new findings (novel). This includes acquiring new knowledge directed primarily towards a specific aim or objective. It also encompasses experimental development projects, aimed at creating knowledge in support of the development of new concepts and ideas related to the design of new products or processes

based on new concepts or ideas with the objective of improving on existing knowledge (creative). This
includes R&D to improve methods or ways of doing things

uncertain about its final outcome (uncertain)

o systematically performed. R&D is conducted in a planned way, with the processes and outcomes documented (systematic) and:

o lead to results that have the potential to be reproduced (transferable and/or reproducible).

### 5. Phase 4 Al Award stages of assessment

All applications undergo a multi-stage assessment process. The stages of assessment for the Phase 4 Al Award are shown below:

Stage 1	Screening for pre-requisites	The full application will be screened for pre-requisites by the AAC Delivery Team. Applications which meet Phase 1-3 AI Award criteria will be signposted to the Innovation Programme Management Office (PMO) team
Stage 2	Full assessment	Applications that meet the pre-requisites will be assessed online against the Phase 4 Al Award criteria. Online assessors include clinicians, informaticians, NHSX and Al experts, national clinical directors, AHSNs, commercial and technical experts (scoring criteria in Appendix 1)
Stage 3	Due diligence and peer review	The AAC Delivery Team will review the evidence provided in applications and assess the submission against the ESA10 R&D definition. Applications which are eligible for R&D funding will be peer reviewed. Further information may be sought from applicants, clinical experts and sites where the AI solution has been adopted
Stage 4	Short list expert advisory group	A technical, clinical, commercial and strategy group will review the highest scoring applications. The group will recommend a number of applications for the Panel group to review
Stage 5	Panel assessment	The decision-making panel will be co-chaired by the CEO of the Accelerated Access Collaborative (AAC) and the Head of Digital Health and AI at NHSX. The Panel will base their decision on the advice from the short list advisory group in the context of wider budgetary and strategic considerations
Stage 6	Ratification	Panel outcomes will be a ranked list which is ratified by the CEO of NHS England and NHS Improvement

The stages of assessment for the Phase 1-3 Al Awards can be accessed online.

### 6. Phase 4 Al Award assessment criteria

For AI technologies that are in Phase 4 (outlined in Figure 2 above) and that meet the pre-requisites outlined above full assessment will be undertaken against the following criteria:

Strategic considerations	How the AI solution supports health and social care priorities, including the NHS Long Term Plan, and aligns with wider government priorities
Health and care outcomes	<ul> <li>The extent to which the AI solution:</li> <li>Addresses a clearly identified clinical need or problem;</li> <li>Demonstrates expected improvements in health outcomes, operational efficiency, patient experience and/or safety and quality of care</li> </ul>
Financial outcomes and affordability	The extent to which the AI solution demonstrates affordability: the financial costs / return on investment to the site/system adopting the technology
Risk and limitations	The extent to which potential risks to project success (technical, data use and storage, clinical, commercial and environmental) have been acknowledged, with plans for managing these identified
Delivery and sustainability	How the AI solution impacts on clinical systems, cost-saving measures, and workforce, including any additional resource required to implement the AI solution
Impact data	How the anticipated clinical, operational and systems benefits from adoption of the AI solution will be measured

The assessment criteria for the Phase 1-3 Al Awards can be accessed online.

### 7. Key dates

The table below highlights the key application dates. Please note that NHS England and NHS Improvement reserve the right to alter the key dates if required.

Activity	Date
Open for applications	28 January 2020
Suite of WebEx events open for applicants to address queries regarding the AI Award and application process. Links can also be found on NHS England's AI Award web page	4 February 2020, 11:00-12:00 <u>Join here</u> 11 February 2020, 11:00-12:00 <u>Join here</u> 18 February 2020, 11:00-12:00 <u>Join here</u> 25 February 2020, 11:00-12:00 <u>Join here</u>
Applicant information event	3 February 2020
Application deadline	13:00 on 4 March 2020
Digital App and Digital Software applications: NHS England Digital Assessment Questions (DAQs) deadline	13:00 on 4 March 2020
Screening and assessment period	6 March 2020 to 15 May 2020
Shortlist expert advisory group	11 to 15 May 2020
Final selection process	17 June 2020
Outcomes communicated to applicants	29 June 2020 to 3 July 2020
Strategic planning period/commercial and contractual discussions	29 June 2020 to 31 July 2020
Al Award Competition 2 launched	Summer 2020

### 8. How to apply

Application materials will be available on the <u>AAC website</u>. Prior to submitting their completed application to the AI Award, applicants should also complete the Digital Assessment Questions (DAQ) to assess if their AI technology would meet these standards. The DAQs application form can be accessed <u>online</u>.

If you have any questions, please email enquiries@ai-award.info

The deadline for completed applications is 13:00 on 4 March 2020.





# Artificial Intelligence in Health and Care Award 2020

Appendix 1 – Phase 4

Application Form Guidance Note

Please use plain English when completing this application. Note that some questions which form part of this application (including Section 1) are not scored. See the scoring principles table below for more information.

### Section 1 – Applicant details

### 1. Please provide your contact details

We may need to contact you during the application process. Please provide contact details for the lead applicant and confirm your understanding of <a href="NHS England's privacy notice">NHS England's privacy notice</a>

#### Section 2 – Al solution details

### 2. Please provide the title and a summary of your Al solution

Include the name of your AI solution and a summary of what it does. You should upload one or two slides (as a pdf) showing images and descriptors to help put your AI solution into context. **(200 words)** 

### 2.1 Please select the Al solution category [options: Diagnostic & Treatment/ Health Promotion & Prevention/ Organisational & Administrative Efficiency/ Other]

Tick all that apply

If Other, please explain (max 100 words)

## 2.2 Is your Al solution currently receiving support from any other NHS, NHSX or other government funded programme?

We may contact representatives from other programmes for information about the support provided. This answer will not affect the initial scoring of your application.

- Tick Yes (message) please provide details of the programme you have received support from (max 100 words)
- Tick No

### 2.3 At which stage is your AI solution?

Please tick the category which best fits your Al solution.

This Call for Applications is for Phase 4 stage AI technologies. Should your application be judged to be an early stage AI solution the AAC Delivery Team may pass your application to our early stage competition delivery partners for consideration. Please confirm whether you are happy for us to share your application in this way:

- Tick Yes (message) If your application is judged to be a Phase 1-3 early stage Al solution the AAC Delivery Team will pass your application to the i4i/SBRI Innovation PMO for consideration
- Tick No (message) If your application is judged to be a Phase 1-3 early stage Al solution we will not pass on your application and it will not move forward for assessment onto the Al Award. You will receive a message from NHS

England and NHS Improvement's AAC Delivery Team group advising of this decision.

### Section 3 – Pre-requisites

This section asks you to answer questions to confirm that your AI solution is suitable for consideration for the Phase 4 AI Award and to categorise applications.

- 3.1 Does your Al solution utilise <u>artificial intelligence</u> to address a need or problem facing the NHS in a <u>priority area?</u> Note: your Al solution might not currently be used in the health and social care setting, but it should be a transferable technology which meets a priority need
  - Tick Yes (message) please continue
  - Tick No (message) You will not be able to proceed with your application as this is a pre-requisite for the programme

### 3.2 Does your Al solution have the potential for routine use in health and social care?

- Tick Yes (message) please continue
- Tick No (message) You will not be able to proceed with your application as this is a pre-requisite for the programme

## 3.3 Does your bid meet the requirements to be classified as Research and Development (R&D)? (click the link below or see the footnote in Section 4)

- Tick Yes (message) please provide an assessment against each of the five criteria for categorisation as R&D under ESA10 Annex C of the <u>Consolidated</u> <u>Budgeting Guidance 2019 to 2020</u> (max 500 words).
- Tick No (message) You will not be able to proceed with your application as this is a pre-requisite for the programme

### 3.4 Can your Al solution sufficiently demonstrate that it has the potential to meet at least one of the following criteria?

Improvement in patient outcomes
Improvement in patient experience
Improvement in operational efficiency

- Tick Yes
- Tick No (message) You will not be able to proceed with your application as this is a pre-requisite for the programme. Additional information and alternative forms of support may be available from <a href="NHSX">NHSX</a> or the <a href="Academic Health Science Network portal.</li>

### 3.5 Can you commit to adhere to any relevant standards?

Successful applicants to this programme will need to commit to adherence to any relevant standards: these will, where appropriate, include the <u>Al Code of Conduct</u> for data-driven health and care technology (for artificial intelligence systems used

by the NHS), the <u>NICE Evidence Standards Framework</u> for digital health technologies, the NHS Digital <u>Standards for commissioning or developing</u> Personal Health Records

- Tick Yes (message) please continue
- Tick No (message) You will not be able to proceed with your application as this is a pre-requisite for the programme
- 3.6 Can you commit to demonstrating interoperability with existing NHS systems, or a commitment to work towards and fund relevant product development to achieve interoperability? Include detail of what interoperability with key systems is currently available and what additional investment would be required in each new clinical setting
  - Tick Yes (message) please continue
  - Tick No (message) You will not be able to proceed with your application as this is a pre-requisite for the programme
- 3.7 Has your Al solution gained approval, or is working towards relevant approvals, from any necessary regulatory, intellectual property and ethical frameworks in the country of origin/use?

Please select approvals as appropriate and upload supporting documentation to demonstrate approval or work towards approval

- Regulatory approvals
- Intellectual property protection
- o Ethical frameworks evidenced
- Other relevant approvals (max 100 words)
- Conformité Européene (CE) marking
- Completed, or commitment to complete the <u>Digital Assessment Questions</u> / digital health technology standard (if the Al solution utilises digital technology or software)
- Demonstrate Information Governance (IG) compliance in sites using the technology by having IG toolkits or a contract in place with applicable providers/commissioners
- Not subject to any MHRA safety alerts

If your application does not meet the above pre-requisites it will not move forward to the next stage of assessment. You will receive an email from NHS England and NHS Improvement's AAC Delivery Team advising of this decision.

If your application meets the pre-requisites you will receive an email advising you that your application has moved to the next stage of assessment.

#### Section 4 – Assessment Criteria

This section asks you to answer questions that will allow full assessment against the criteria. The criteria are weighted to focus on core priorities: strategic considerations, health and care outcomes, financial outcomes and affordability and, risk and limitations.

### Relative weighting:

Strategic considerations: 1

Health and social care outcomes: 2

Financial outcomes and affordability: 2

o Risk and limitations: 2

o Delivery: 1

Evaluation: 0.5

### Strategic considerations

4.1 Describe how your Al solution supports health and social care priorities in England (200 words)

Your application will be considered against NHS England and NHS Improvement's Long Term Plan, NHSX strategic priorities and/or wider government priorities including the Industrial Strategy grand challenges or resource efficiency (e.g. reduction in single use plastic).

#### Health and social care outcomes

- 4.2 Detail the unmet need or problem your Al solution aims to address Summarise the problem and describe any trends or forecasts for the issue. (max 300 words)
- 4.3 Describe the health and social care outcomes that your Al solution will deliver, with details of the supporting evidence from demonstrator sites, pilots or trials conducted

If you have evidence independently available, please copy and paste links into this answer. You can also refer to documents that you upload at the end of the application form. We are particularly looking for evidence of clinical, system, operational or workforce outcomes that have been delivered in the NHS, although outcomes in other systems outside the NHS should be provided if your AI solution is not in use in a health or social care setting. Please upload any relevant documents (max 300 words)

4.4 Demonstrate that you have considered the potential for your Al solution to improve or exacerbate health inequalities

Detail how the AI solution may have the potential to exacerbate health inequalities and describe how you will mitigate against this risk (max 300 words)

4.5 Demonstrate the expected outcomes and cost-effectiveness of your Al solution

Show that your solution is comparable or better than competitor offers and affordable to health and social care (max 300 words)

### Financial outcomes and affordability

4.6 Describe the value for money your Al solution delivers including details of adoption cost, return on investment, overall savings, and timeframes for savings to be realised.



Please complete the budget impact template provided which must include:

- Current cost of care;
- Unit cost of your AI solution per patient;
- Implementation costs, i.e. training, additional equipment, IT/IG integration;
- The impact and dependencies on other parts of the patient pathway
- The expected return on investment (ROI) realisable in year one (if any) and expected future savings annually over a three to five-year period with patient numbers projected;
- Projected number of many hospitals and patients your AI solution could reach and:
- Information on how many patients could be reached over the three to five year period with savings to be realised.

#### **Risk and limitations**

4.7 Please provide evidence of the current financial status of the company that supplies the Al solution

This should include the most recent set of audited company accounts, and if possible, these should be provided for the last three years by uploading here. (max 100 words)

4.8 Please provide the name of any direct competitors and how your Al solution compares with any current competitors, noting any competitive advantages of your solution

Where multiple suppliers exist for a particular AI solution, NHS England and NHS Improvement may take a 'themed' approach and contract with multiple suppliers of the same AI solution. This question is asking you to assess what other similar products are available in this field. (max 300 words)

4.9 Please demonstrate the business model your Al solution uses

Please describe your business model, including how your AI Solution is, or could be, provided and procured by health and social care providers/commissioners (300 words)

4.10 Describe how you will use patient data

Describe any known limitations of the data used and algorithms deployed by the Al solution. This answer should also include an ethical examination of how data is used: for example, being compliant with the Al Code of Conduct, how its

performance will be validated and how it will be integrated into health and care provision. You should demonstrate how security of data is integral to design (max 300 words)

### 4.11 Demonstrate an ability to monitor and report service effectiveness, patient safety

Please include detail of how you will monitor and report service effectiveness, patient safety or data issues, including any recovery plan (300 words)

### 4.12 Demonstrate an ability to meet required codes and standards for Al

Please detail any current codes or standards that you meet and how you would demonstrate a commitment to meet any future standards, including the ability to fund any necessary development (300 words)

### **Delivery and sustainability**

### 4.13 Describe how your Al solution impacts on systems

Detail the impact your AI solution may have on existing systems of work, including the workforce resource. Describe any Information Technology and Information Governance changes required, and how this resource could be supported. What clinical, technical, data, measurement resources are required for implementation? (max 300 words)

## 4.14 Please outline the skills, experience and capacity of your project team to deliver the intended benefits of your Al solution

Include examples relevant to your proposed solution, for example comparable work, training, experience, or previous grant or funding awards. (max 300 words)

## 4.15 Please describe your plan for spreading the use of your Al solution through Al Award support.

This should include uptake progress to date and barriers faced in any existing sites, how these were addressed, potential future adoption sites and geographical coverage. Include implementation timescales and plans, to demonstrate that the AI solution can be implemented within a 3-6 month period, once the decision to adopt is made. (max 300 words)

### 4.16 Please describe any current support for your Al solution

This should include any engagement with and/or support from users, clinicians, patients, or groups such as the Academic Health Science Networks (AHSN), Cancer Alliances, Sustainability Transformation Partnerships (STP) and Integrated Care Systems (ICS). Please provide evidence of this and name the relevant stakeholders. Where available, provide feedback from current adoption sites. (max 300 words)

# 4.17 Describe your proposal for continuing to spread adoption after the support from the Al Award finishes.

This programme is for a limited period. Answer this question by summarising your plans for continuation once central support ends. (max 300 words)

### Impact data

## 4.18 Please provide your plan to monitor, report and measure progress against the anticipated health and social care, and financial outcomes.

This should include the metrics required to measure success and the process for capturing this data. Please consider the categorisation of technologies in the NICE evidence standards framework and describe which category applies to your technology and the rationale for your assessment (max 300 words)

### **Section 5 – Additional supporting information**

This section asks you to answer questions that provide additional information. This section is not scored.

### 5.1 Please provide names and contact details of any organisations supporting this application and their specific role.

If you have been working with NHS clinicians, Trusts or other organisations to develop, test or adopt your AI solutions, please list them here. Please confirm they are happy to be contacted to discuss this AI solution and its (potential) use in the NHS or social care. This answer will not affect the initial scoring of your application.

Please use the upload button on the top right of this page to add any additional economic impact assessments, independent evidence or articles which support your application (limit of five uploads).

Please prioritise independent evaluations or evidence about your AI solution, as opposed to internal or promotional documents. You do not have to upload documents here if you do not wish to.

#### Application submission process important note

You <u>must</u> click the submit button at the top of the page and then click to confirm. This completes your application. If you do not press submit and confirm we will consider the application is incomplete and it will not be processed.

Confirming your submission will generate an automatic acknowledgement of receipt. If you do not receive this email acknowledgement, please complete the submit process as described above. If you still do not receive an email acknowledgement, please email <a href="mailto:enquiries@ai-award.info">enquiries@ai-award.info</a>