

## Invitation to Quote - ITQ-RES-0820-405

### The development and test of demand and capacity modelling using System Dynamics approach at NHS system level, post Covid-19

Please address any queries relating to this document to:

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#### Specification / Requirements

The Demand and Capacity programme, which is part of NHS England and NHS Improvement, aims to disseminate the skills and knowledge around demand and capacity modelling across the wider NHS.

Current models and approaches promoted by the programme focus on service level demand and capacity modelling. More information about the current programme is available here <https://www.england.nhs.uk/ourwork/demand-and-capacity/about/>.

The Demand and Capacity Programme are seeking to work with a supplier to pilot a system level approach. This ITQ covers development and test of a strategic demand and capacity modelling using System Dynamics approach for NHS Systems (ICSs or STPs) post Covid-19.

The requirements are threefold, in liaison with the Demand and Capacity Team to;

1. Highlight the benefits of using System Dynamics Modelling to senior leaders in NHS England and Improvement;
2. Develop and test a post Covid – 19 strategic demand and capacity planning using a System Dynamics Modelling approach for NHS Services at system level;
3. Support the Demand and Capacity Team to enhance their skills in the development of system dynamics modelling solutions.

#### The Deliverables shall be:

- An NHS system level readiness assessment tool for the use of a System Dynamics approach,
- Completion of the readiness assessment tools for a limited number (up to 5) of NHS systems. Followed by the selection, with the Demand and Capacity Team, of an NHS System to work with,

- Delivery of several workshops to pilot the approach in an NHS system, specific number and dates of workshops is to be agreed with the system as well of the duration of the workshops, within the price of the contract,
- Training materials and further documentation of the workshops: methodology, materials and learnings,
- Customised models developed with / for the system alongside technical documentation,
- Transferable model archetypes alongside technical documentation,
- An Executive summary document (most likely slides) showing the added value of the System Dynamics Modelling approach to NHS directors and members of executive teams,
- An approach document that highlights the benefits (analytical and non-analytical) of using a System Dynamics approach against other available analytical approaches for modelling demand and capacity at NHS system level,
- A learning and findings document, post – implementation and piloting of the approach.

All work is to be completed in close partnership with the programme team and the relevant stakeholders in the chosen system.

As part of your quote, please describe how you would be working with a local system as well as the Demand and Capacity Team.

### **Timescales**

The test and pilot of the approach will require a coordination with the selected NHS System. The Supplier shall provide a timeline in principle, outlining weekly activity and milestones.

### **Your Team / Key Personnel**

As part of your quote, please state the personnel who shall deliver the requirement and include summary CV and bio of these personnel and state the time each team member will spend on the requirement.

### **Budget**

A fixed price of £30,000 (excluding VAT) is available for this work. Rates and prices shall be deemed inclusive of all additional expenses incurred.

**Any bids submitted in excess of this threshold shall not be passed from initial compliance checking and will be rejected without opportunity to correct.**

During project delivery, any invoices above this threshold in relation to the delivery of this project shall be rejected.

### **Price**

Please provide a fixed price quote for delivery of our requirements in full. Prices shall be excluding VAT. Please provide a breakdown of your price, including day rate charges of your

team/personnel and inclusive of any expenses. Any assumptions or dependencies on NHSE/I must be made clear in your quoted Price.

Please indicate key milestones that will result in an invoice and its price. Invoicing shall be following formal (email) acceptance of the deliverable by Head of Demand and Capacity or the designated delegate.

### **Enquiries & Clarifications**

All queries relating to this ITQ should be made by e-mail to [england.demandandcapacityproject@nhs.net](mailto:england.demandandcapacityproject@nhs.net) & Cc to [nhsi.procurement@nhs.net](mailto:nhsi.procurement@nhs.net) using the following subject; ITQ-RES-0820-405 Demand and capacity modelling using System Dynamics.

We aim to respond to clarifications within two working days or sooner if possible. Clarification questions and answers shall be made available to all potential bidders who have expressed an interest. Clarification requests made after noon on 20 August will not be responded to.

### **Terms and conditions**

The appointment, if any, will be subject to NHS Standard Terms and Conditions for the Provision of Services and this appointment will be confirmed by issuance of a Purchase Order. Please note NHSE/I shall retain the intellectual property in the Deliverables. Requests to amend the Terms and Conditions will not be considered.

### **Service Levels**

The Deliverables and any associated documentation will be of high quality, with clearly laid out and readable diagrams and where relevant written in plain English in such a way that it is accessible and of practical use to a number of different stakeholders at end of the contract without recourse to support from the Supplier.

The Supplier's project team will work with NHSE/I's team prior to the completion of the Deliverables to ensure that the approach to drafting is in line with the requirements.

To ensure the quality of outputs, the supplier will report on their progress on a bi-weekly basis by virtual conference, to Sandra Eismann, Head of Demand and Capacity or her delegate.

### **Quote deadline, submission, page limit & evaluation.**

The quote deadline is noon on Tuesday 25 August. All submissions should not exceed 10 pages in total (including pricing and breakdown).

Quotes will be reviewed by at least two members of the Demand and Capacity team before a moderated decision is made.

The selection shall be the highest quality approach to executing the full Deliverables in a reasonable timeframe, within the stated budget.

Please submit your bank account details on letter headed paper so that we may promptly set you up on our payment systems should your quote be accepted.

**Contracting Authority**

Shall be NHS Trust Development Authority of Wellington House, 133-155 Waterloo Road,  
London, SE1 8UG