

Data Science Advisory Board

Terms of Reference

1. Overview

The Joint Biosecurity Centre (JBC), part of NHS Test and Trace, exists to provide local and national decision makers with the best available analysis, assessment and insights on the spread of Covid-19 for the whole of the United Kingdom. It does this by using data science and engineering to combine health and non-health data and information in order to produce insights that are unique.

The Data Science Advisory Board will provide the Joint Biosecurity Centre with advice on the method and methodologies of data science. This will include:

- Reviewing and recommending improvement to practices in place across all research modelling flows that lead to critical national decision making;
- Acting as experts from diverse fields to review and represent data science research and activities ongoing across all relevant sectors to provide a diverse and wide-ranging perspective; and
- Considering other related matters as necessary.

In recognition of the value of partnership working, feedback and challenge is invited and welcomed: the advice from the Data Science Advisory Board will enable the Joint Biosecurity Centre to generate and build momentum in the wider data science system, as well as giving expert credence of the activities and outputs.

The Joint Biosecurity Centre is committed to high standards of ethics and transparency. Standards and legal requirements are informed by NHS Test and Trace, and the Data Science Advisory Board members are invited to advise on data ethics.

The data science perspective provided by the expert Board members will provide insight to not only the spread of Covid-19, but will also be used to support the build of capability to inform the response to any future pandemics.

2. Membership

Membership shall be by invitation and on a voluntary basis. The intention is that the Board will comprise a diverse group of experts who provide technical knowledge to determine the applicability of a range of models and analysis types.

Members will be invited to join the Board for a twelve-month period, with the option to extend should all parties agree. Members are kindly requested to provide a month's notice should they wish to withdraw from the Board.

Members are responsible for the quality of their advice and for clearly communicating any limitations or caveats that may apply. They may extrapolate and offer judgement where evidence is limited, but should make explicit that they are doing so. Where time allows, it may be preferable to seek external peer review.

Members may speak to the media in their individual capacity as experts but the content of Data Science Advisory Board meetings and papers of correspondence should remain confidential.

The Chair will rotate every quarter across the membership and will be responsible for leading discussions in meetings. Nominations from members will be invited for the subsequent Chair, to be seconded within the membership.

The Secretariat, which sits in the Joint Biosecurity Centre, will be responsible for agenda setting and approval of documentation for publication.

Other experts and officials may be invited to attend meetings on an ad-hoc basis should Board members consider it necessary.

3. Role and Responsibilities

The Data Science Advisory Board will:

- i. Ensure the methodologies underpinning the Joint Biosecurity Centre's data science ambitions and outputs are clinically and scientifically robust. To include:
 - Maintaining awareness of relevant initiatives in statistical, mathematical and computational research;
 - Providing challenge and making recommendations for improvements in methodologies using the latest available information;
 - Providing guidance on commissioning of independent reviews of these activities to ascertain their utility, maturity and reliability;
 - Offering evaluation of the prioritised list of capabilities for integration into the Joint Biosecurity Centre's analytical function;
 - For the selected capabilities, to facilitate and guide the Joint Biosecurity Centre's work with the originating research groups and others to advance those capabilities through our operational readiness model.
 - Provide feedback on the prioritisation of items in the integration pipeline backlog
- ii. Identify any associated risks and opportunities for consideration;
- iii. Oversee a co-ordinated approach to stakeholder engagement and communication of with local, national and international experts to secure access to all available capabilities and to promote a transparent and open collaborative environment.

4. Secretariat

The secretariat function for this Board will be provided by the Joint Biosecurity Centre. Notes of the meetings shall be distributed to attendees and retained for audit purposes. Summaries of the Data Science Advisory Board will be published on gov.uk.

Relevant documentation to inform agenda items will be circulated to members in advance of the meeting date with sufficient time for review.

These Terms of Reference will be reviewed on a regular basis to ensure they remain fit for purpose.

5. Frequency of Meetings

The Board shall meet monthly, usually on the last Friday of the month. Extraordinary meetings can take place at other intervals, if required.

The Board may choose to set up task-and-finish working groups for larger topic areas, depending on circumstance and need, which will report back to the monthly meetings.