GUIDANCE FOR REVIEWERS IN ASSESSING DATA SHARING PLANS

This guidance is provided for Reviewers/Review Panels reviewing NMRC applications, to aid in the assessment of Data Sharing Plans submitted as part of the grant applications.

Research Data Governance and Sharing Framework and Data Sharing Plan

To promote synergies of research in Singapore and bring about better returns from public investment in research, NMRC expects research data generated from publicly funded research projects to be shared timely with as few restrictions as possible. The Research Data Governance and Sharing Framework can be found on the NMRC website.

The research data sharing policy will be implemented through integration into NMRC's grant processes. All applications for funding of at least \$\$250,000 of direct cost must include a Data Sharing Plan as part of the grant application to show how investigators will meet the data sharing responsibilities.

The Data Sharing Plan template and the Instructions to Applicants document can be found on the NMRC website.

Role of Reviewer

The Data Sharing Plan will be assessed by the NMRC's Review Panel or equivalent body, alongside the grant application, in the grant review process. The Data Sharing Plan will be considered separately from the scientific evaluation of the proposed research. However, a satisfactory Data Sharing Plan is mandatory for the award of the grant. In the case where a proposal to be awarded has an unsatisfactory Data Sharing Plan, the NMRC's review panel or equivalent body may request for the Data Sharing Plan to be revised.

Reviewers of Data Sharing Plans are expected to:

- 1. Understand and be familiar with the objectives and principles of the Research Data Governance and Sharing Framework.
- 2. Assess the Data Sharing Plans and provide opinions on whether sufficient and appropriate considerations have been given to the data sharing requirements and principles.
- 3. Evaluate if resources requested for data sharing are reasonable and well justified.

Reviewers may wish to consider the following pointers in assessing the Data Sharing Plans:

Section of Data Sharing Plan	Pointers
Description of Research and Research Data 1.1. Brief Description of the Research Study 1.2. Brief Description of the Research Data and Analysis to be Undertaken	This section is for reviewers' information, and it entails brief descriptions of the nature of study, the research data that will be collected/generated, and the plans for/scope of analysis to be undertaken, to provide the context of the Data Sharing Plan.

2. Restriction on Data Sharing

- This section is for reviewers' assessment of the suitability of the Final Research Data for sharing and/or the reasonableness of the restriction on data sharing (if any).
- Applicants are required to provide strong justifications for anticipating that they cannot share all Final Research Data under the Framework, or cannot share the Final Research Data under the Framework within the timeframe stated in the Framework.
- Possible justifications may include the need to protect human subjects' confidentiality or adhere to consent agreements, or the anticipated need for more time to obtain intellectual property rights (such as patent application) over the Final Research Data and/or an invention/product that may be invented/developed using the Final Research Data or to work on a product that may be developed using the Final Research Data for public benefit.
- Applicants shall include alternative means to produce a version of the Final Research Data that can be shared, as far as possible. (E.g., in relation to research projects with sensitive data, an aggregated version of the Final Research Data can be shared.)

Points to consider:

- Are the Final Research Data from the project suitable for sharing?
- If the Final Research Data is not suitable for sharing, is the justification(s) provided reasonable?
- Are there workarounds to produce a version of the Final Research data which can be shared?
- Is the identified restriction or limit to data sharing reasonable and justified?
- Is there any planned action(s) to limit such restriction and is it reasonable?

3. Data Use Limitation

- This section is for reviewers' assessment of the reasonableness of the data use limitation (if any).
- Anticipated data use limitations should be minimised where possible and be substantiated with valid reasons e.g., where the limitation is due to limited consent obtained for the use and disclosure of the Final Research
- Examples of such limitations include the use of the Final Research Data by non-profit organisations only, the use of the Final Research Data for health and/or biomedical research only, or the use of the Final Research Data for research related to a specific disease only.
- Approved requests to access the Final Research Data will be subject to the data use limitation set out in this section.

Point to consider:

		Is the data use limitation reasonable and justified?
4.	Institutional Review Board (IRB) Endorsement (For a Research Study that involves human subjects)	 This section is for reviewers' information, and it indicates if an IRB has reviewed and endorsed the Data Sharing Plan for studies involving human subjects. IRB's review and endorsement of the Data Sharing Plan is not mandatory at the point of grant application, but will be required before any work requiring IRB approval may commence, to ensure adequate protection of the human subjects. The IRB review should include assessment of whether data submission is consistent with the informed consent procedures, whether the anonymisation standards is adequate to protect the human subject involved, whether there is any sensitive data that may potentially lead to stigmatization, and whether the data use limitations are appropriate and sufficient to minimise the potential for harm. The IRB's decision will also take priority over the assessment of the NMRC Review Panel with regard to human subject protection.
5.	Lead Principal Investigator's Undertaking	This section is for reviewers' information.