

RIE2025 Centre Grant Briefing

22 April 2021

Agenda

- Objective of RIE2025 Centre Grant (CG)
- Funding Model:
 - Funding Categories and Eligible Entities
 - General Funding Mechanism
 - Focus Areas
 - Funding Components and Limits
- Application Details
 - Application Form and Review Process/Criteria
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 - Interview and Submission Details
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RIE2025 CG Objective

- To provide funding support to the public healthcare institutions (PHIs) to **build up their core research capabilities in terms of common research platforms, shared equipment and core manpower to enhance their collaborative and transdisciplinary research productivity** in achieving progress towards the RIE2025 goals of healthcare research

RIE2025 CG Funding Categories

Funding Category	Funding Quantum & Duration	Aim	Eligibility
CG Category 1 – Established Centres	Up to \$20mil over 4 years	<ul style="list-style-type: none"> • To support individual Public Healthcare Institutions (PHIs) in strengthening existing research capabilities to meet the CG’s objectives • To support individual Regional Health Systems (RHSes) in developing/strengthening capabilities in population health research 	<ul style="list-style-type: none"> • Open to all the eligible PHIs and RHSes • PHIs, which are applying under this category, are not allowed to apply under the Cat-3 (Developing Centre)
CG Category 2 – Collaborative Centres	Up to \$7mil over 4 years	To support joint collaborations between two or more PHIs in strengthening existing research capabilities to meet the CG’s objectives	<ul style="list-style-type: none"> • Open to all the eligible PHIs
CG Category 3 – Developing Centres	Up to \$3mil over 4 years	To support individual PHIs in developing new/existing research capabilities to meet the CG’s objectives, under the mentorship or guidance from a named co-partner that can be an entity or an individual	<ul style="list-style-type: none"> • Open to all the eligible PHIs • PHIs, which are applying under this category, are not allowed to apply under the Cat-1 (Established Centre)

RIE2025 CG List of Eligible Entities

Public Healthcare Institutions – *eligible for all funding categories*

1. National Cancer Centre Singapore
2. National University Cancer Institute, Singapore
3. Singapore General Hospital
4. Singapore Eye Research Institute
5. National University Hospital
6. National Neuroscience Institute
7. National Heart Centre Singapore
8. National University Heart Centre, Singapore
9. Tan Tock Seng Hospital
10. Institute of Mental Health
11. KK Women's and Children's Hospital
12. Changi General Hospital
13. National Centre of Infectious Diseases (replaced CDC)
14. Khoo Teck Puat Hospital
15. National Dental Centre Singapore
16. National Skin Centre
17. Ng Teng Fong General Hospital
18. SengKang General Hospital
19. Singapore Health Services (SingHealth) Polyclinics
20. National Healthcare Group (NHG) Polyclinics
- 21. National University Polyclinics (NUP) - NEW**
- 22. National University Centre for Oral Health, Singapore (NUCOHS) - NEW**
- 23. Alexandra Hospital - NEW**
- 24. Bright Vision Hospital – NEW**
- 25. SengKang Community Hospital – NEW**
- 26. Outram Community Hospital - NEW**
- 27. Yishun Community Hospital - NEW**
- 28. Woodlands Health Campus - NEW**
- 29. Jurong Community Hospital – NEW**

Regional Health Systems – *for CG Cat-1 (Established Centres) and population health research only*

1. SingHealth
2. National University Health System
3. National Healthcare Group

RIE2025 CG General Funding Mechanism

- The general funding principle for RIE2025 CG would be based on a **competitive-performance funding mechanism**, where the assessment of each application will be done relatively with the other applications and takes into account the past research performance of the applicants.
- Eligible entities will be required to submit a research strategy plan for RIE2025 based on the template provided, on how they intend to build/enhance their core research capacity and capability in the specific areas of focus.
- For the CG renewals, evaluation will also be based on whether the applicant groups have incorporated the Centre Grant Evaluation Panel's (CGEP's) key recommendations and suggested course of actions into shaping the RIE2025 proposal.
- Overall, the award of the CG funding will be dependent on:
 - Quality of the research strategy plans
 - Whether the entities have addressed the CGEP's key recommendations (for the CG renewals)
 - Entities' past research performance/RIE2020 achievements, where applicable

*Pls see detailed review criteria in Slide 10

RIE2025 CG Focus Areas

- **For all funding categories**, the CG applicants should demonstrate how their proposed research strategy plans could contribute to the relevant aspects of the RIE2025 Human Health and Potential (HHP) goals in terms of transforming and protecting the health of the nation, through achieving one or more of the following outcomes:
 - **Good Healthcare outcomes at sustainable cost**
 - **Population health, preventive health, epidemic preparedness and response**
 - **Data-centric healthcare and digital health**
 - **Quadruple aims (i.e. improving health outcomes, keeping per capita cost manageable, improving care experience and keeping providers satisfied)**
- **For the CG Cat-2 (collaborative centres)**, CG applications focused on one of the following 7 MOH-prioritized disease domains would be given priority consideration:
 - **Cancers**
 - **Cardiovascular diseases**
 - **Infectious diseases**
 - **Eye**
 - **Metabolic and Endocrine**
 - **Neuroscience**
 - **Mental Health**

RIE2025 CG Funding Components and Limits

- **Research Personnel Core (cap at 50% of the total CG budget request)** – for covering the salary of
 - **research-active scientists** (e.g. Clinician Scientists, Clinician Investigators, allied Health Professionals like Biostatisticians, Epidemiologists) who have the ability to attain peer-reviewed grants.
 - **key research personnel** operating the centralised shared resources or services, including facility core leaders, research support staff (e.g. Research Assistants, Research Technologists).
- **Facility Core** – for support of centralised shared research resources such as the purchase of equipment, provision of dedicated space for research operations, covering of other operating expenses associated with the development and maintenance of core research platforms.
- **Administrative Core (cap at 15% of the total CG budget request)** – for supporting the central administration of resources and services, fiscal management of the centre grant and reporting activities such as for the appointment of key administrative personnel and catering for training/educational programmes to enhance the knowledge and capability of the administrative staff for medical research.
- **Seed/Bridging Fund Core (cap at 10% of the total CG budget request)** – for the award of
 - **pilot grants** with each capped at \$50,000 to young clinician investigators to generate the necessary preliminary data to apply for higher-level national grants.
 - **bridging grant** for a maximum period of 1 year to sustain the key research manpower from grants which have already ceased.

Application Form – Research Strategy Plans

Section	Description
1	Application Details
2	Overall Research Strategy Plans <ul style="list-style-type: none">- Background- RIE2020 Centre Grant (for renewals)- RIE2025 Research Strategy Plans- Merits of Collaboration (applicable for Cat-2 Collaborative Centres)
3	Research themes (up to 8 research themes)
4	Budgets
5	Governance Structure
6	Expected Outcomes
7	Signatories

Review Process & Assessment Criteria

- Evaluation will be done by the **CGEP** and will include **interview sessions (via online platforms)** with the applicants.
(Note: Cat 2 and Cat-3 proposals may be subject to triaging depending on the number of proposals that NMRC receives)
- **Assessment Criteria** are as follows:
 1. How relevant are the research aims of the institutions in furthering the vision/mission of NMRC?
 2. How relevant and useful are the proposed research capabilities in furthering the research agenda of the eligible entities and how effective are they in enhancing collaborative and transdisciplinary research productivity?
 3. **What are the translational outcomes of the research strategies; are they contributing to the relevant aspects of the RIE2025 HHP goals in terms of transforming and protecting the health of the nation through achieving one or more of the following: (i) good healthcare outcomes at sustainable cost, (ii) population health, preventive health, epidemic preparedness and response; (iii) data-centric healthcare and digital health; and/or (iv) quadruple aims (i.e. improving health outcomes, keeping per capita cost manageable, improving care experiences and keeping providers satisfied)**
 4. Are the research strategy plans highly competitive? Do they demonstrate high potential to be world-class?
 5. Are there any sustainability plans involved and whether the entities will be more self-sufficient over time?
 6. Is the budget reasonable?
 7. Are the concerns raised and/or recommendations by the CGEP during the RIE2020 CG mid-term review addressed or followed up respectively? (for CG renewals)

RIE2025 CG Performance Indicators *(updated/new in red)*

S/N	Indicator
1	Number of Transition Awards
2	Number of PhD and Masters students trained
3	Number of NMRC-supported clinician-scientists/investigators who are regarded as international key opinion leaders (KOLs)
4	Number of NMRC-supported clinician-scientists/investigators who with diverse background/trainings
5	Number of publication in top 10% journals
6	Number of joint projects or collaborations with (i) other research institutes and centres in Singapore and (ii) international research institutes and centres
7	Amount of Industry Funding/Spending
8	Amount of Industry Spending (in-kind)
9	Number of Technologies deployed (including Licenses)
10	Number of Impactful licenses
11	Amount of licensing revenue
12	Number of spin-offs supported
13	Amount of follow-on funding raised by spin-offs
14	Clinicians, faculty researchers and/or students exposed/participated in innovation & enterprise (I&E) activities
15	Number of early-phase clinical trials started
16	Number of NMRC-supported centres/programmes/projects with findings that result in new or change in local or international clinical practice guidelines (e.g. CPGs) and healthcare/health policies, including implementation of new or improved medical interventions or diagnostics (can be drugs and procedures) or services (e.g. new clinical service and shorter patient waiting time)
17	Number of Interventions which result in a more cost-effective outcome
18	Number of coordinated media coverage of research findings which can help the Government to advance public interest

- Reduced from 32 indicators in RIE2020 to 18 indicators for RIE2025.
- Indicators are aligned with the approved MOH framework for Key Performance Indicators (KPIs)/Tracking Indicators (TIs), which focuses on KPIs that offer actionable insight and assessment of long-term impact to the HHP domain.

Timeline

- 26 April 2021 – Launch of the CG grant call
- 4 June 2021 – Close of CG grant call
- July 2021 (tentative) – Review/Interview of the CG applications by the CGEP
- July/August 2021 (tentative) – Announcement of the results

Scheduling of the CG Interview

- Interviews will have to be conducted via online platforms as part of the review of the RIE2025 CG applications.
- Due to the different time zones of the different CGEP members, NMRC seeks the institutions' understanding on the need to hold the interviews over a few days and within the **6pm to 10pm time slot**.
- NMRC will get in touch with the Research Division Office colleagues as soon as we finalise and secure the dates of the review/interview meetings.

Submission Details

- It is mandatory for all applications to be submitted to NMRC by **4 June 2021, 5pm**.
- All applications must be endorsed by the Institutions'/Clusters' Heads as the Centre Grant is an institutional-level funding.
- Late submissions or incomplete applications (including without endorsement) will not be accepted.
- Application form and grant call information will be available on the NMRC website from **23 April onwards**.

Partnering with TRUST

TRUST* is a national data sharing platform developed by MOH and PMO SNDGG to facilitate **safe and secure sharing and usage** of health-related research and real world data between the public and private sectors.



TIME AND COSTS SAVINGS

Access to datasets is time consuming due to lengthy bilateral negotiations

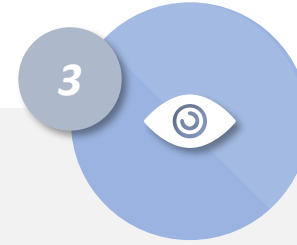
- Need not invest in new infrastructure and/or security measures to enable data sharing.
- TRUST will perform data fusion and sharing in an expedient manner leveraging on pre-agreements, defined processes and frameworks.



DATA GOVERNANCE AND LEGAL COMPLIANCE

Need for a safe and secure platform to enable data access and linkage

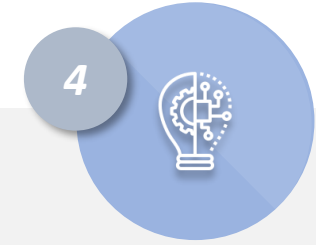
- Trusted Third Party (TTP) managing de-identification, provide secure environment for data fusion, access and analysis with safeguards.
- Compliance with legal requirements on data-sharing and use.



INTEROPERABILITY AND FLEXIBILITY

Varied data standards impede fusion and analytics.
Data cleaning and concordance is resource-intensive.

- Processes to standardize, clean and concord data ensures interoperability and analytics
- OMOP CDM standards.
- Able to support data sharing between parties who have their own existing agreement



INNOVATION AND INSIGHTS

Lack of access to rich and high quality datasets.

- Provides access to library of govt administrative datasets e.g. clinical, socio-economic, phenotypic data that would otherwise not be easily accessible
- Availability of secure exploitation environment + analytic tools

Benefits to Data Contributors

- MOH would like to seek support from PHIs and RHSs to work with TRUST to select and contribute strategic datasets based on pre-agreed upon scope and data sharing decision making process.
- Benefits to Data Contributors include:
 - **Exclusive use** – retains exclusive use of own datasets and decide who they want to collaborate/share with (during exclusivity period).
 - **Broaden collaborator network** – Post exclusivity period, TRUST facilitates use of their datasets to a bigger group of users (through TRUST Data Access Committee) and this will also further expand contributor's collaboration network.
 - **Harmonised format** – TRUST will co-support data cleaning efforts, interoperable with international recognized data standards
 - **Maximise value/utility of datasets & Early adopter advantage** – Gain access to, and fuse with, other data sources such as clinical data and other govt data

Thank you

Q&A