NHG Monitoring Programme Frequently Asked Questions (FAQs)

1. What is the NHG Monitoring Programme?

The NHG monitoring programme was established as a quality control component under the OHRPP Research Quality Management (RQM) framework.

Under this Programme, all NHG PI-Initiated studies regulated by the Human Biomedical Research Act (HBRA) will be subjected to monitoring.

2. Why is the NHG Monitoring Programme required?

According to Human Biomedical Research Act (HBRA) enacted in August 2015 by the Ministry of Health (MOH), part 5, Section 23(2) of the Act mandates that each Research Institution (RI) must supervise, review and proactively monitor its Human Biomedical Research (HBR) studies. A monitoring framework has thus been established to meet this statutory requirement.

3. What are the objectives of the NHG Monitoring Programme?

The objectives of the NHG Monitoring Programme are to:

i) Safeguard the safety and well-being of the research participants;
ii) Ensure good quality and integrity of the research data; and to
iii) Ensure the conduct of the study is in accordance to applicable regulations, policies and guidelines.

4. Which studies will be selected for monitoring?

The NHG Monitoring Programme targets all **PI-Initiated HBR studies** conducted in **NHG institutions, primarily Category 2B (ii) and 3 studies**. Table 1 below shows how studies are classified according to its risks and its mode of monitoring:

Risk Category	Criteria		Mode of Monitoring
1	All **Exempt** Studies		Voluntary PI Self-Assessment Form (PISAF)
2A	All **Expedited** studies with **Industry-Sponsored Monitoring available**		
	All PIs		As per Sponsor's requirements. This framework is not applicable to this group of studies.
2B	All **Expedited** studies with **NO** Industry-Sponsored Monitoring		
	(i) Waiver of consent conducted by New PI^		Voluntary PISAF
	(ii) **No** waiver of consent conducted by New PI^		**Mandatory PISAF**
	(iii) All other PIs		Voluntary PISAF
3	**Full Board** studies with **Industry-Sponsored Monitoring available**		As per Sponsor's requirements. This framework is not applicable to this group of studies.
	Full Board studies with **NO** Industry-Sponsored Monitoring		
	Tier A	Which involves: • Vulnerable Population • Restricted Research • Devices (Except Registered Class A) • Surgical Procedures (Includes Transplantation Research) • PI who has never conducted a Full Board study approved by DSRB previously	**Remote + Onsite Monitoring**
	Tier B	All other Full Board studies that do not fall into Category 3 Tier A	**Mandatory PISAF + Onsite Monitoring**

Table 1. Risk classification of studies and its mode of monitoring

5. What are the definitions of Category 3 Tier A studies?

i) **Vulnerable Population (Per DSRB Definition)** – Studies involving Children, Pregnant Woman, Foetuses and Neonates, Cognitively-Impaired persons and Prisoners

ii) **Restricted Research** - As defined in Fourth Schedule of HBRA:
Studies involving human eggs or human embryos ; or Cytoplasmic hybrid embryos; or Introduction of any human-animal combination embryo into an animal or human; or Introduction of human stem cells (incl. pluripotent stem cells); or human neural cells into an animal at any stage of development (incl. prenatal animal foetus or animal embryo)

iii) **Devices –** Includes all Unregistered products, and Registered Classes B, C, D in accordance to HSA Medical Device Guidance GN13 (May 2014) Risk Classification:

Risk Class	Risk Level	Examples
B	Low-moderate risk	Hypodermic Needles / suction equipment
C	Moderate-high risk	Lung ventilator / bone fixation plate
D	High risk	Heart valves / implantable defibrillator

iv) **Surgical Procedures** – Studies involving Surgical Procedures as Research Intervention as determined on the DSRB Application Form Section D1.

v) **PI who has never conducted a Full Board study approved by DSRB previously** – PIs whom are new to conducting Full Board studies reviewed by IRB

6. What about Registered Devices according to Risk Class A?

This class of device is considered as Low Risk by HSA and will be categorised under Category 3 Tier B.

7. How will the studies be monitored?

The extent of monitoring depends on the nature and risks of the study and the experience of the PI. The frequency and its requirements will need to be stipulated in a study monitoring plan.

i) For Category 2B(ii): Expedited studies involving consent from subjects conducted by New PIs

With effect from Mar 2017, it is mandatory for studies **involving consent** from subjects which are reviewed under the **Expedited** category and conducted by **New PIs** (i.e. no prior research experience as a PI) to undergo the PI Self-Assesssment Programme. Please refer to the NHG Research website for more information on the PI Self-Assessment Programme and a copy of the PI Self-Assessment Form (PISAF).

ii) For Category 3: Full Board studies without Industry-Sponsored monitoring

With effect from April 2018, a combination of remote, on-site monitoring and self-monitoring methodologies will be implemented depending on the risks and requirements of the studies. Table 2 illustrates the typical monitoring frequency and activities:

Tier	Type of study	Monitoring Activities after study approval (Based on 3 years of study duration)	
3A	**Full Board Studies involved Vulnerable Population, Restricted Research, Devices, Surgical Procedures and/or New PI** *(Refer to Qn 5 on the definition of the criteria listed above)*	Within 2 months of *IRB approval*	• Site Initiation Visit (SIV)
		After SIV until 1st subject has been enrolled	• Remote monitoring (RM) 3-monthly *(RM is optional if the 1st subject was enrolled before 3 months after the SIV was conducted.)*
		Upon 1st subject enrolled	• 1st Site Monitoring Visit (SMV)
		After 1st SMV	• Adhoc SMV if critical issues are noted *Otherwise,* • Remote monitoring 3-monthly (If there is active recruitment) or 6-monthly (If the study is no longer recruiting new subjects e.g. enrolment closed, study on follow up status)
		Yearly SMV starting from the date of the 1st SMV till end of the study	• 1 X On-site SMV for o New PIs o New PIs conducting study involved vulnerable subjects o Studies involving restricted research o Studies involving devices o Studies involving surgical procedures
			• Remote monitoring 3monthly or 6monthly depending on study status
			• Adhoc SMV if critical issues are noted
		End of the study	• PI to complete study closure checklist
3B	**Any other Full Board studies that does not fulfill Category 3A**	Within 6 months of IRB approval	• Self-monitoring using PISAF
		1 year after IRB approval	• 1X On-site SMV for 25% of studies • Self-monitoring for remaining 75% of the studies • Adhoc SMV if critical issues noted

			• Self-monitoring 6-monthly
		2 years after initial IRB approval till end of study	• Self-monitoring 6-monthly (If there is active recruitment) or yearly (If the study is no longer recruiting new subjects e.g. enrolment closed, study on follow up status)
		End of the study	• PI to complete study closure checklist

Table 2. Monitoring activities and frequency for Category 3 studies

8. What do the monitoring activities involve?

Table 3 below elaborates on the monitoring activities:

Monitoring Activities	Definitions
Study Initiation Visit (SIV)	This visit is usually performed prior to the start of the study. It typically involves: • Ensuring appropriate training of study protocol and other research procedures of the study team members has been conducted • Ensuring regulatory, ethics and institutional requirements are met • Discussing of site-specific processes and procedures which may include but not limited to: recruitment strategies, informed consent process, source documentation requirements, processes for safety evaluation and recording of adverse events, laboratory procedures involving specimen processing and shipping, management of investigational product and form of communication between study team members • Ensuring adequate facilities and resources (such as study supplies, medical records) to conduct the study • Developing investigator file and essential documents The Monitor will complete a SIV Checklist and follow up on outstanding issues with PI.
Site Monitoring Visit (SMV)	This visit is conducted at the Institutions (on-site) where source documentation are stored. The frequency and extent will depend on the risk and complexity of the study protocol. It typically involves: • Assessing adherence to the currently approved protocol/amendments, with applicable regulatory, ethics and institutional requirements • Ensuring informed consent from subjects had been taken appropriately according to applicable guidelines and regulations

	• Ensuring safety events have been promptly assessed by the Investigator and reported according to applicable guidelines and regulations • Performing Source Document Verification (SDV) to ensure data in case report forms (CRFs) or study database are accurate, complete and verifiable from source documents • Ensuring appropriate investigational product (e.g. medical devices) storage, dispensing, and accountability (if applicable) • Ensuring appropriate biological samples collection, storage conditions and shipping procedures (if applicable) • Verifying adequacy of investigator and site staff, equipment and facilities • Reviewing investigator files for completeness • Meeting with the PI and/or delegate to discuss progress of the study and any concerns raised as a result of the monitoring. The Monitor will complete a SMV Checklist and follow up on outstanding issues with PI.
Remote Monitoring	This is typically conducted by the Monitor remotely (e.g. through phone call) to ensure continuing compliance from the PI. The Monitor will complete his/ her assessment using the Remote Monitoring Checklist (RMC).
Self-Monitoring	The PI will need to perform self-monitoring using the PI Self-Assessment Form (PISAF).

Table 3: Monitoring activities

9. Who will perform monitoring for these studies?

This is a joint collaboration between the NHG Institutions and the OHRPP RQM Unit. Monitoring will be conducted and facilitated by both the NHG Institutions and the RQM.

10. How will I know if my study has been selected for monitoring?

Once your study falls under the scope of HBRA, it will be subjected to the legislations of the Act.

You will be notified via email by the RQM team if your study is selected for either PI Self-Assessment Programme or Category 3 monitoring. The monitoring plan for your study will be discussed in detail by your designated monitors.

11. Can I request for changes to the risk category or monitoring frequency for my study?

Currently, the IRB, the Institution Representative or designee and Research Institution may request for changes to the risk categorization (e.g. Tier 3A to Tier 3B) and monitoring frequency (e.g. increase or decrease in the intensity of monitoring) where necessary.

The PI may submit a written request to NHG RQM for a downgrade from Category Tier 3A to Tier 3B if:

a) The PI was selected for monitoring because the Full Board study was the PI's first Full Board study. However, the PI had conducted a Full Board study previously approved by other IRBs.
b) The PI whom is conducting the Full Board study involving devices or surgical procedures had been monitored by an Industry Sponsor or NHG RQM previously on a study of similar nature (i.e. Full Board study involving devices or surgical procedures)

The NHG RQM unit will evaluate the request on a case-by-case basis.

All other reasons for changes to the risk category or monitoring frequency shall be evaluated by the approving IRB on a case-by-case basis.

12. Whom can I contact if I have questions about monitoring?

You may contact the RQM unit at researchquality@nhg.com.sg.