### Upholding Research Integrity: Embracing the Responsible Conduct of Research (RCR) Principles in Malaysia's Ministry of Health Research Governance Framework

Asyraf Syahmi Mohd Noor <sup>1</sup>, Wan Rosalina Wan Rosli <sup>3</sup>, Swee Ping Tang <sup>3</sup>, Mohammad Zabri Johari <sup>2,3</sup>, Chin Yin Chung Melvyn <sup>3</sup>, Noriah Bidin <sup>3</sup>, Lee Keng Yee <sup>1,3</sup>, Murizal Zainol <sup>1,3</sup>, Nurain Mohd Noor <sup>3</sup>

 <sup>1.</sup> NIH Manager Office, National Institutes of Health (NIH), Ministry of Health (MOH), Malaysia
<sup>2.</sup> Institute for Health Behavioural Research (IHBR), National Institutes of Health (NIH), Ministry of Health (MOH), Malaysia
<sup>3.</sup> Medical Research & Ethics Committee (MREC), Ministry of Health (MOH), Malaysia

#### **DR. SWEE-PING TANG**

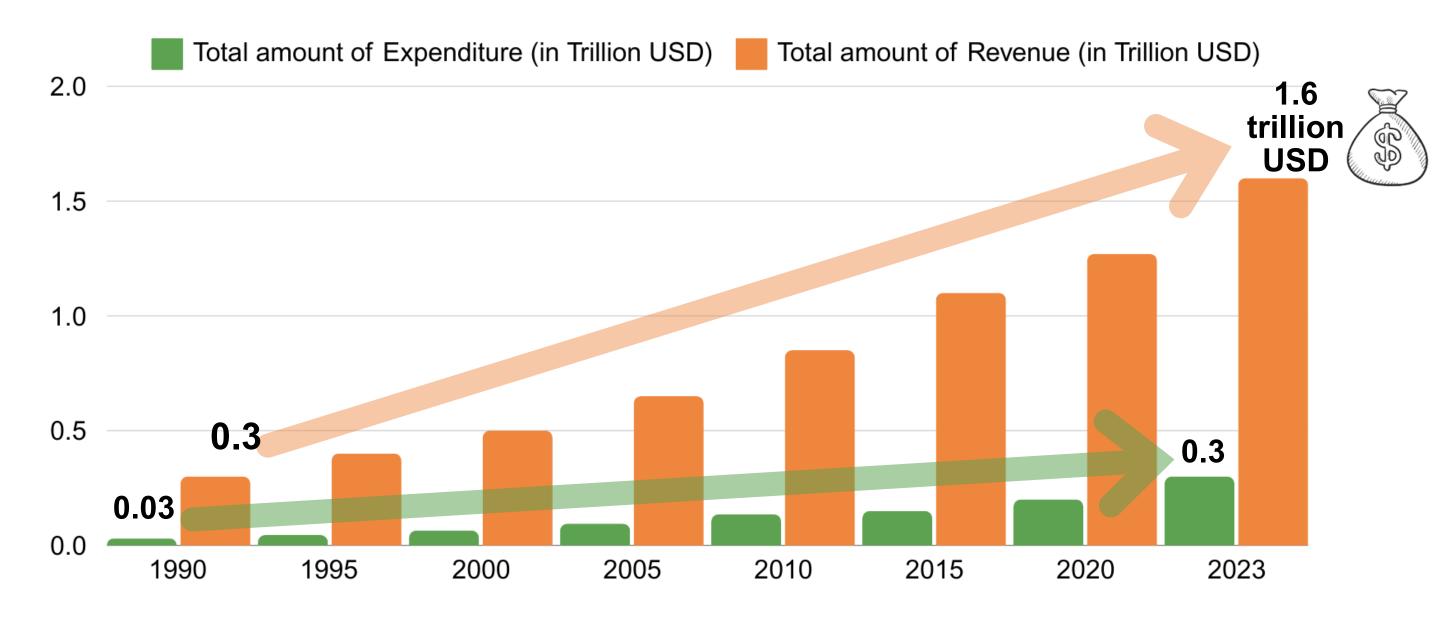
MBBS(Mal), MRCP(UK), FRCPCH(UK), CSER (UK)

- Senior Consultant Paediatrician and Paediatric Rheumatologist, Head of Paediatrics Department, Selayang Hospital, Ministry of Health Malaysia
- Deputy Chairperson of Medical Research & Ethics Committee (MREC), Ministry of Health Malaysia.

Dr. Tang is a distinguished clinician and researcher in paediatric autoimmune diseases, recognised for her extensive contributions, including numerous publications and book chapters. In 2003, she pioneered the Malaysia's paediatric rheumatology services, which have since grown to five additional states, revolutionising care for young patients nationwide. With a decade of dedicated service on the Medical Research & Ethics Committee (MREC) and as the current Deputy Chairperson, Dr. Tang is deeply committed to advancing ethical research practices, particularly for paediatric studies. As a passionate educator, she is dedicated to mentoring doctors on the importance of ethical standards in medical research.



## Estimated Global Pharmaceutical Industry's Expenditure Investment & Revenue in R&D



Statista. (2024). Global pharmaceutical industry - statistics & facts.

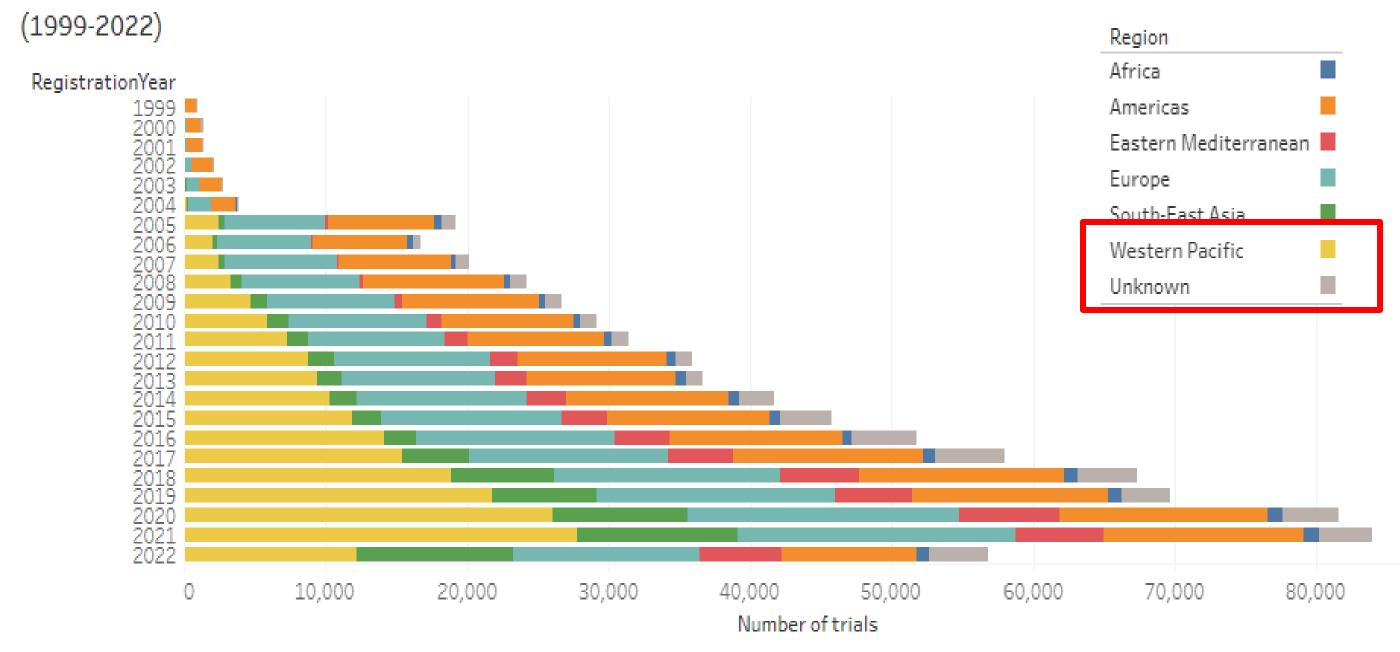
## Shifting trends in reallocating trial sites to LMIC



Shifting Trends In Reallocating Trial Sites Across Regions And Countries 2019 -2023 (Citeline Trialtrove, Jan 2024; IQVIA Institute, June 2024)

#### Rapid increase of trials registered in Western Pacific & South-East Asia, 1999-2022

Total Number of Trial Registry By WHO Region and Year



WHO International Clinical Trials Registry Platform (ICTRP), Feb 2023



Self-regulation among researcher Responsible Conduct of Research



**Research Misconduct** 

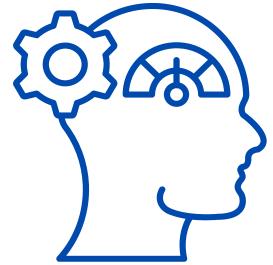


Self-regulation among researcher Responsible Conduct of Research



Stringent peer-review system for scientific publishing

**Research Misconduct** 



Self-regulation among researcher Responsible Conduct of Research



Strict product licensing



**Research Misconduct** 



Stringent peer-review system for scientific publishing



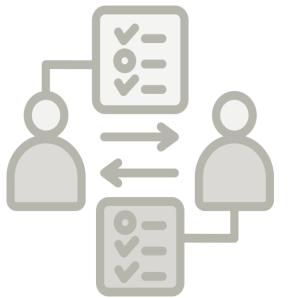
Self-regulation among researcher Responsible Conduct of Research



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**Research Misconduct** 

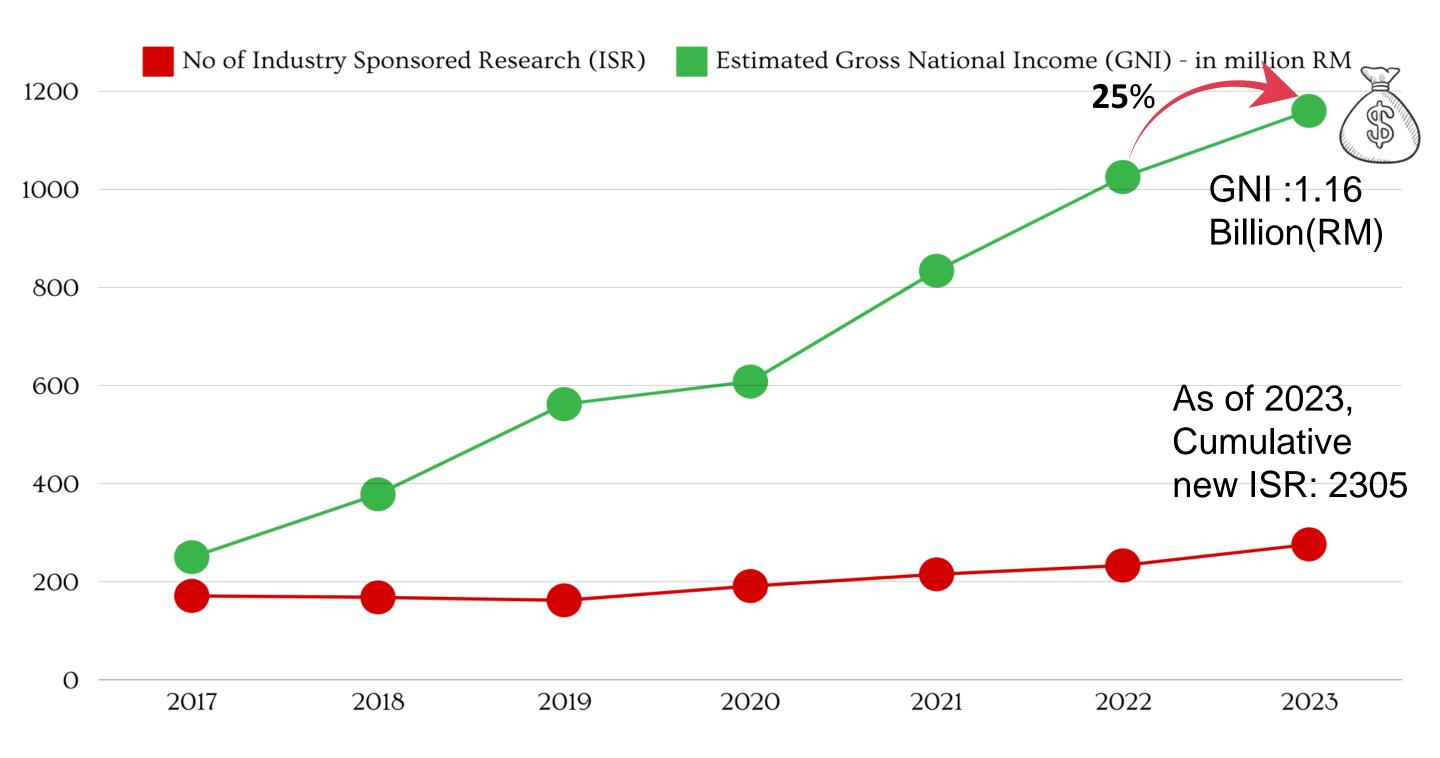


Stringent peer-review system for scientific publishing



Robust governance within research ecosystem

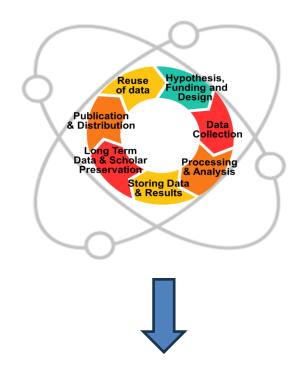
### Health Research Industry in Malaysia



KPI Research Scorecard from 2017 (Clinical Research Malaysia (CRM) Annual Report ,2023 )

#### **Ministry of Health Malaysia**

#### Health Research Governance Framework & Responsible Conduct Of Research



Highest standards for research practices Integrity and validity of research Accountability, Transparency and Efficiency

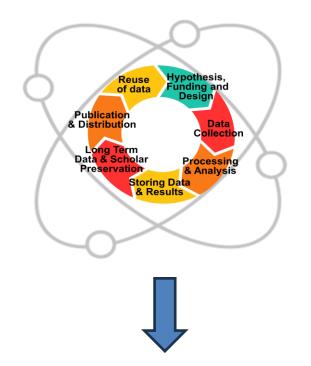
#### **Responsible Conduct of Research**



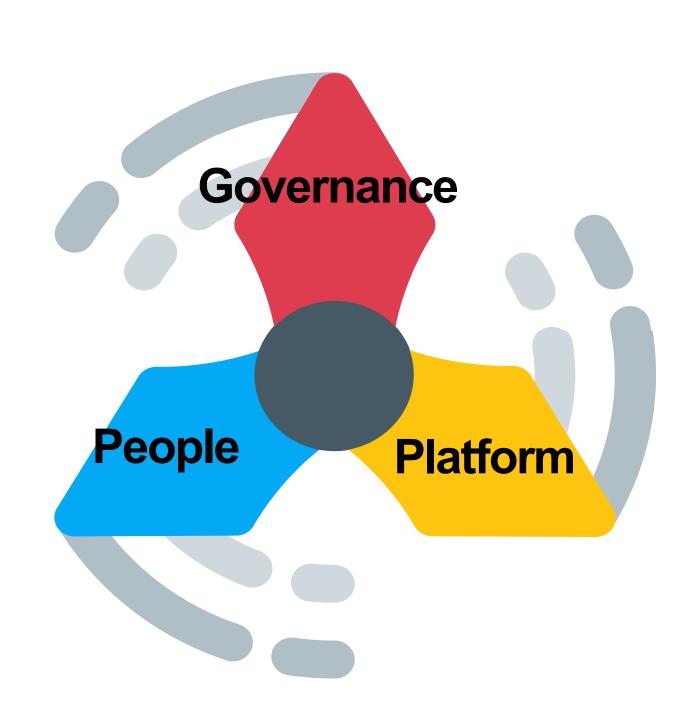
Malaysian Code of Responsible Conduct of Research , 2nd edition 2017

#### **Ministry of Health Malaysia**

#### Health Research Governance Framework & Responsible Conduct Of Research

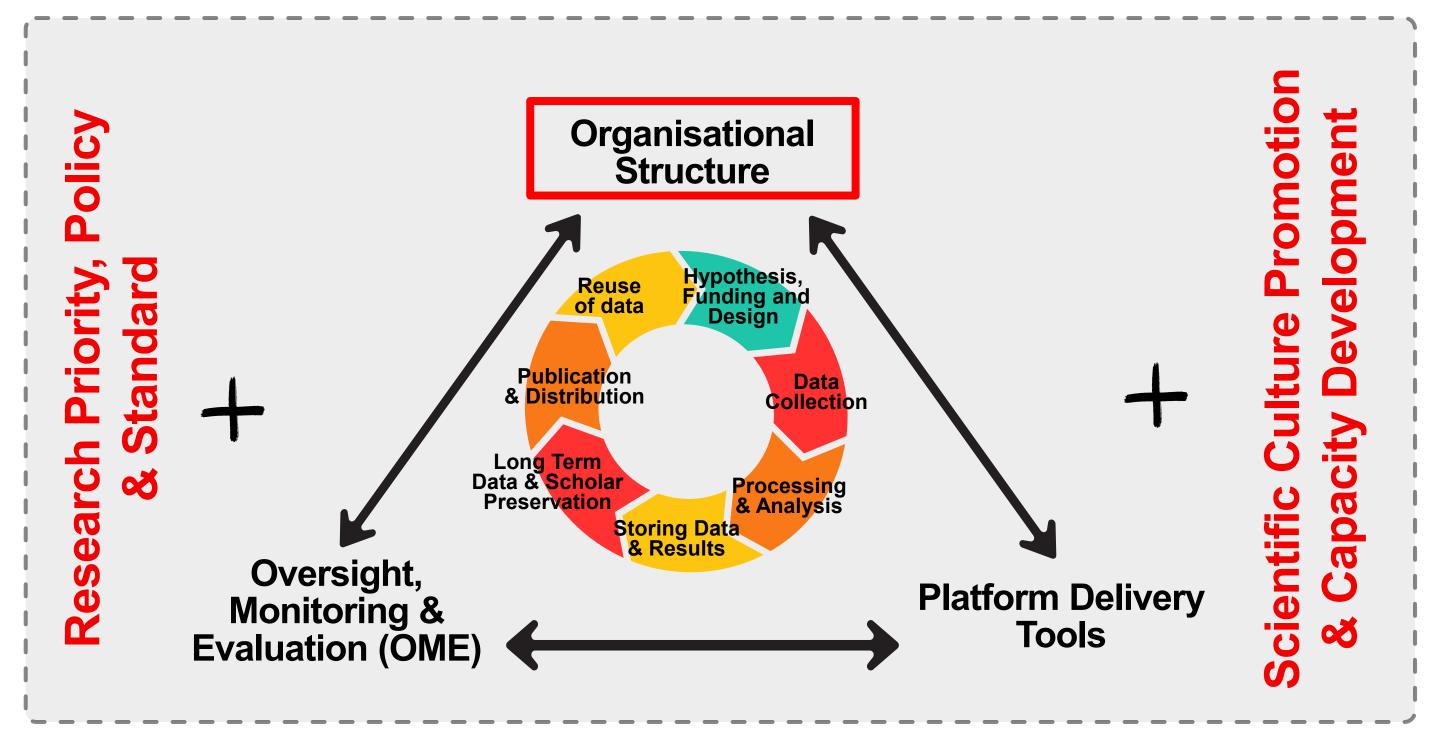


Highest standards for research practices Integrity and validity of research Accountability, Transparency and Efficiency



#### MOH Health Research Ecosystem

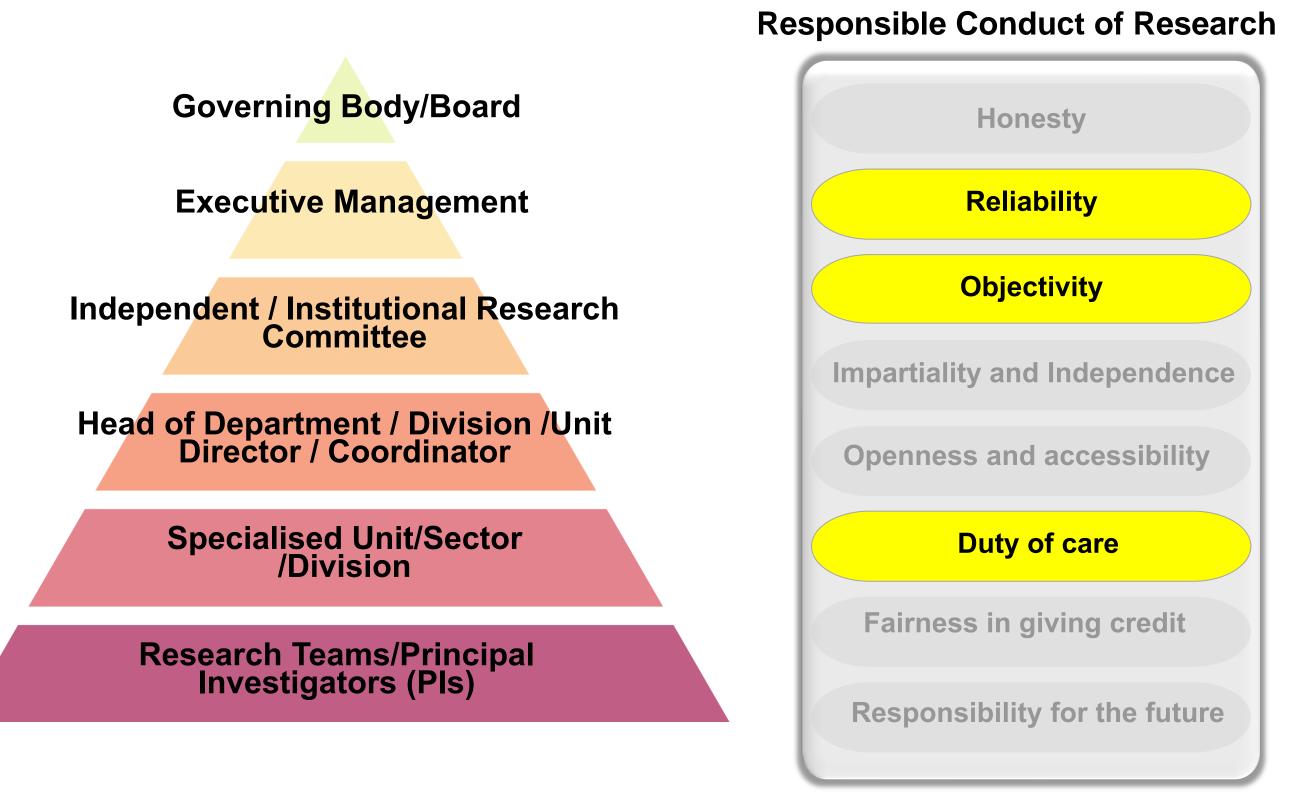
#### MOH Malaysia – Health Research Governance Framework



1.Rani M et. el. J Evid Based Med. 2011 Nov;4(4):204-13. doi: 10.1111/j.1756-5391.2011.01161 2. Smits P, Champagne F. Health Res Policy Syst. 2020 Feb 18;18(1):22. doi: 10.1186/s12961-020-0525-

2.Department of Health, UK. Research governance framework for health and social care. 2nd edition London: Department of Health, 2005

### Organisational Structure in Health Research Governance

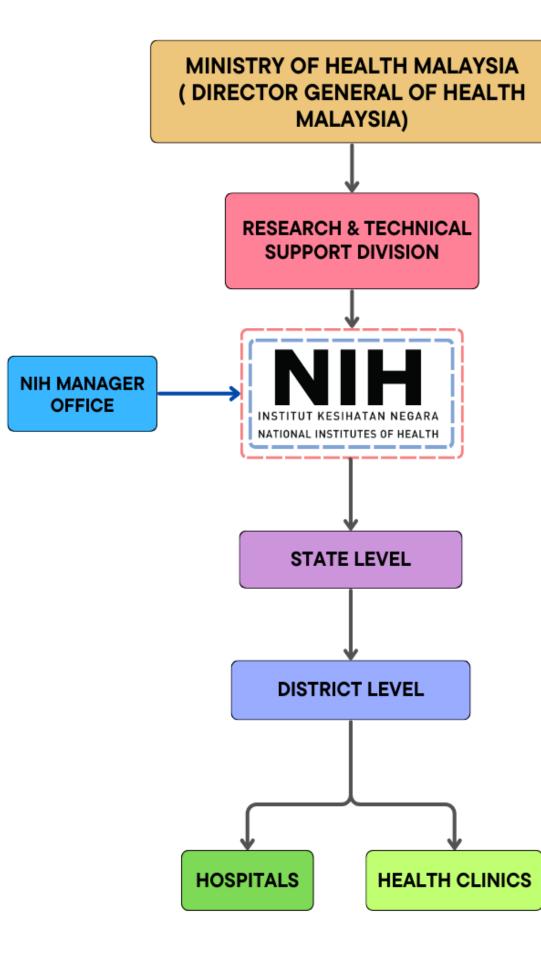


1. World Health Organization. (2014). Standards and operational guidance for ethics review of health-related research with human participants. World Health Organization.

2.National Health and Medical Research Council, Australian Research Council, & Universities Australia. (2018). Australian code for the responsible conduct of research. Commonwealth of Australia

3.Department of Health, UK. Research governance framework for health and social care. 2nd edition London: Department of Health, 20054. Smits P, Champagne F, Health Res Policy Syst. 2020 Feb 18;18(1):22. doi: 10.1186/s12961-020-0525-z.

## MOH Malaysia's Organisational Structure

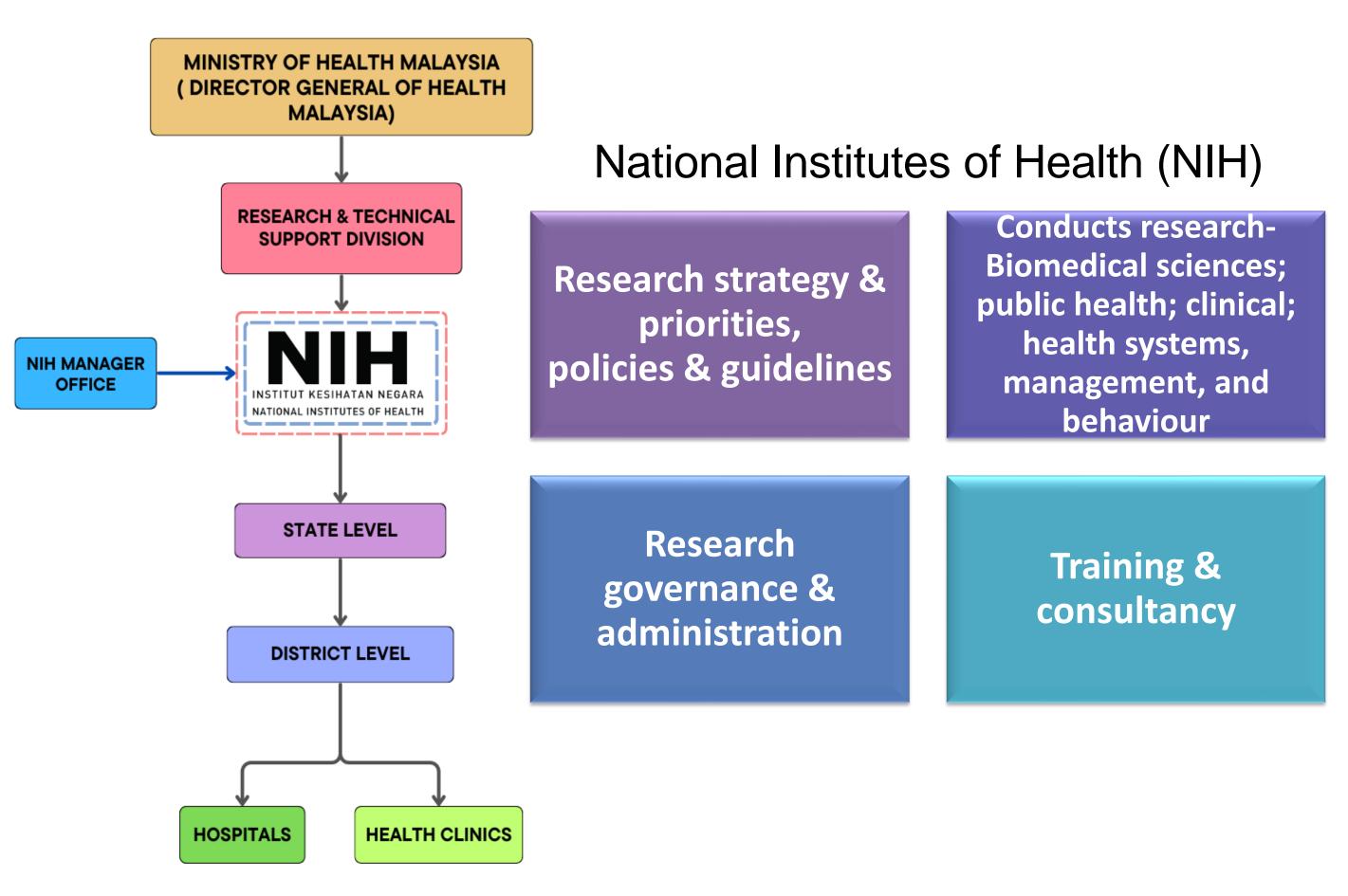


#### National Institutes of Health (NIH)

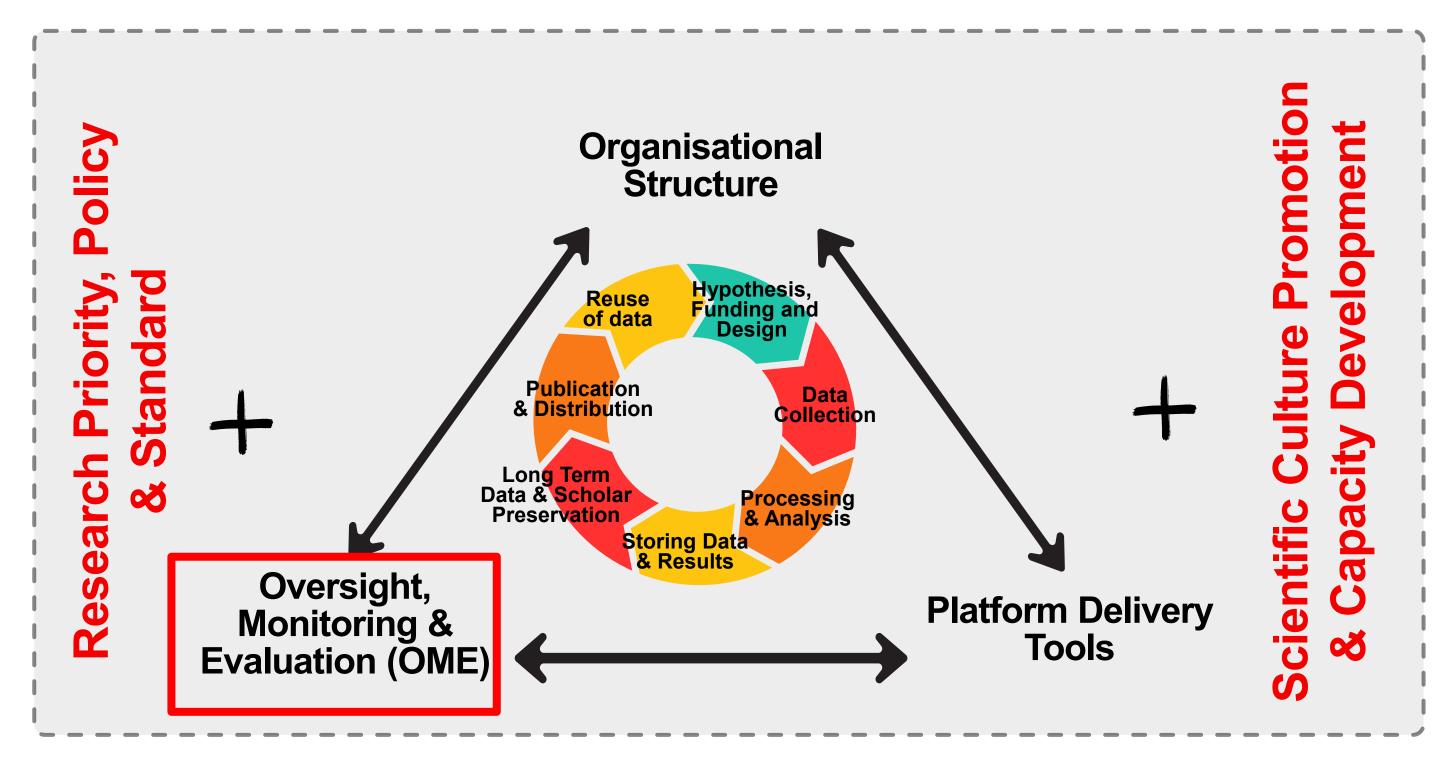


Established under the 7<sup>th</sup> Malaysia Plan and launched in August 2003

## MOH Malaysia's Organisational Structure



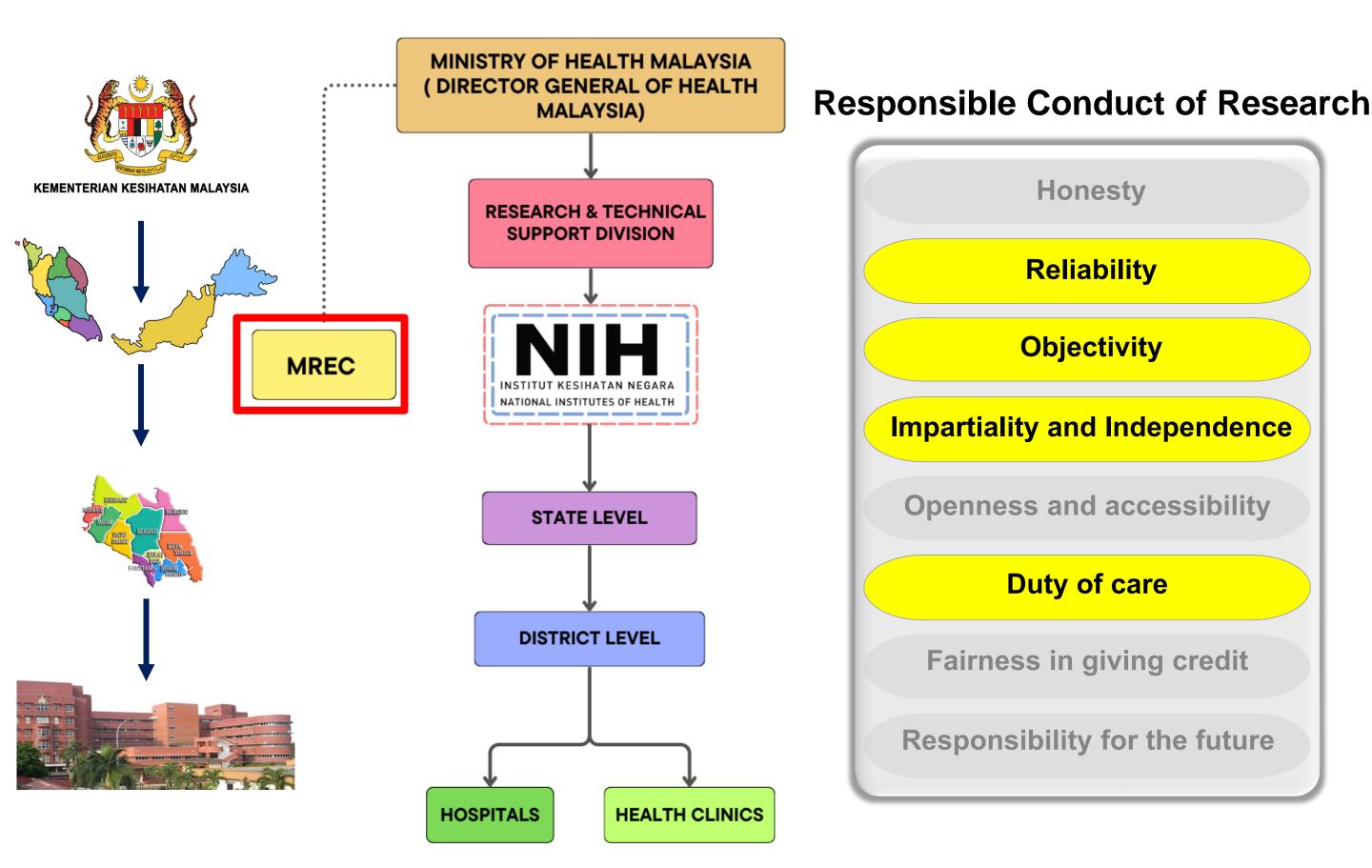
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## Oversight, Monitoring & Evaluation



## Oversight, Monitoring & Evaluation By Independent Research Ethics Committee

## MREC

Est. 2002

#### **MEDICAL RESEARCH & ETHICS COMMITEE**

Review &	Research Conduct Oversight	Monitoring of Adverse Events	Monitoring of Protocol Deviation	Compliance Audit
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Provides independent guidance, advice and decision on ethical issues of health research

involving human subjects conducted by MOH staff or in MOH facilities.

Ensures that research is not only ethically accepted but, Scientifically sound and rights of subjects are protected Oversight, Monitoring & Evaluation By Independent Research Ethics Committee

#### NATIONAL COMMITTEE FOR CLINICAL RESEARCH (NCCR)

MREC

MEDICAL RESEARCH & ETHICS COMMITEE

#### NSCERT

NATIONAL STEM CELL RESEARCH & THERAPY COMMITTEE **NRDHM** 

NATIONAL RESEARCH & DEVELOPMENT FOR HERBAL MEDICINE COMMITTEE

#### FIH

FIRST IN HUMAN SCIENTIFIC REVIEW COMMITTEE

**ESTABLISHMENT OF INSTITUTIONAL -LEVEL COMMITTEE** 

#### ACUC

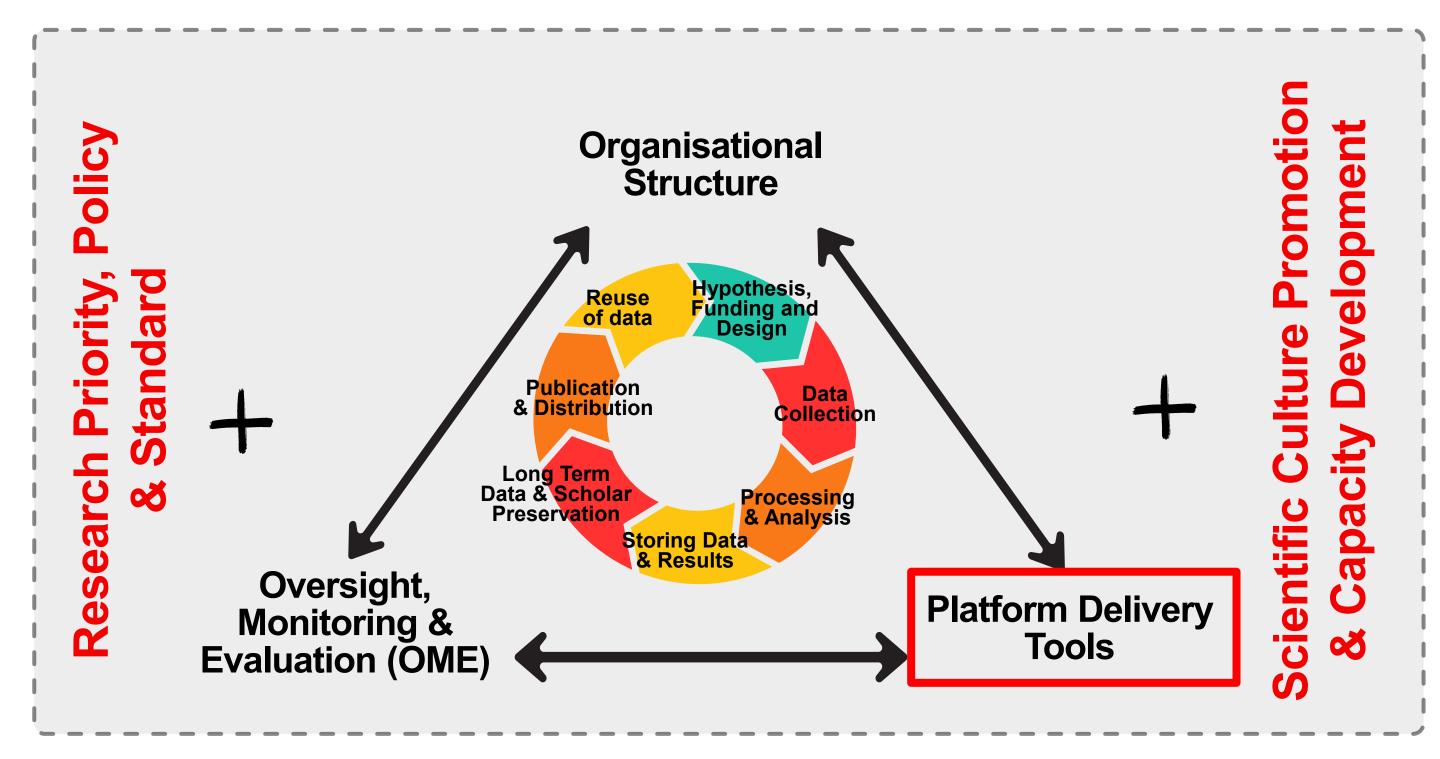
#### GRP

#### RRB

ANIMAL CARE & USE GRANT REVIEW PANEL COMMITTEE RESEARCH INSTITUTIONAL BIOSAFETY REVIEW BOARD (JPP-NIH)

**IBBC** 

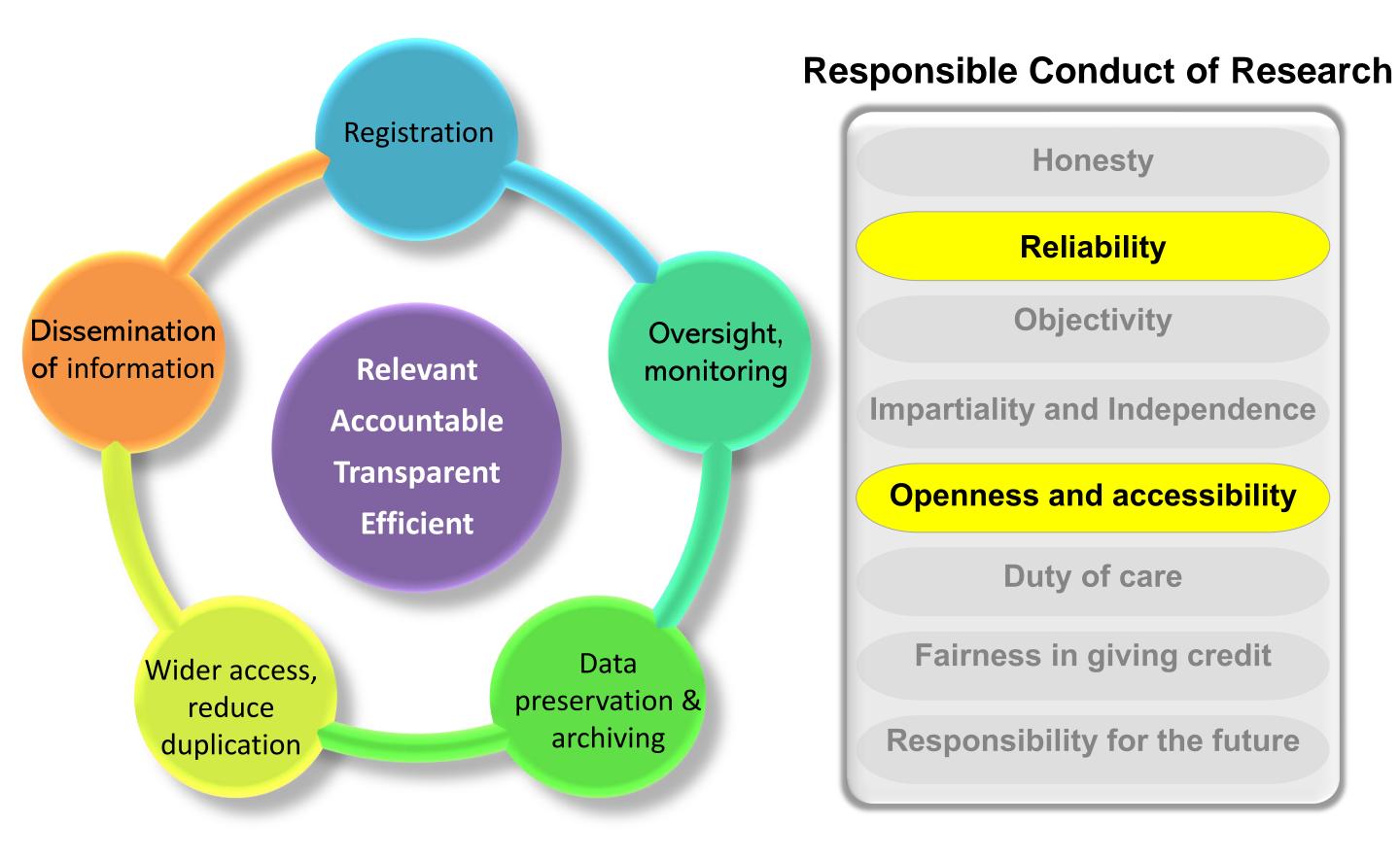
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## **Platform Delivery Tools**



## Network of systems in MOH



#### National Medical Research Register (NMRR)

- Prospective research registration
- Funding application
- Ethical approval
- Monitoring during the research conduct
- Submission of final reports

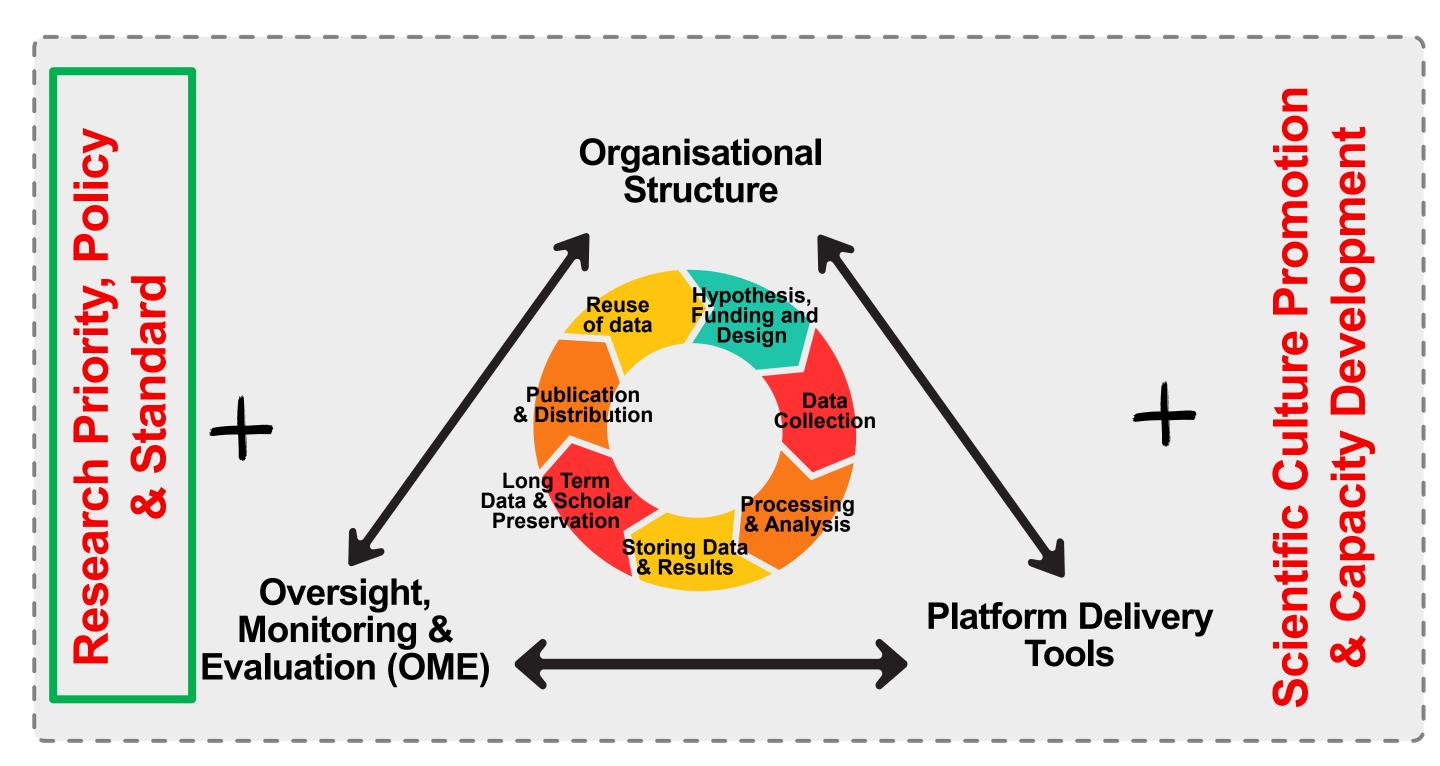
#### NIH Data Repository System (NIH- DaRS)

 Archives and preserves research data

#### NIH Research Digital Repository System (NIH - DSpace)

- Archives scholarly works and outputs
- Allows open access

#### MOH Malaysia – Health Research Governance Framework



1.Rani M et. el. J Evid Based Med. 2011 Nov;4(4):204-13. doi: 10.1111/j.1756-5391.2011.01161 2. Smits P, Champagne F. Health Res Policy Syst. 2020 Feb 18;18(1):22. doi: 10.1186/s12961-020-0525-

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### Research Priorities , Policies, Guidelines & Standards



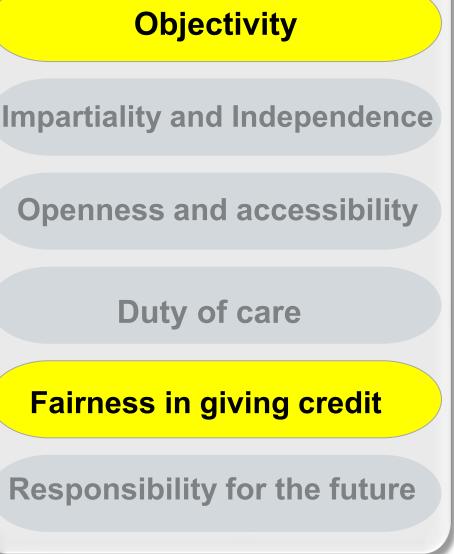
improve the universal health coverage and transforming the nation into a high income country by 2030

#### MOH's Research & Technical Support Programme Strategic Planning (2021-2025)

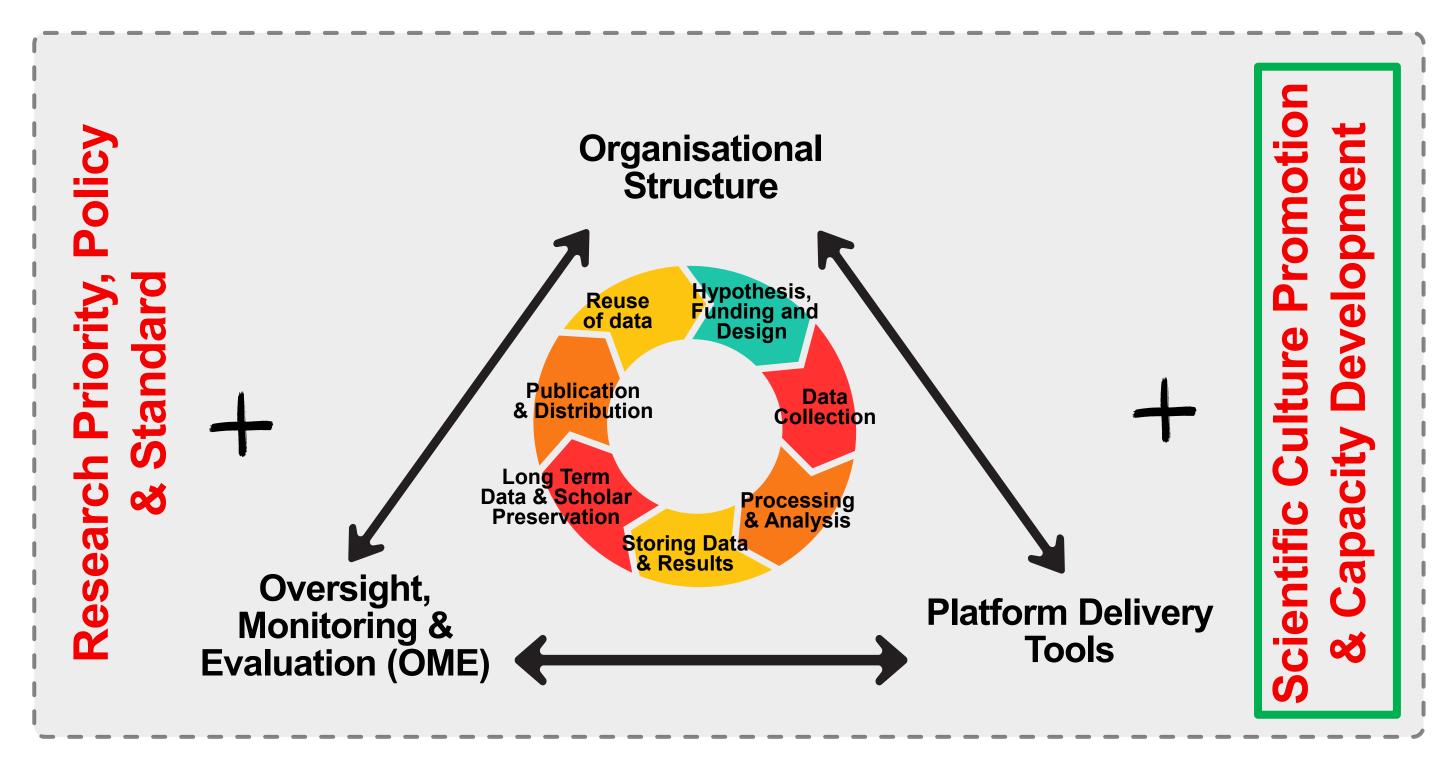
• Sets the direction, standards and goals in health research

#### **Policies / Guidelines**

- NIH Guidelines for Conducting Research in MOH's Facilities & institution,3rd Edition 2021
- Laid out the general rule and requirement for conducting research in the MOH facilities & institutions



#### MOH Malaysia – Health Research Governance Framework

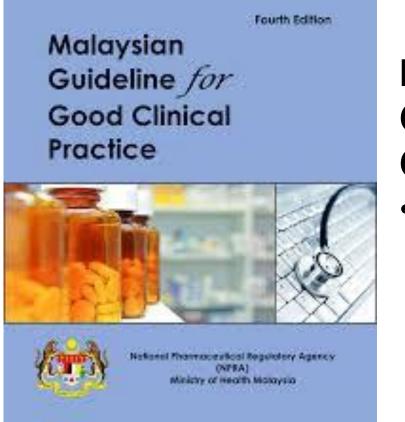


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## Scientific Culture & Human Capacity Development

#### **Responsible Conduct of Research**



#### Mandatory Good Clinical Practice (GCP) Certification

For all participating in interventional research and clinical trials



## Scientific Culture & Human Capacity Development

## - MyKursus

INSTITUT KESIHATAN NEGARA NATIONAL INSTITUTES OF HEALTH

KATALOG KURSUS

#### **Courses & Workshops on best research practices**

- Organised by MOH all year round
- Offered to both novices as well as established researchers

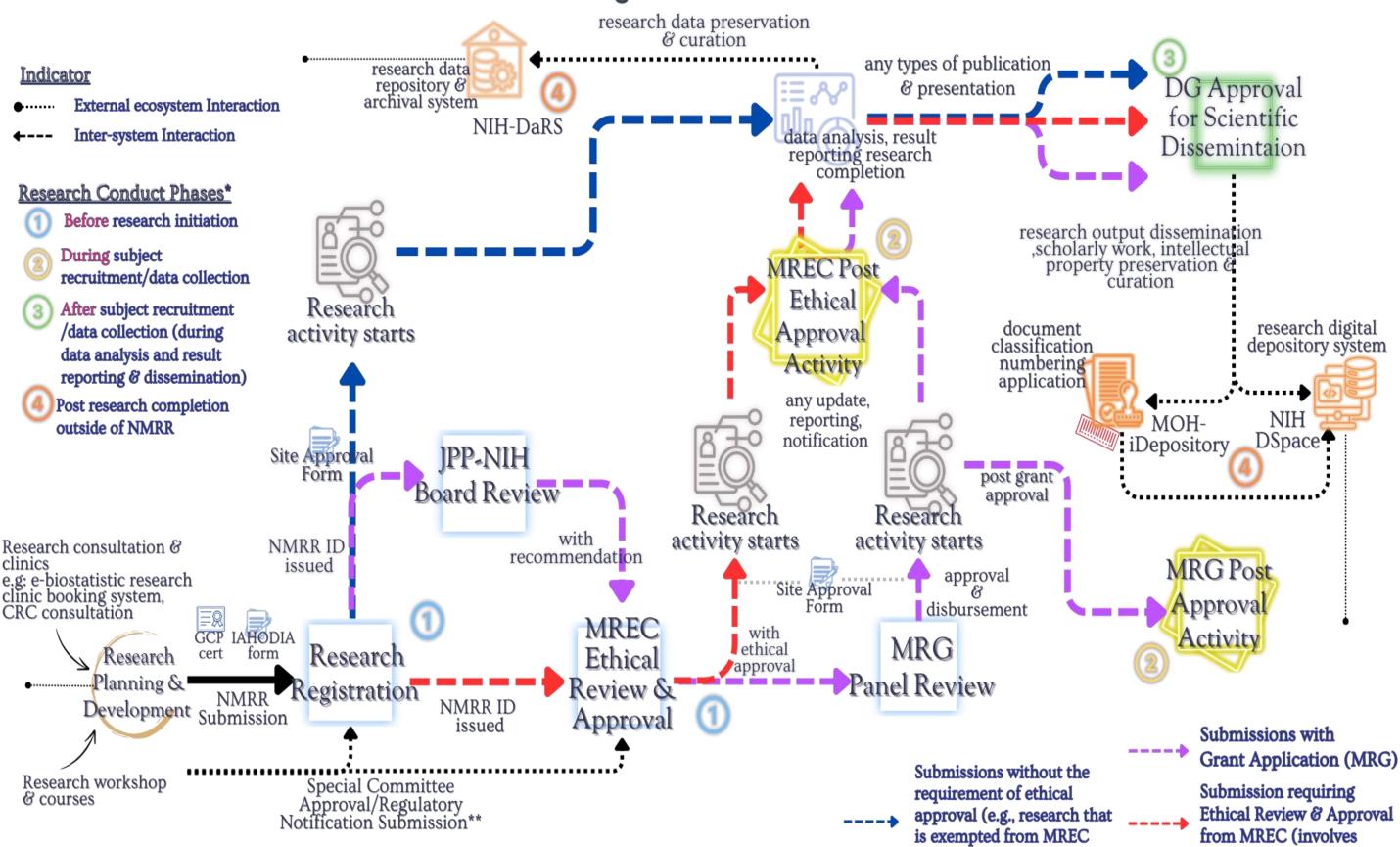
Tajuk	J†	Penganjur
BENGKEL PEMURNIAN MODUL TADBIR URUS KLINIKAL UNTUK BAKAL PEMIMPIN KEMENTERIAN KESIHATAN MALAYSIA		PUSAT PEMBANGUNAN KECEMERLANGAN TADBIR URUS KLINIKAL, INSTITUT PENGURUSAN KESIHATAN
IMPLEMENTING GLP PRINCIPLES IN RESEARCH FACILITY ACCORDING TO THE OECD PRINCIPLES		UNIT ENTOMOLOGI, PUSAT PENYELIDIKAN PENYAKIT BERJANGKIT (IDRC), INSTITUT PENYELIDIKAN PERUBATAN



BENGKEL PEMANTAPAN HALATUJU STRATEGIK INSTITUT KESIHATAN UMUN	TAKWIM LATIHAN RANGKAIAN PUSAT PENYELIDIKAN KLINIKAL (CRC) BAGI TAHUN 2024					
	No.	BULAN	NAMA KURSUS	TARIKH	ANJURAN	
	1		Proposal Writing Workshop	16 Jan	CRC Hospital Seri Manjung	
CME NIH 9/2024: DIALLING FOR DATA: OVERCOMING CHALLENGES IN A NAT	2	JANUARI	CRC in House CME	17 Jan	CRC Hospital Taiping	
	3		Introduction to Clinical Research	17-18 Jan	CRC Hospital Sibu	
BENGKEL PENULISAN SAINTIFIK BAGI INSTITUT KESIHATAN UMUM	4		Pubmed Short Training	18 Jan	CRC Hospital Taiping	
	5		NMRRR Registration Workshop	24 Jan	CRC Hospital Umum Sarawak	
	6		Clinical Audit Workshop	30-31 Jan	CRC Hospital Putrajaya	
CME NIH 10/2024: HARNESSING GENE EDITING TECHNOLOGY FOR TREATING	7		Training of Trainers Workshop : ICR Module Ver 2	1 Feb	CRC Hospital Umum Sarawak	
	8		Introduction to Clinical Research Workshop	5-6 Feb	CRC Hospital Pakar Sultanah Fatimah	
ENSURING ACCURACY: A WORKSHOP ON QUALITY CONTROL IN THE MICROB			Introduction to Clinical Research for Cluster Hospital	5-6 Feb	CRC Hospital Sultan Ismail, Johor	
	10		Introduction to Clinical Research	6-7 Feb	CRC Hospital Seberang Jaya	
	11		Introduction to Clinical Research (Paramedic)	19-20 Feb	CRC Hospital Raja Perempuan Zainab II, Kelantan	
	12		Research Promotion Week	19-22 Feb	CRC Hospital Sungai Buloh	
	13		Introduction to Clinical Research (TOT)	20-21 Feb	CRC Hospital Queen Elizabeth, Sabah & CCRN, ICR	
					1	

: work & visualisation by) Research Registry & Data Coordination , Sector for Ethics & Research Surveillance , NIH, MOH

human subject)



review)

#### General Overview of Conduct of Research Involving MOH facilities & institution

## Conclusion

- The need for a robust health research governance framework to uphold research integrity.
- The MOH Malaysia's health research governance framework providing robust governance and administration within the MOH health research ecosystem.
- By embracing the RCR principles within its framework, MOH Malaysia is committed to ensure the continuity and sustainability of its health research ecosystem while always upholding the principles of accountability, transparency and efficiency.



»Terima'-Kasih



## धन्यवाद

"Dhanyabaad"