



Nordic Digital Health Innovation Challenge Malaysia 2022

Addressing the prevalence of Non-Communicable Diseases in Malaysia

Agenda

- Opening remarks by Mr Kacper Pierzynowski, Senior Manager, Business Sweden
- Keynote remarks by Dr Feisul Idzwan Mustapha, Consultant Public Health Physician and Deputy Director (NCD), Ministry of Health
- Nordic Digital Health Innovation Challenge presentation - objective, scope and timeline by Mr Kacper Pierzynowski, Senior Manager, Business Sweden
- Q&A

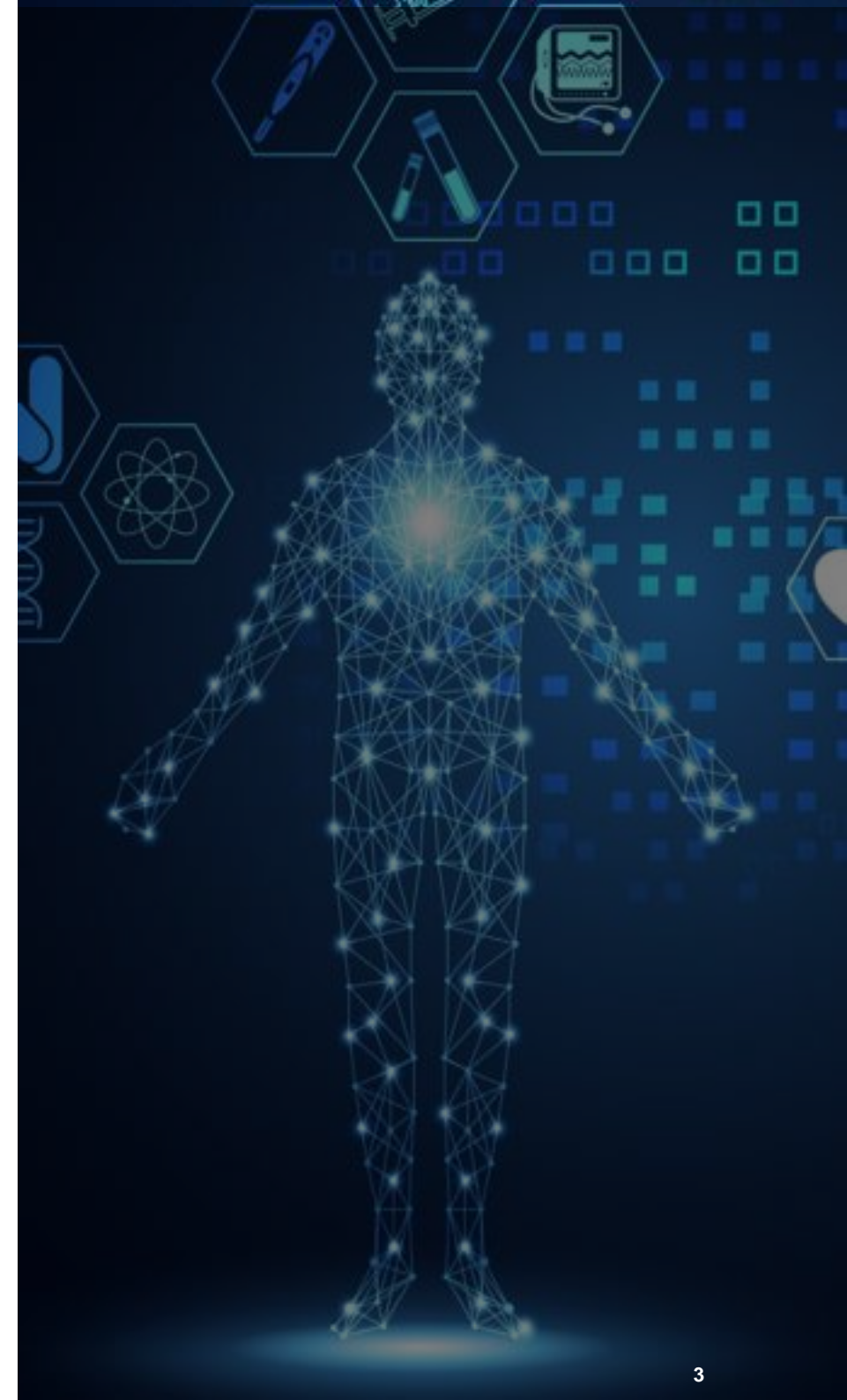


Nordic Digital Health Innovation Challenge

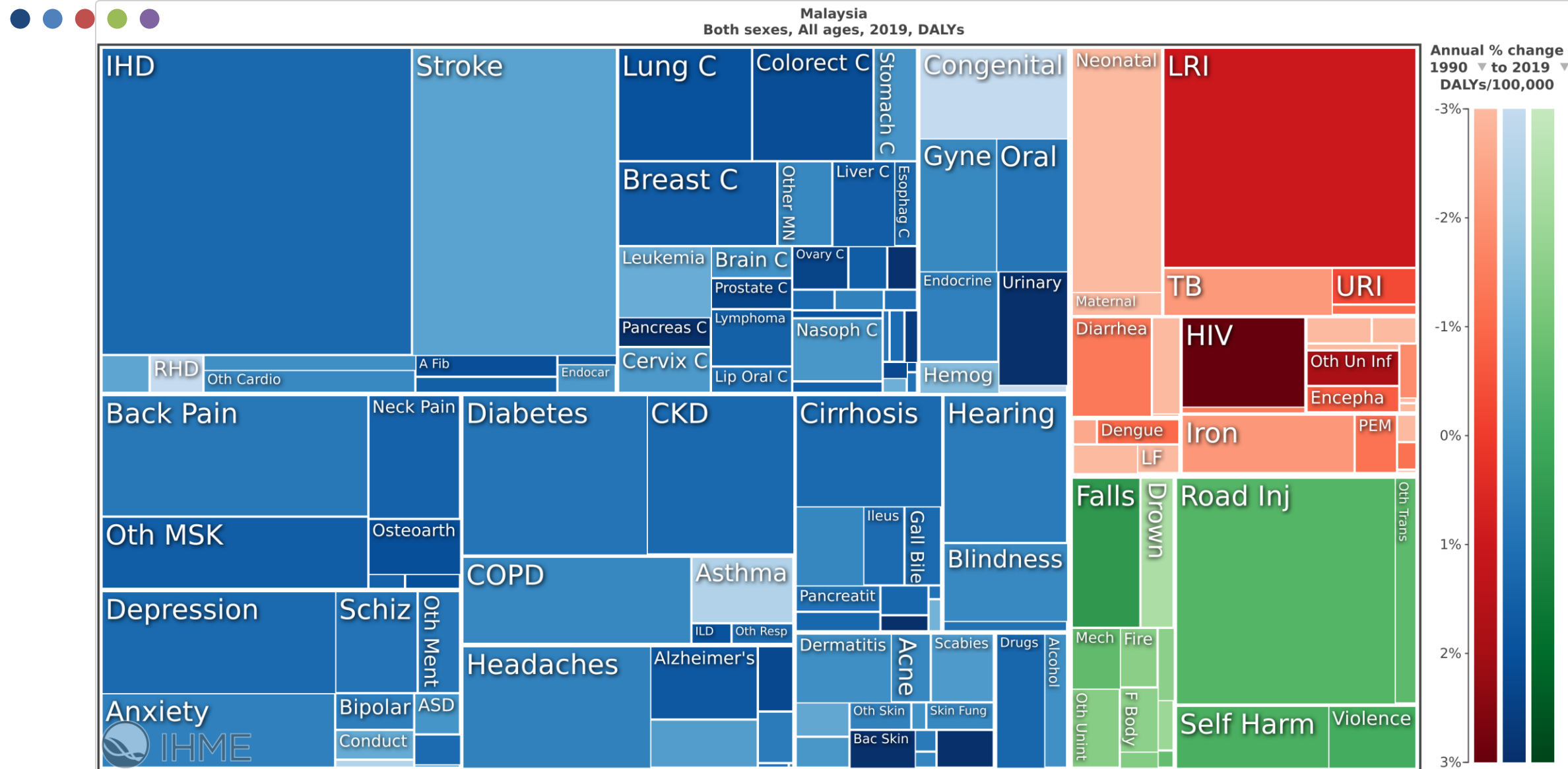
**ADDRESSING THE PREVALENCE OF NON-COMMUNICABLE DISEASES
IN MALAYSIA**

Keynote remarks

**Dr Feisul Idzwan Mustapha, Consultant
Public Health Physician and Deputy
Director (NCD), Ministry of Health**



Burden of Disease, Malaysia (2019)



Prevalence of NCD Risk Factors in Malaysia, 2011-2019

(≥18 years)

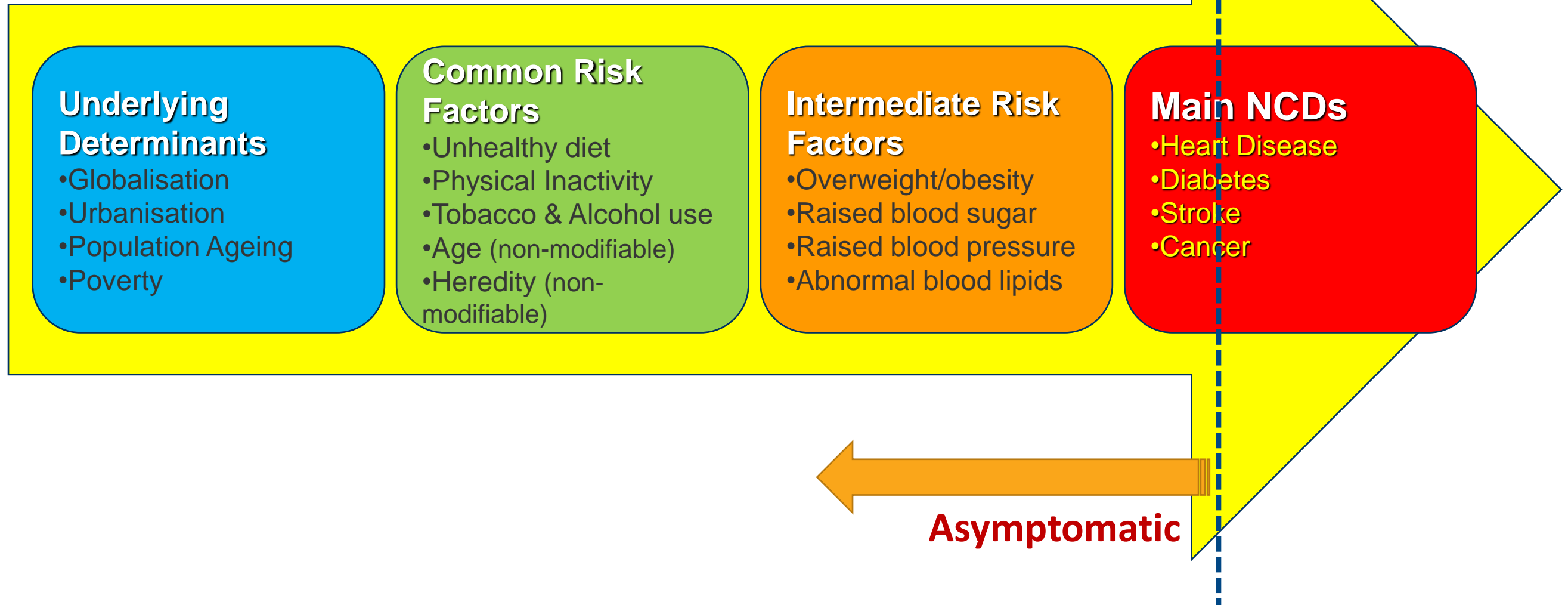


	2011	2015	2019
Diabetes Mellitus	11.2	13.4	18.3
Hypertension	32.7	30.3	30.0
Hypercholesterolaemia	35.1	47.7	38.1
Overweight	29.4	30.0	30.4
Obesity	15.1	17.7	19.7
Physically inactive	35.7	33.5	25.1
Smoking*	23.1	22.8	21.3

*Data for 15 years and above

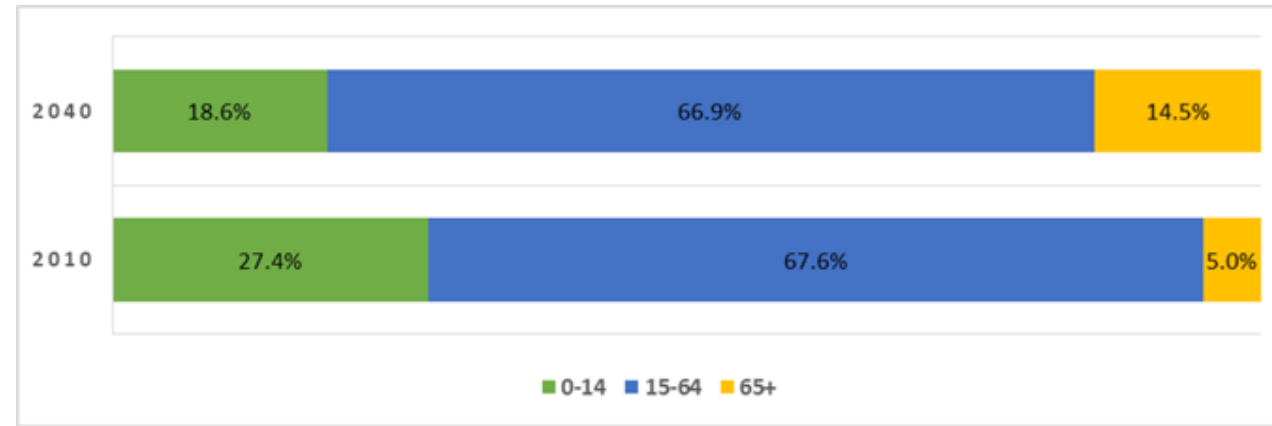
Source: National Health and Morbidity Survey 2019

The Causation Pathway for NCDs

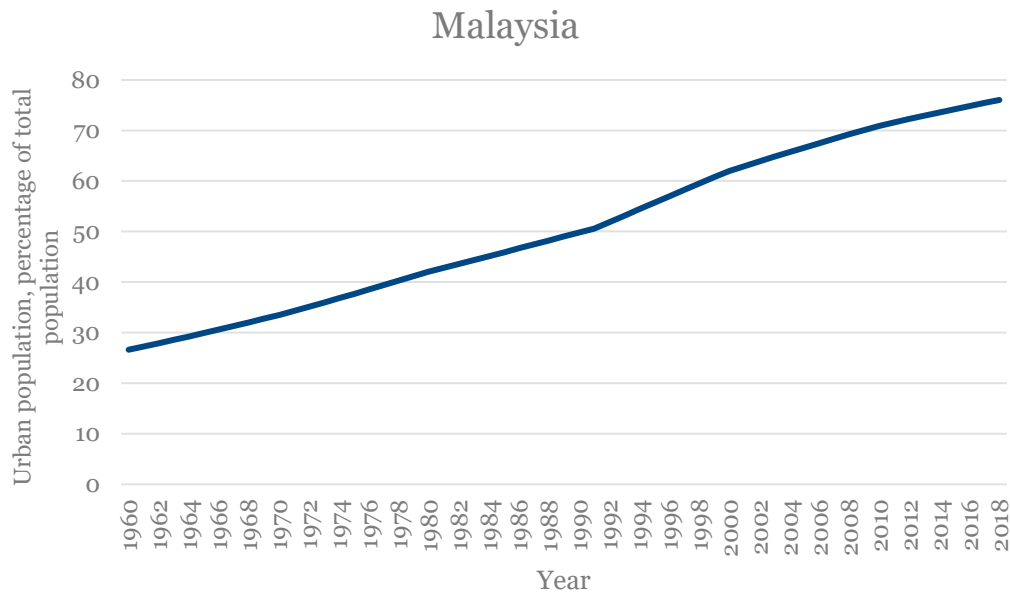


Underlying Determinants

- Globalisation
- Urbanisation
- Population Ageing
- Poverty



Population age structure for Malaysia, 2010 & 2040



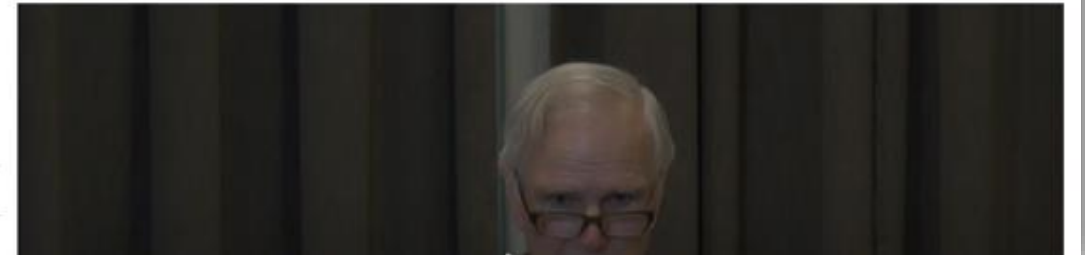
Proportion of urbanisation in Malaysia

Poorer than we think: Malaysia's official poverty figures 'vastly' undercounted, says UN expert

NATION

Friday, 23 Aug 2019

12:02 PM MYT



HOME / MALAYSIA

Malaysia's malnutrition paradox: While kids stunted, adults growing (sideways)

Published 9 months ago on 30 November 2018

By Zurairi AR

Continuum of NCD Care



Supply: Provision of services



Prevention



Early detection



**Diagnosis and
management**

Primary care
Secondary care



Rehabilitation



Palliative care

Demand: Behaviour of individuals/patients

Digital Health in Malaysia



- Digital health solutions provide tools to
 - help patients take responsibility for their own health
 - meet their needs across different stages of their healthcare journey
 - from diagnosis and treatment, to post-discharge follow-up



Prevention



Early detection



**Diagnosis and
management**

Primary care
Secondary care



Rehabilitation



Palliative care

Considerations in Malaysia (1)



- The most vulnerable groups of the population may not engage well with digital health solutions
 - Level of health literacy
 - Level of IT literacy
- Types of smartphone & access to internet
- Understanding behaviours of Malaysians
 - Health-seeking behaviour
 - Self-care
- Do we invest much in **co-creation**?
- Do we incorporate behavioural insights?

Health-related behaviours of Malaysians

(examples)



1 in 3 adults have low health literacy (NHMS 2019)

Preferred source of information (T2D patients, MOH health clinics, 2019)

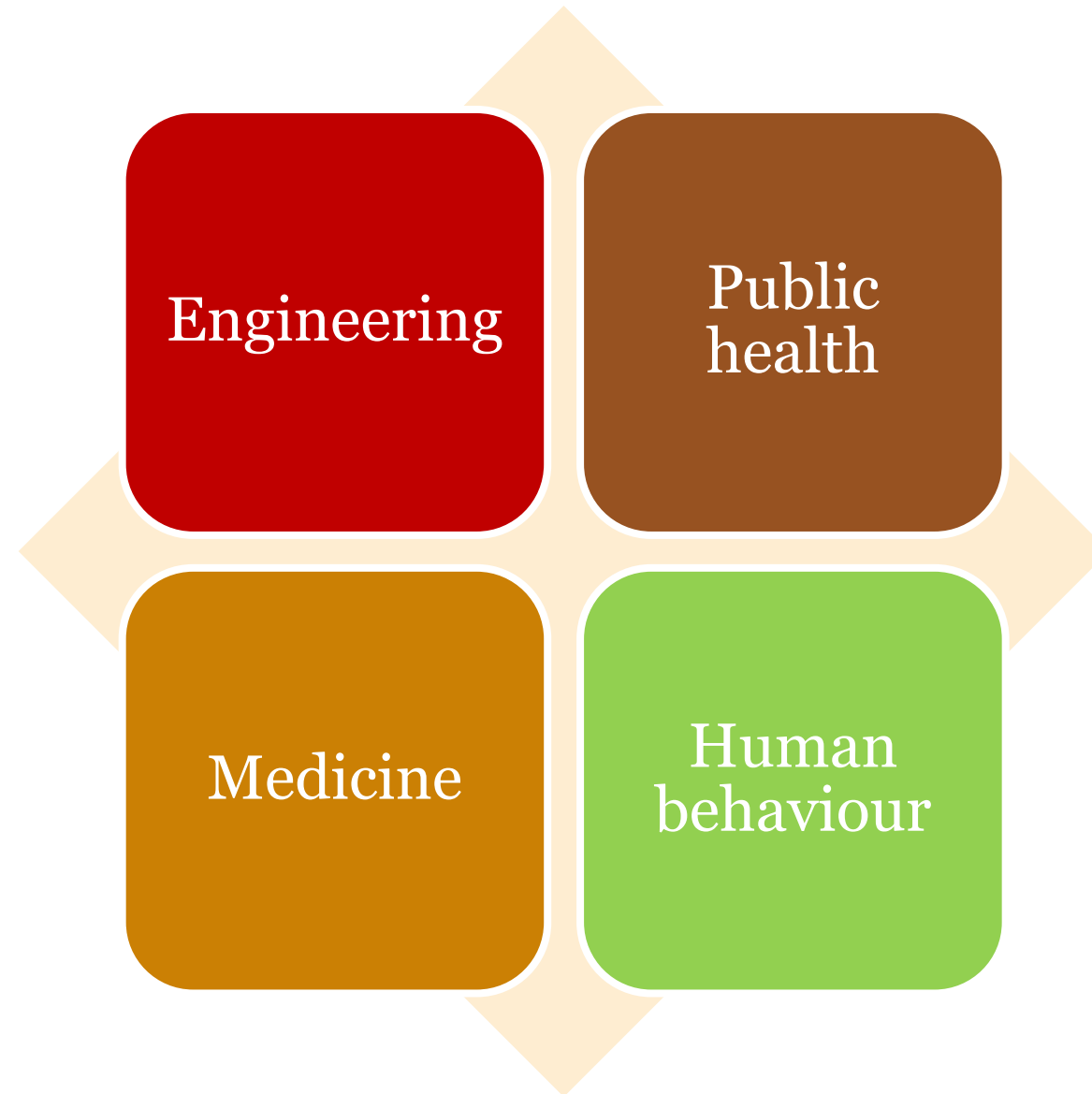
- **Face-to-face:** healthcare providers 86.8%, family 43.2%, friends 33.5%
- **Traditional media:** TV 68.1%, radio 27.0%, newspaper 36.8%
- **New media:** WhatsApp 48.1%, search engines 41.0%, social media 31.2%
- **Apps:** 9.2%

Considerations in Malaysia (2)



- Current regulatory eco-system
- Current status of medical and health records in Malaysia
- Build-back-better – learning from the COVID-19 pandemic
- Collateral damage due to pandemic, among vulnerable populations

Intersectionality for Digital Health



Key takeaways



- Digital health – way forward
- Need to address the inter-sectionality of digital health and behaviours and public health
 - Co-creation is the way forward, incorporating behavioural insight
- Think of on how to upscale – right from the beginning
- Detailed evaluation – planned from the start
 - Including process evaluation



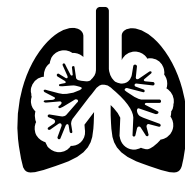



Nordic Digital Health Innovation Challenge Malaysia 2022

Addressing the prevalence of Non-Communicable Diseases in Malaysia

Nordic Digital Health Innovation Challenge 2022

ADDRESSING THE PREVALENCE OF NON-COMMUNICABLE DISEASES IN MALAYSIA

Rationale	<p>The prevalence of non-communicable diseases (NCDs) and related risk factors in Malaysia has risen substantially in the last two decades. This rapid increase in the number of patients suffering from NCDs presents a major challenge to public health and the economy of Malaysia. Hence, new and innovative solutions that can augment the healthcare system and tackle the rising health challenges are in high demand in Malaysia and the region</p>				
Initiative	<p>Digital Health Innovation Challenge is envisioned to accelerate a collaborative ecosystem of open innovation to enhance patient-centricity and improve patient outcomes in Malaysia. Through this challenge we would want to identify solutions which will empower NCD patients and community at risk to proactively reduce the risk factors of these diseases by increase accessibility to digital tools enabling self-care and monitoring as well as to streamline patient-physician interaction and remote care experience</p>				
NCD areas	 Cardiovascular diseases	 Chronic respiratory diseases	 Diabetes	Other: <ul style="list-style-type: none">• Hypercholesterolaemia• Cancer• CKD• Mental Health• Etc.	



Recruitment of Nordic innovative solutions that enable early detection and management of NCDs



Target Solutions

Harness digital technology to streamline patient-physician interaction and remote care experience

Early Detection & Management

- Solutions that can improve the early detection self-care and monitoring of Cardiovascular, Chronic respiratory, Diabetes, Cancer, Hypercholesterolaemia, CKD and other NCDs

Mass Screening

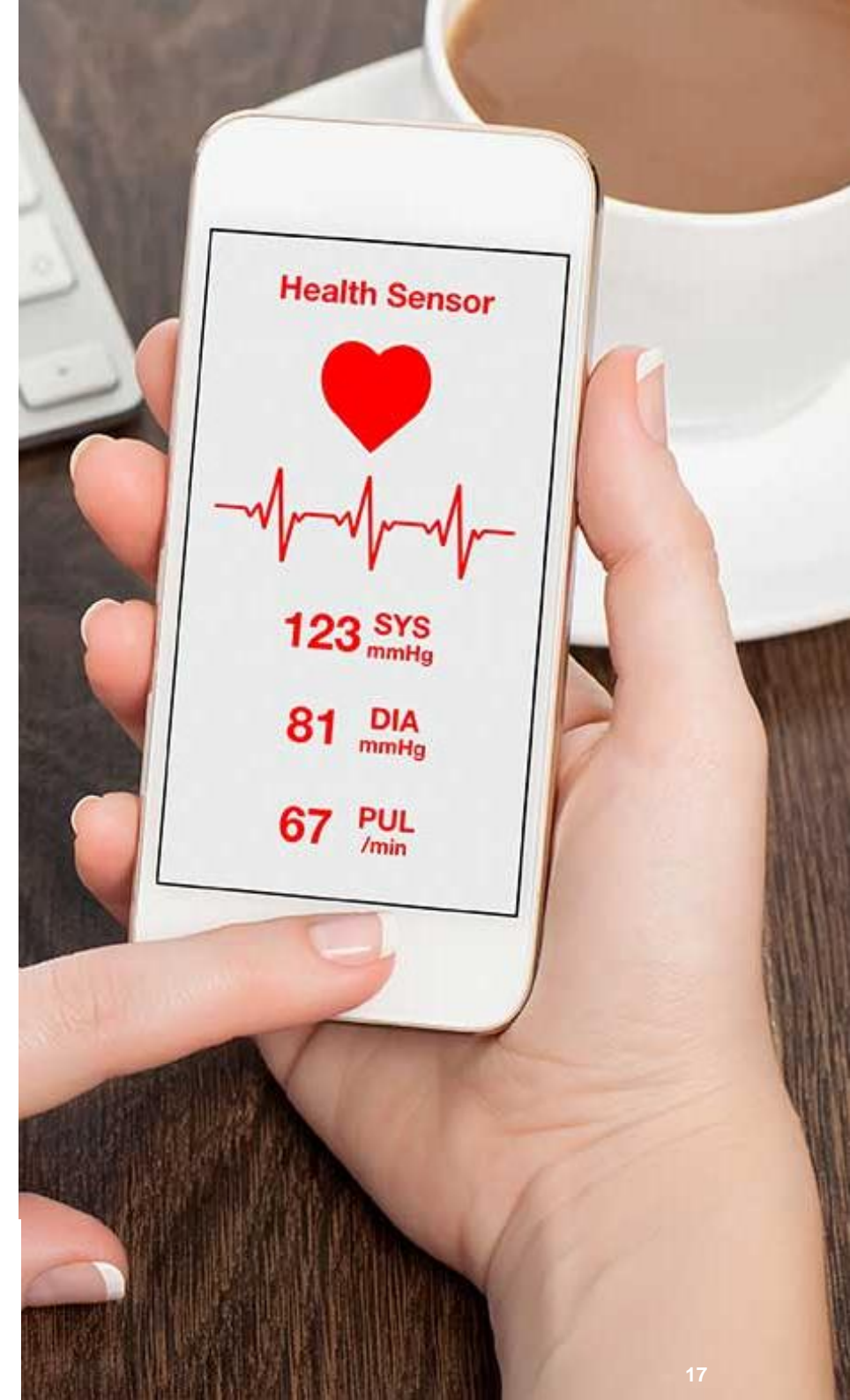
- Increase targeted screening for high-risk group, underdiagnosed community and at-risk population

Patient Awareness

- Educate patient with easy access information to increase awareness and achieve behavioral change

Doctor Awareness

- Increase capacity of healthcare professionals to proactively screen for Cardiovascular, Chronic respiratory, Diabetes and other NCDs when facing patients



Applications will be evaluated by the Steering Committee based on the following equally weighted criteria



Evaluation criteria

Harness digital technology to streamline patient-physician interaction and remote care experience

Impact	<ul style="list-style-type: none">• Is the design of the solution well thought out to be accepted by the target population?
Feasibility	<ul style="list-style-type: none">• Practicality of implementation within existing systems / policy framework?
Uniqueness	<ul style="list-style-type: none">• How innovative and novel is the solution?
Scalability	<ul style="list-style-type: none">• How can your solution be taken to a next level, national roll out?



Why should you join Nordic Digital Health Innovation Challenge 2022



Benefits

Harness digital technology to streamline patient-physician interaction and remote care experience

Network

- Gain access to regional innovation network for knowledge sharing, product showcase and market expansion

POC

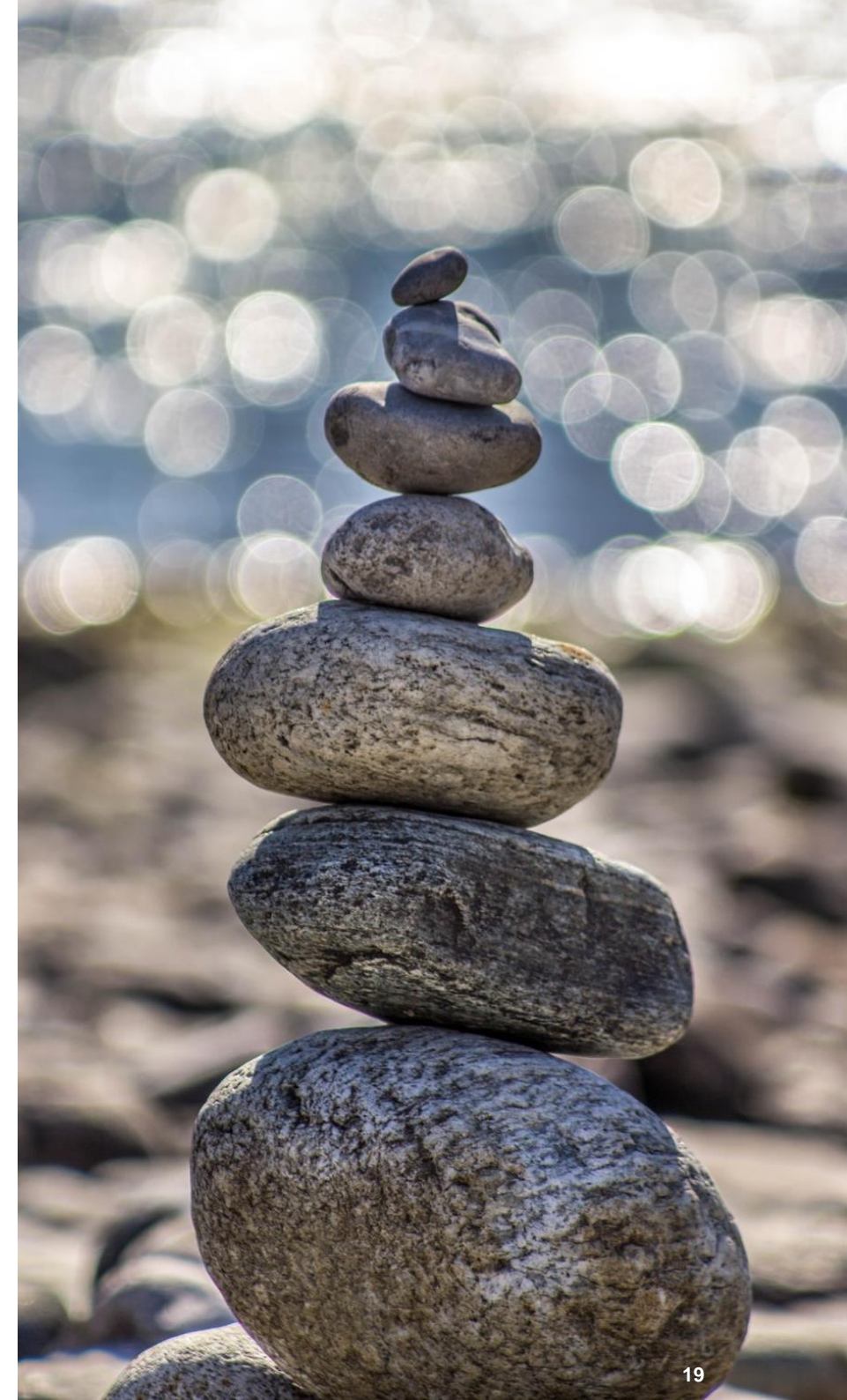
- Gain access to Sandboxes for product/solution trials and POC

Mentorship

- Gain access to network of local and global experts to further develop your solution and adapt to local context and regulations

Funding

- Gain access to funding to test and scale up your solution



Tap into Malaysian ecosystem with your solutions to accelerate a collaborative ecosystem of open innovation



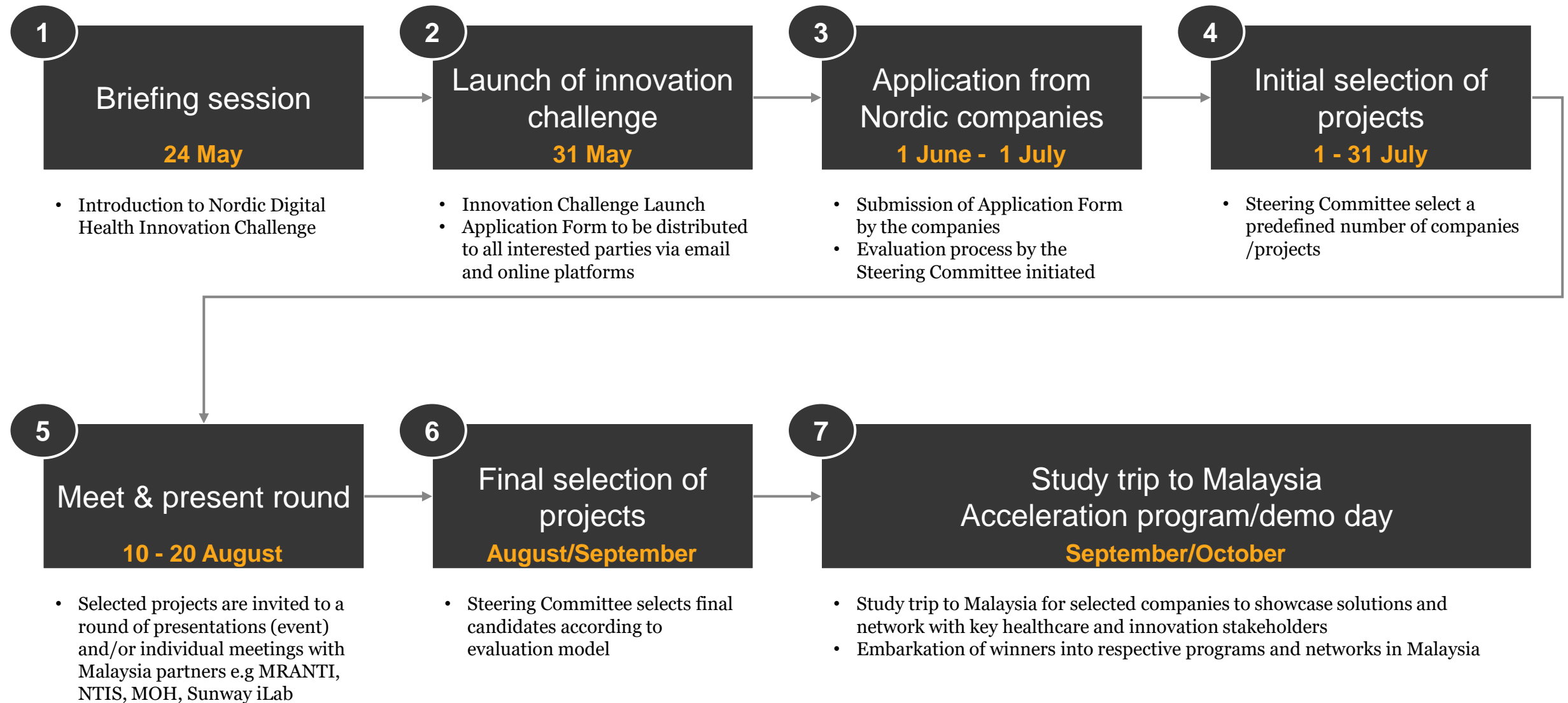
- National Technology and Innovation Sandbox (NTIS) is a facility that allows innovators, startups, scaleups and high-tech entrepreneurs and researchers to test their products, services, business models and delivery mechanisms in a live environment
- Scope: capacity building programs, market access, funding, testbed and test environment facilitation, regulatory compliance
- **Benefits for Nordic companies:** access to network for product development, adaptation, testing and regulatory compliance




- Malaysia Digital Economy Corporation (MDEC) is the government agency under the Ministry of Communications and Multimedia Malaysia entrusted to lead the nation's digital economy forward. MDEC's mandate includes driving digital adoption, development of industry ready tech talents, digital economy policies and global champions
- Scope: Global Technology Grant (GTG) and 4IR Catalyst Grant (4ICG)
- **Benefits for Nordic companies:** access to funding for research or innovation, development and commercialisation of innovative commercial product or service, and deployment of solutions in partnership with an end-user



Nordic Digital Healthcare Innovation Challenge – overview & preliminary timeline



Practical information and next steps



Nordic Digital Health Innovation Challenge Application Form

The prevalence of non-communicable diseases (NCDs) and NCD risk factors in Malaysia have risen substantially in the last two decades.

- 1 in 5 adults in Malaysia has diabetes or equivalent to 3.9 million population and the trend is increasing as reported by National Health and Mobility Survey (NHMS) from 11.2% (2011) to 18.3% in 2019
- 3 in 10 adults or 6.4 million people in Malaysia have hypertension and only half of them are aware they have the disease
- 4 in 10 adults or 8 million adult Malaysians have hypercholesterolemia, 1 in 4 of them are not aware of their disease
- Cardiovascular diseases such as stroke and coronary heart diseases, are the leading causes of death in Malaysia, and 1.7 million Malaysians are currently living with three (3) major risk factors which are diabetes, hypertension and hypercholesterolemia

Nordic Digital Health Innovation Challenge is envisioned to accelerate a collaborative ecosystem of open innovation to enhance patient-centricity and improve patient outcomes in Malaysia. Through this challenge we would want to identify solutions which will empower NCD patients and community at risk to proactively reduce the risk factors of these diseases by increase accessibility to digital tools enabling self-care and monitoring as well as to streamline patient-physician interaction and remote care experience

* Required

1. What is the name of your company? *

2. What NCD(s) does your solution target? *

- ☐ Cardiovascular Diseases inc. Heart Failure
- ☐ Chronic Kidney Disease
- ☐ Diabetes
- ☐ Cancer
- ☐ Chronic Respiratory Diseases
- ☐ Mental Health
- ☐ Other

- Application Form to be distributed digitally to all participants in this call on **30th of May**
- Application Form link and QR code will be also published via partners social media channels
- Solution providers will be able to apply digitally starting on the **31st of May**

- Challenge Official Information and Rules accessible via embedded link in the Application Form (to be distributed on 30th of May to all participants in this call)



- For any questions or comments please contact Henrik.Zygmunt@business-sweden.se
- Solution providers are also encouraged to mail any additional material such as company & product presentations to Henrik.Zygmunt@business-sweden.se

Q&A – Nordic Digital Healthcare Innovation Challenge 2022



