

PRESS RELEASE

For Immediate Release

**THREE STARTUPS TO TEST-BED AND SCALE TRANSFORMATIVE SOLUTIONS IN
PUBLIC HEALTHCARE INSTITUTIONS**

*Winning Projects to be Guided by the Newly Established Centre for Healthcare Innovation Evaluation
Framework (CHIEF) Designed to Accelerate Adoption of Innovations*

29 SEPTEMBER 2023, SINGAPORE – Three technology startups have emerged winners of Healthcare InnoMatch 2023, with their innovative near-market solutions that will drive Singapore's push for a healthier population. The winners were selected from eight finalists, beating 163 participants from across 28 countries.

Healthcare InnoMatch is an annual global challenge driven by the Centre for Healthcare Innovation (CHI) under its CHI Start-up Enterprise Link (CHISEL) initiative set up to strengthen healthcare transformation. It is supported by the Ministry of Health (MOH) and Temasek Foundation (TF), together with the three public healthcare clusters National Healthcare Group (NHG), National University Health Systems (NUHS) and SingHealth.

Themed ***"Reshaping preventive care for a healthier population"***, this year's competition focused on solutions that best address challenges and needs in keeping patients healthy and preventing chronic health conditions. The winners were awarded a total of up to SGD 2.4 million to begin test-bedding their innovations at a public healthcare cluster they have been paired with, eventually adopting and scaling for use in public healthcare institutions across Singapore and beyond.

The winners and their partner healthcare clusters are (in alphabetical order):

- CardioKol (partnered with NUHS)
- Neurowyze (partnered with NHG)
- Wonder Technology (partnered with SingHealth)

The synopses of their winning proposals are in **Annex 1**.

In the finale event attended by an audience of over 300, the finalists faced the challenging task of pitching their solutions to the panel of judges from the Health Promotion Board, MOH, NHG, NUHS, SingHealth, Synapse, and TF.

"Healthcare InnoMatch brings together healthcare startups from around the world annually to make the best-in-class solutions accessible to our patients and practitioners across Singapore's three healthcare clusters. This year's theme aligns with HealthierSG, our nation's focus on preventive health. We have

seen high-quality submissions and look forward to the impact created by the winning teams, measured by our standardised evaluation framework," shared Associate Professor Tan Cher Heng, Executive Director, Centre for Healthcare Innovation.

Mr Tay Choon Hong, CEO of Health Promotion Board said, *"In the role that the community plays in the future of healthcare, we need to have a shift in perspective. We should start to think of solutions that extend beyond individuals towards societal inclusion and participation. The participation rates for such solutions would be higher and more impactful for the community."*

Ms Ngiam Siew Ying, CEO of Synapse, shared the importance of IT viability in the finalists' solutions. He said, *"I'm excited to be here because technology is a major enabler when you think about healthcare transformation. If you intend to scale care models, the only way to do so is with technology. It is important that the solution is compatible with the environment you operate in, whether in terms of technical integration or business processes."*

Facilitating Faster, Better and Safer Adoption of Innovation

To further enhance the readiness and speed of adoption, all winning innovations will undergo a thorough and robust evaluation framework. Designed to give innovators, care providers and investors the confidence to adopt and scale, the **CHI Evaluation Framework (CHIEF)** is a one-stop platform to provide systematic and evidence-based approaches to assess the value and impact of these healthcare innovations.

With CHIEF, budding innovators will be equipped with the necessary guidance system from conceptualisation to adoption. Using the framework, they are able to benchmark their progress to specific milestones and checklists identified. The CHIEF advisors, made up of clinicians, researchers and officers from local and international healthcare innovation organisations led by the Ministry of Health (MOH), will provide further guidance and connect innovators to industry partners to help close the gap for projects that may not have satisfied any aspects of the framework.

Collaboration with Public Healthcare Clusters

Launched in 2021, Healthcare InnoMatch is a global call for proposals from start-ups and small and medium-sized enterprises (SMEs). It serves as a platform for public healthcare providers and innovators from Singapore and beyond to solve pressing healthcare challenges through forward-thinking approaches and breakthrough technologies. It seeks innovative ideas that can transform the future of healthcare, such as improving healthcare delivery, lowering barriers to affordable care, and bringing care closer to residents in the community.

All three public healthcare clusters in Singapore collaborate to assess the clinical and operational feasibility of healthcare innovations using a common evaluation framework.

The winning projects have been paired and test-bedded with at least one public healthcare cluster, where they can further customise their products and gain constructive feedback from healthcare providers and patients before it is scaled across the entire system if successful.

This is designed to accelerate the development of their new, near-market-ready technologies, which can be time-consuming and complex. Winning projects would also be able to take advantage of the experience of test bedding their innovations at the public healthcare cluster level to prepare them for future larger-scale implementation and commercialisation beyond Singapore.

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About Centre for Healthcare Innovation

The Centre for Healthcare Innovation (CHI) is committed to transform healthcare, driven by its three thrusts: Promoting a culture of innovation through thought leadership, achieve better health and healthcare by enabling workforce transformation, and to catalyse value-based outcomes by effecting systems-level change.

Founded in 2016 on the concept of co-learning and collaboration, CHI and its network of like-minded local and international partners create thought leadership, as well as co-build initiatives and programmes to inculcate a culture of innovation within healthcare.

Strengthened by this network, CHI has been able to customise and design signature programmes that aim to build a sustainable workforce via new andragogy and paradigms for our communities of carers and patients. To catalyse value-based outcomes and effect systems-level change, CHI's impactful platforms and initiatives drive innovation adoption and knowledge translation, consequently giving the healthcare community quicker access to the latest innovations.

CHI is enabled by our financial lever, the Ng Teng Fong Healthcare Innovation Programme that funds and supports healthcare innovation in collaboration with its partners through five (5) tracks – Strategic Training, Innovation, Community Enabling, Strategic Innovation, and Strategic Research.

The programme is managed by the TTSH Community Fund and CHI. Through meaningful and impactful collaborations, we will meet current and future healthcare challenges through innovative and value-driven care delivery to the populations we serve. For more information, visit www.chi.sg.

About CHI Start-up Enterprise Link (CHISEL)

Launched in November 2020, CHISEL is a platform to strengthen healthcare transformation. CHISEL facilitates a faster and more consistent adoption process for start-ups and SMEs to find suitable healthcare institutions to rapidly implement innovations using a sandbox approach.

Through a stage-by-stage approach, it will assist and enable start-ups and SMEs to demonstrate the value of their innovations in a simulated and/or clinical setting. CHISEL intends to present more innovations to the larger health community in the future through other initiatives similar to the Healthcare InnoMatch. These will give innovators access to more healthcare institutions, including public and private healthcare organisations and intermediate, long-term, and social care sectors.

Annex 1: Project Descriptions

Company: Cardiokol

Project Name: Voice Assist Arrhythmia Monitoring

Partnering Healthcare Cluster: NUHS

Atrial Fibrillation (AF), an abnormal heart rhythm(arrhythmia), is a major cardiovascular challenge associated with a five-fold increased stroke risk. Detecting AF is challenging because it often goes unnoticed due to its asymptomatic nature, especially in individuals 65 and older. Existing methods for monitoring AF have limitations, including short monitoring periods and the need for invasive procedures or device compliance, particularly among older users.

Cardiokol has developed Voice Assist Arrhythmia Monitoring (VAAM), a digital telehealth solution that utilises voice biomarkers on widely available platforms like phones, landlines, speakers, and voice assistants. VAAM can detect AF regardless of spoken content or language barriers without special devices, making it a non-invasive and user-friendly solution for monitoring at-risk populations, particularly the elderly. Its goal is to make long-term cardiac arrhythmia monitoring and screening practical and cost-effective for large populations, especially the ageing demographic.

Company: Neurowyzzr

Project Name: Digital Brain Function Screen (DBFS)

Partnering Healthcare Cluster: NHG

Digital Brain Function Screen (DBFS) is a clinically validated medical tool that uses gamified neuroscience puzzles to generate a medical report within one minute for clinicians to discuss. It is registered as a digital medical device with the Singapore Health Sciences Authority (HSA), U.S. U.S. Food and Drug Administration (FDA), and Australia Therapeutic Goods Administration (TGA).

In comparison, pen-and-paper tests require trained personnel and costly MRI/CT scans, which can exceed \$8,000; DBFS is efficient and cost-effective, taking 15 -20 minutes to complete, accessible online via a web link or email, allowing individuals to complete it at home or in a clinic using a tablet or computer. This makes it suitable for broad population usage. By enabling early intervention through affordable measures like lifestyle adjustments or cost-effective supplements and medications, DBFS can potentially reduce financial burdens and emotional distress for families while reducing the nation's expenses associated with severe cognitive decline.

Company: Wonder Technology

Project Name: Wonder SAFE

Partnering Healthcare Cluster: SingHealth

Wonder SAFE is a revolutionary Voice AI Platform for Mental Health. It provides secure, accurate, fast, and effective mental health screening and monitoring solutions for healthcare platforms, online hospitals, employee benefit programmes and insurance providers.

The state-of-the-art AI technology captures the subtle acoustic changes in the voice and can be used to assess mental disorders such as depression. Compared to the conventional Patient Health Questionnaire-9 (PHQ-9) for depression screening, the acoustics-based voice biomarker technology improved accuracy, objectivity, and scalability, making mental health screening more effective and reliable.