# RESILIENX

The bulletin of the Centre for Digital Epidemiology

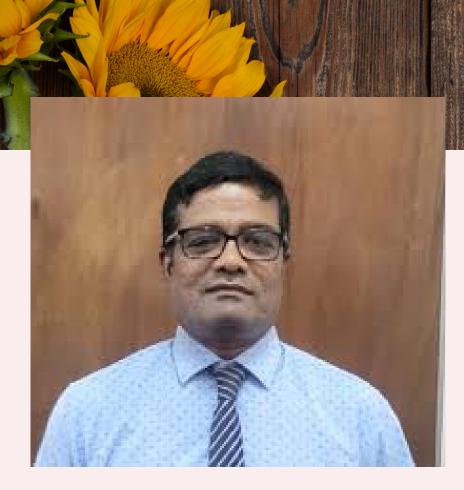




# Message from the Coordinator for Strategic Planning

I am delighted to witness the remarkable progress of the Centre for Digital Epidemiology at the Faculty of Medicine, University of Jaffna. Established with the invaluable support of dedicated individuals and the Jaffna Medical Faculty Overseas Alumni USA, the Centre was envisioned to generate locally developed knowledge and conduct high-quality research that directly enhances the quality of life for our communities. Building research capacity and mobilizing resources has indeed been a challenging journey. However, with a strong team of researchers and the unwavering support of our international partners, the Centre has successfully navigated these challenges and is well on its way to achieving its objectives. The progress of various research activities and the success of our capacity-building initiatives stand as a testament to the Centre's achievements. As our activities continue to expand, we recognize the need for further organizational development and capacity-building efforts. Moving forward, our focus will be on strategic planning and execution. With the guidance of our advisory panel, alumni and wellwishers, I am confident that we will continue to achieve remarkable milestones in our pursuit of excellence.

Prof.R.Surenthirakumaran
Dean, Faculty of Medicine,
Coordinator for Strategic Planning
Centre for Digital Epidemiology.



# Message from the Coordinator for Clinical Research & Operations

Sri Lanka, as a lower-middle-income country, faces significant challenges in achieving Universal Health Coverage (UHC) due to limited resources and infrastructure. To overcome these, we have adopted an integrated approach that combines research, service delivery, and capacity building. Through the Centre of Digital Epidemiology (CoDE), we are advancing digital transformation, focusing on secure and accessible data management, and developing an Al-driven decision support system to enhance precision in healthcare decisions. Our work emphasizes collaboration at both local and global levels, involving multidisciplinary teams, empowering community and participatory action research to address various health challenges, from nutrition to mental health, in support of UHC.

Prof.S.Kumaran Coordinator for Clinical Research & Operations Centre for Digital Epidemiology, Faculty of Medicine

# Table of Contents

01	Cancer	01-04
02	Primary Care	05-08
03	Nutrition	09
04	Eye care	10-11
05	WASPAR	12-13
06	Others	14
07	Events	15-17
07	Capacity Building	18-19

**RESILIENX** Cancer

The Prevalence of Oesophageal Premalignant Lesions Among the Tamil Patients Referred for Upper Gastro-Oesophageal-Duodenoscopy to the Endoscopy Unit of the Tertiary Care Hospital in Northern Sri Lanka

### Research project overview

Oesophageal cancer has significantly increased in Sri Lanka over the past decade, becoming a major public health issue. There have been reports of a disproportionately high prevalence of oesophageal cancer among speaking Sri Lankans. The purpose of this exploratory investigation is to determine prevalence of oesophageal the premalignant lesions (squamous dysplasia, koilocytotic atypia) and their association with risk variables. Identifying associations may help define a high-risk group within this population. The finding of this study may pave the way to identify the high-risk category of individuals. In the event, that a high-risk category identified, we can proceed with the next phase of the study where OGD can be performed in the high-risk category. The ultimate aim is to figure out whether oesophageal cancer screening could be established for high-risk patients so that the disease could be identified at the premalignant course or at an early stage to improve survival outcomes of this dreaded disease.

### Objective

To determine the prevalence of esophageal premalignant lesions (squamous dysplasia,koilocytotic atypia) in Tamil patients undergoing OGD at the Endoscopy Unit, Teaching Hospital Jaffna and to determine factors associated with esophageal premalignant lesions.

### Methodology

### **Study Population:**

Tamil patients undergoing OGD at the endoscopy Unit of Teaching Hospital, Jaffna presenting with dyspeptic, gastric acid reflux symptoms and dysphagia.

### **Endoscopic Procedure:**

An upper gastrointestinal endoscopy under white light is performed in all the patients. Lugol iodine (10 ml, 2.5%) is sprayed on to the esophageal mucosa up to the upper esophageal sphincter using dye spraying catheter and examined with narrow-band imaging (NBI). Biopsies are taken from unstained or lightly stained oesophageal mucosa.

### Histological procedure:

Biopsies obtained are processed at TH, Jaffna and sent to Pathologists attached to the histopathology laboratory of the Department of Pathology, Faculty of Medicine, University of Colombo, for final reporting.

#### **Current Status**

- Delayed data collection due to unavailability of proper endoscopes and still in progress (75.0% completed).
- An abstract was published (poster presentation) at ISDE 2024 World Congress.
- Manuscript is in progress.
- Oesophago Gastro Duodenoscopies (OGDs) have been performed on patients previously identified with oesophageal premalignant lesions.
- Histological reports have been documented.

Cancer

## The incidence of hypothyroidism in patients undergoing radiotherapy for head and neck cancer at the Tellipalai Trail Cancer Hospital

### Research project overview

Head and neck cancers (HNCs) have a high morbidity and mortality rate, making them a significant global health concern. HNCs can be effectively managed with localised treatments including surgery and radiation therapy because of their comparatively low metastatic rate.

However, radiation-induced hypothyroidism (RIH) can occur when the thyroid gland is inadvertently exposed during radiotherapy.

Thyroid tissue is harmed by this exposure, which impairs hormone synthesis. Focused history taking during follow-ups is essential for RIH early detection. The purpose of this study is to look into the prevalence of RIH in Northern Sri Lankan patients who have had neck radiation therapy.

### **Objective**

To Identify the incidence of RIH among patients receiving radiotherapy to H & N cancers at the Tellipalai Trail Cancer Hospital (TTCH) between 2013/01/01 – 2022/12/31.



### Methodology

All patients with head and neck cancers referred to Tellipalai Trail Cancer Hospital between 2013/01/01 to 2022/12/31 and have undergone definitive or adjuvant radiotherapy to the neck.

Data extracted from patient records.

### **Current Status**

- Data collection completed.
- An abstract published (oral presentation) at JMA Congress 2024.
- The list of patients required to undergo for hypothyroidism testing was shared with the oncologist.
- Manuscript writing is completed.

**RESILIENX** Cancer

## Determination of actionable somatic mutations among patients with Esophageal Cancer in Northern Sri Lanka

### Research project overview

Oesophageal cancer is one of the leading types of cancer among men and women in Northern Sri Lanka. Although there are several targeted chemotherapeutics available for specific actionable somatic mutations, the incidence of such mutations has not been studied in oesophageal cancers.

Hence, this is one of the pioneer studies to evaluate the incidence of presently recognized actionable driver mutations among patients with esophageal cancer. On identifying these actionable somatic mutations, this will make a strong case for follow up clinical trials as well as for early diagnosis (screening) based on liquid biopsy.

### Objective

- Evaluate the incidence of EGFR (del 747-A750, L858R and T790M), MSI, BRAF p.V600E/K, KRAS (G12V, G12D, G13D) and NRAS (G12V, G12D, G13D) somatic mutations among oesophageal cancer.
- To assess significant incidence of such mutations, which may open the possibilities of clinical trials to use corresponding targeted chemotherapeutics in the future, as well as to develop tests for screening using un-invasive methods (liquid biopsy).
- Correlation of somatic mutations listed in (5.1) with the clinical and histological data.

### Methodology

The wax mounted pathology specimen of oesophageal cancer patients diagnosed between March 2012 to June 2019, in northern province will be used for the study.

#### **Current status**

- A research collaboration was made between Faculty of Medicine, University of Jaffna and the University of Manchester to assess the biological samples collected under this research.
- Material transfer agreement between University of Jaffna and Manchester University was submitted Ethical to Review Committee and approval was obtained.
- As the initial step all the relevant documents and dozens of paraffinembedded biopsy samples were couriered to the University of Manchester for DNA quality assessment.
- Awaiting updates from Prof. David Wedge regarding the DNA extraction.

**RESILIENX** Cancer

Assessing Knowledge, Perceptions and Attitudes of Radiotherapy among Healthcare staff, selected Non-Healthcare staff, undergraduate students and the general public in the Jaffna District

### Research project overview

Radiotherapy is an important conventional treatment modality used for both curative and palliative management of cancer. 50% of cancer patients require radiotherapy during the illness. This treatment is valuable for definitive, neo adjuvant, adjuvant, and palliative care Though radiotherapy is an effective mode of treatment, it has a poor public image universally. In Sri

Lanka, the term "current" is colloquially used to refer to radiotherapy, which can lead to misconceptions and misunderstandings among the public.

This preliminary study focuses on the Jaffna district in the northern province of Sri Lanka which encourages interdisciplinary collaboration to assess the knowledge, attitudes, perceptions, and misconceptions among medical and non-medical professionals, undergraduate students in health-related and other courses, and the general public.

### Objective

To evaluate the knowledge, perceptions, and attitudes of radiotherapy among healthcare and non-healthcare staff, undergraduates, and the general public in the Jaffna district.



### Methodology

- Self-administered and interviewer administered questionnaires will be designed. The study will be conducted through different phases.
- Phase I Health care staff including doctors, allied health professionals (nurses, radiographers, physiotherapists, pharmacists, medical laboratory scientists, attendants and health care assistants) attached to Teaching Hospital Jaffna and Base Hospitals in PointPedro, Tellipalai, Chavakachcheri and Kayts.
- Phase II Undergraduate students attached to the University of Jaffna.
- Phase III Staff of the government and private banks, school teachers, and officers attached to the divisional secretariat offices, Jaffna.
- Phase IV The public belonging to Fisherman Cooperative Societies, Farmers Organizations, Three Wheelers Owner's Association, and families visited by midwives in the Jaffna District.

### **Current status**

- Data collection (Phase I) has been completed among healthcare staff at the Teaching Hospital, Jaffna, as well as the Base Hospitals in Point Pedro and Kayts.
- Currently, data collection ongoing among the healthcare staff at the Base Hospitals in Chavakachcheri and Tellipalai.
- Afterward, the study will be conducted among selected nonhealthcare staff (Phase II) in the Jaffna District.

**RESILIENX** Primary

## DIGIPATHS: Digitally Integrated Care Pathways for Multiple Long Term Conditions Management in Primary Care, Sri Lanka

### **Research Project Overview**

Long-term health conditions are becoming increasingly common in Sri Lanka, contributing significantly to disability and early mortality. Managing multiple chronic conditions (MLTCs) is particularly challenging and often results in poor health outcomes. The DIGIPATHS project aims to improve care for people living with MLTCs by developing and implementing Digitally Integrated Care Pathways (DICPs) that incorporate electronic health records (OpenMRS), a clinical decision support tool, automated feedback mechanisms, and a patient-facing application to support integrated, continuous care. This collaborative initiative is led by the University of Birmingham in partnership with the University of Jaffna, University of Edinburgh, University of Leicester, and Sri Lankan institutions including the University of Kelaniya, University of Colombo, Sabaragamuwa University of Sri Lanka, and the Ministry of Health.

### Methodology

The project is organized into six work packages (WPs).

WP1 involves the establishment of a Stakeholder Consultation Group (SCG) to provide ongoing guidance and support.

WP2 consists of a mixed-methods rapid evaluation of existing primary care pathways, followed by a stakeholder-led process to prioritise recommendations for improvement.

WP3 focuses on co-designing and co-producing the DICP, working iteratively with Sri Lankan software developers and the SCG.

WP4 will implement and test the DICP through a cluster randomised controlled trial in 50 primary care medical units.

WP5 will conduct a process evaluation to assess feasibility and adoption, while WP6 will carry out an economic evaluation to determine the intervention's long-term sustainability within the Sri Lankan healthcare system.

OCIPATHS

RESILIENX Primary Care

## DIGIPATHS: Digitally Integrated Care Pathways for Multiple Long Term Conditions Management in Primary Care, Sri Lanka

### **Current Status**

Progress to date includes the establishment of the SCG under WP1, with two meetings held.

In WP2.1, pathway mapping and clinical observations in primary care units in the Northern Province have been completed, and findings summarised.

In WP2.2, relevant guidelines have been selected, recommendations extracted, and specialist opinions obtained, with part of the recommendations already presented to stakeholders.

In WP3, work on the WHO DAK document is ongoing, with hypertension and diabetes sections nearly complete. The technical feasibility of linking OpenMRS to OpenClinical, Dexter, and the patient-facing app has been tested.

The protocol for pilot testing has been submitted for ethical approval, and the RCT feasibility study protocol for WP4-WP6 is under development.







### **Administrative Progress**

Administrative milestones include Cabinet of Ministers' approval on 24 March 2025 and the signing of a collaboration agreement between the University of Birmingham and the University of Jaffna.

At the University of Jaffna, appointments have been made for the positions of Health Informatics Research Fellow, Qualitative Research Fellow, Logistics Coordinator, Finance Coordinator, and Data Quality Coordinator.

Interviews are scheduled for August for the positions of Manager and Implementation Research Fellow, and for September for the CIE Coordinator and Qualitative Data Collectors.

A subcontract has been signed with the University of Colombo, while subcontracts with the University of Kelaniya, Sabaragamuwa University, and the Ministry of Health are pending.

Primary Care

# NIHR Global Health Research Group on Violence against Women and Violence against Children: University of Birmingham/University of Cape Town in partnership with the Lancet Commission

There are five work packages mainly focusing on

- 1.Developing diverse, representative and inclusive survivor panels
- 2.Understanding the healthcare burden

**RESILIENX** 

- 3.Describing the economic cost of inaction
- 4. Finding out what works to prevent violence
- 5. Knowledge exchange and training

### **Research Leaders of Each Package**

- •WP1 Mrs.Purathani Mathanaranjan, Senior Lecturer, Department of Law, University of Jaffna and Dr. U.Mayorathan, Consultant Forensic pathologist, Teaching Hospital, Jaffna.
- •WP2- Dr.P.A.D.Coonghe, Senior Lecturer, Department of Community and Family Medicine, Faculty of medicine, University of Jaffna.
- •WP3- Prof. Shivany Shanmugathas, Head, Department of Marketing, Faculty of management Studies and Commerce, University of Jaffna.
- •WP4- Dr Fathima Fazla Ahamed Fayaz, Research Fellow Department of Applied Health Sciences, University of Birmingham.

As part of this project, Pre-arranged meetings for this project funded by the National Institute of Health and Care Research (NIHR), UK, titled 'NIHR Global Health Research Group on Violence Against Women and Violence Against Children: University Birmingham/University of Cape Town in partnership with the Lancet Commission' were held on 14<sup>th</sup>,15<sup>th</sup> of May, 2025 in the UK. These meetings were attended by Prof.R.Surenthirakumaran and Dr.P.A.D.Coonghe, who contributed their insights towards the initiatives of the project.

Now, Approval from the Council of University of Jaffna was obtained on 26<sup>th</sup> of July, 2025 further approval will be forwarded UGC and works are currently ongoing on each work package for proposal development.

RESILIENX Primary Care

## Rural Health Development Project: Bridging the Gaps in Primary Care through Community Health Workers

Access to quality healthcare in rural and underserved areas remains a pressing challenge. The Rural Health Development Project, supported by the International Medical Health Organization (IMHO) through the Center for Digital Epidemiology, Faculty of Medicine, University of Jaffna, aims to address this gap by training and deploying Community Health Workers (CHWs) drawn from local Mother Support Groups.

CHWs serve as the first point of contact for many rural households, creating an essential bridge between communities and the formal healthcare system. Being members of the same communities they serve, CHWs possess a deep understanding of local needs, cultural practices, and barriers to healthcare access. This insight enables them to effectively link individuals with timely, quality health services.

Candidates for CHW roles are identified through a screening and interview process. Eligible individuals undergo intensive competency development programs and hands-on field training. In practice, CHWs collaborate closely with Public Health Midwives (PHMs), assist in routine clinic activities, and lead outreach initiatives to foster greater community engagement with primary healthcare services.

### Progress so far

The initiative is now active in the Northern Province and Batticaloa District, with five CHWs recruited in Batticaloa and twenty-five in the Northern Province. All have completed initial training and are developing competencies under the guidance of the University of Jaffna and Eastern University, Sri Lanka.

CHWs have strengthened primary healthcare delivery by assisting PHMs in antenatal, well-women, and well-baby clinics. Through coordinated home visits, they reach antenatal and postnatal mothers, support vaccination drives and conduct household surveys that helps in identifying underweight children, unvaccinated children, eligible couples, and patients lost to follow-up—facilitating timely referrals.

Their community engagement has extended to organizing medical nutrition exhibitions, conducting school health promotion programs, and delivering targeted awareness campaigns, leading to improved health-seeking behaviors and stronger community-health system links.



### **Sustaining the Impact**

Funding from the IMHO remains the cornerstone of this project, enabling the recruitment, training, and ongoing deployment of CHWs. This sustained support ensures that rural communities continue to benefit from a more responsive and connected primary healthcare system—one that is embedded in the community and capable of improving health outcomes over time.

### Integrated Community-Based Nutritional Intervention for Children Aged 6-59 Months in Northern Sri Lanka.

### **Project Overview Project**

Amuthasurabi is an ongoing initiative funded The Amuthasurabi project is ongoing in the by IMHO through the Centre for Digital Poonkery Epidemiology. This project aims to evaluate experimental study. the feasibility and impact of a community- Baseline data were collected from the nutritional intervention based children aged 6-59 months in the Northern sessions have been completed. Currently, Province of Sri Lanka.

### Methodology





### **Current status**

MOH area as quasi-

targeting participants, and the parental education monitoring and follow-up activities have been initiated.

> The monitoring and follow-up process aims to facilitate the practical implementation of the knowledge and provided during the parental These education sessions. sessions covered basic knowledge on nutrition, nutrient deficiencies, and their long-term Thev consequences. also included demonstrations of cost-effective family meals using locally available ingredients, weekly meal planning, cost calculations, portion sizing, cooking demonstrations with tasting sessions, and hygiene practices.

> Community Health Workers will visit participants' homes to support and guide families in applying what they have learned, ensuring sustainable changes in household nutrition practices.



Eye care **RESILIENX** 

### **Eye care Projects**

Under the CORE Health Projects led by Dr. M. Malaravan, five research initiatives are advancing eye health care in the Northern Province. These focus on cataract surgery outcomes, refractive error detection, and links between ocular and systemic health. The following is a brief status update for each project:

and above in Northern Province.

determine the prevalence of evaluates blindness and visual impairment among outcomes in patients who have undergone individuals aged 40 years and above in cataract surgery. By reviewing medical Northern Sri Lanka. The findings will help records and visual acuity measurements identify the population's eye health needs collected after surgery, the study aims to and guide the necessary interventions, assess supporting the delivery of high-quality eye interventions services and enhancing effectiveness of the existing service delivery model.

The study proposal has been completed, and a concept note has been submitted to IMHO for funding, as financial constraints currently limit the ability to move the study forward.

1. A detailed study on Visual impairment 2. Study on evaluating the quality of and their causes in people aged 40 years Cataract surgery outcomes among patients visiting Teaching Hospital Jaffna.

This community-based eye screening study This retrospective cross-sectional study postoperative visual effectiveness the and identify factors the influencing visual recovery. The findings will contribute to improving postoperative care protocols and overall patient outcomes in cataract management.

> The study has received ERC approval, and data collection is going on.



**RESILIENX** Eye care

### Eye care Projects



## 3. Assessing Hospital based refractive error patterns among school students visiting to the Eye Unit of Teaching Hospital Jaffna.

This prospective study aims to identify the patterns and prevalence of refractive errors among school-aged children attending the Teaching Hospital in Jaffna. The study seeks to understand the common types of refractive errors in this population, their distribution by age and gender, and any associated factors. The findings will provide valuable insights to inform targeted eye care interventions and improve vision screening programs for children in the region.

The proposal has been submitted for the ERC's second review

### 4. School based refractive error study

This retrospective study utilizes data collected from the ongoing free spectacles distribution program for school children in the Northern Province. The study aims to analyse the patterns of refractive errors, the uptake of corrective eyewear, and factors influencing compliance among school-aged children. By evaluating program data, the study seeks to assess the effectiveness and reach of the initiative, identify gaps in service provide evidence-based delivery. and vision recommendations enhance to screening and spectacle provision services in the region.

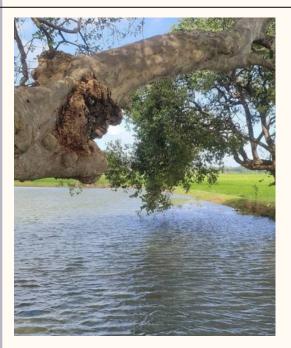
The proposal write-up is currently in progress

# 5. Creating awareness, opportunistic screening and vascular risk assessment among visitors and bystanders of Eye Unit, Teaching Hospital Jaffna.

This study focuses on creating awareness, conducting opportunistic screening, and assessing vascular risk factors among visitors and bystanders at the Eye Unit of Teaching Hospital Jaffna. The aim is to identify individuals at risk of vascular-related eye conditions early and provide timely advice or referrals. This approach helps promote eye health and supports preventive care within the hospital community.

The proposal write-up has been completed and is currently under review, with submission to the ERC expected by August RESILIENX WASPAR

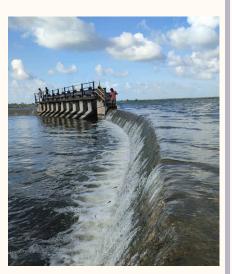
### Water Security In Northern Province, Sri Lanka: Through Participatory Action Research - WASPAR



### Journey along Vazhukkai Aru

As part of WASPAR's emphasis this year on the revival of Vazhukkai aru as a functional human-water system, a day-long journey was undertaken on June 21, 2025 from the stream's headwaters near Varuthalai vilaan to its delta in Araly where it merges with the Jaffna Lagoon. At all major points of interest, including the cascade of ponds along the way, farmers, officials and local residents joined in exchanges around important local themes and issues. The future of agriculture in the Valikamam region and the role of Vazhukki aru in that future were the subject of much of the discussion.





### **Visioning Workshop**

Close to 50 participants drawn from the Valikamam region traversed by Vazhukki aru and representing many interests and walks of life took part in a 1-day Visioning Workshop at the Faculty Conference Hall on July 3, 2025. A modified version of the Future Creating Workshop methodology was applied, and a sketch of Vazhukki aru Catchment in the year 2033 as envisioned by the group gathered. This is now available as a physical model for display



RESILIENX WASPAR

### WASPAR



Northern Water forum - A Focus Group Discussion

A Focus Group discussion was convened on July 30, 2025 among active participants in the Northern Water Dialogue Forum in its 30 months of existence. Following an overview of every activity of the Forum, the Focus Group discussed the significant progress made in relation to WASPAR goals by the Forum, challenges faced, and steps to be implemented in the immediate future.



Water Governance from Karainagar

A group of women from GN division J48 was engaged to voice their water-related concerns, with the aim of empowering them to form a water user group. The Photovoice tool was introduced to highlight the water issues in their area, creating a platform for grassroot involvement in water Governance management

**Visitors** 



**Prof. M. Sivapalan –** A pioneer in the emerging field of Socio-hydrology, and Consultant to WASPAR, Professor Murugesu Sivapalan from the University of Illinois, spent a month with the Project. He was engaged in a number of field activities and guided some of the analysis of data gathered, from a socio-hydrology perspective.



**Eng.Thayanthan Thirunavukkarasu** – Currently a PhD candidate at Carleton University, Ottawa in Canada, and an active member of the Young Water Professionals North group from its inception, also spent a month with WASPAR in June-JuLy . Taking part in all Vazhukki aru investigations and preparations for field investigations for his doctoral research kept him occupied.

### WASPAR Research highlighted at Tokyo Conference on Socio-Hydrology

Karthiga Inthirakumaran: "Understanding Hydrology through Society-Water Relations: Water Security in Karainagar Island, Sri Lanka"

Thayanthan Thirunavukkarasu: Unraveling the Water Governance Paradox: Navigating between Emerging nexuses and a hope for Sustainability in Northern Sri Lanka

The closing synthesis session of this Conference drew cases presented by WASPAR team members to highlight our water crisis in the North as an optimistic example illustrating the global-local nature of human - water systems

Others

## Collaboration for Research, Implementation and Training in Critical Care in Asia and Africa (CCAA).

The Collaboration for Research, Implementation and Training in Critical Care in Asia and Africa(CCAA), led by the Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford, UK, supports two research fellows who are pursuing doctoral studies at the University of Birmingham.

Work dedicated Package is 1 to strengthening the detection and management of atrial fibrillation with the aim of evaluating the existing digital technologies for the diagnosis and management of atrial fibrillation to optimise early detection and care in low middleincome countries. Current progress includes of the development а prevalence manuscript, which is being prepared for submission to a peer-reviewed journal, alongside an ongoing systematic review assessing the diagnostic accuracy of atrial fibrillation screening methods.

Work Package 2 focuses on the cascade of care and care pathways for hypertension and diabetes mellitus in the Northern Province of Sri Lanka with a aim of determining the cascade of care and quality of life; and evaluate the clinical care for living with pathways people hypertension and/or diabetes mellitus in Northern Sri Lanka. The cascade of care analysis for hypertension is in its final stages and is being prepared for submission to The Lancet Regional Health - Southeast Asia. Concurrently, data collection is underway for a rapid evaluation of care processes across primary, secondary, and tertiary healthcare facilities in the region.



RESILIENX Events

### **Events**





## Meeting with British High Commissioner

Hon. Mr. Andrew Patrick, British High Commissioner to Sri Lanka, visited the Faculty of Medicine, University of Jaffna on 19 June 2025. Discussions focused on ongoing UK–Sri Lanka partnerships, enhancing visibility of joint initiatives, and exploring future collaborations in health research and innovation.

### **SCG** meeting

A Stakeholder Consultation Group (SCG) meeting was held at the Faculty of Medicine boardroom under the Digipath Project. Stakeholders discussed the suggested guideline preferences for long-term non-communicable diseases, contributing important perspectives to guide the project's development.







### CIE program in Batticoloa

A Community involvement and Engagement (CIE) program was held in Batticaloa under the Digipath Project. The session engaged elders who regularly visit the Family Health Centre to gather their views on the proposed guideline options on different non-communicable diseases. Their valuable feedback will help ensure the guidelines are practical, inclusive, and community-centered.

**Events** RESILIENX

### Events

### DIGIPATHS Annual Meeting 2025: Steering Toward a Digitally Empowered Health Future

The DIGIPATHS Annual Meeting-2025 brought together experts, collaborators, and stakeholders for a full-day session to align on project strategy, review progress, and discuss the way forward in advancing digital health initiatives in Sri Lanka.

The meeting began with welcoming remarks from Prof. Krish Nirantharakumar, which set a collaborative and focused tone. Prof. Kumaran, then delivered a comprehensive update on the DIGIPATHS project, covering key aspects such as work package progress, capacitybuilding efforts, administrative updates, financials, and the roadmap ahead.

broader digital health strategic directions, and the development on of the National Electronic Health Record collaborations, and strategic aspirations. (NEHR). He highlighted transformative potential and technical challenges of digital health platforms.

A keynote address by Emeritus Prof. Jeremy Wyatt offered a deep dive into integrating digital technologies into primary care. He stressed the importance of accurate data capture through well-designed Electronic Patient Records (EPRs), and the life-saving potential of thoughtful data sharing.

The discussion then shifted to scalability, with Prof. Vajira sharing insights into expanding DIGIPATHS. His session touched on leadership development, Sri Lanka's eHealth ecosystem, and ongoing digital platforms such as eIMMR, the District Nutrition Monitoring System, and eRHIMS.

Then Prof. Madawa Chandratilake emphasized the need of capacity building for future health professionals. He outlined strategies including interdisciplinary training, institutional collaboration, and improved program monitoring and evaluation in his speech.

Then Dr. Palitha, in his speech explored the Prof. R. Surenthirakumaran discussed his landscape, vision of developing the faculty into a emphasized the sector's current state, globally recognized institution. He reflected roots, its historical







### Events

### DIGIPATHS Annual Meeting 2025: Steering Toward a Digitally Empowered Health Future

The day also featured detailed updates on various work packages:

- WP3: Dr. Matt, Dr. Krishna Gokhale, and Mr. Jayakrishna presented on the implementation of systems like OpenMRS, Clinical Decision Support Systems, Dexter, and patient-facing applications.
- WP1: Led by Dr. N. Shobana, this session reviewed community engagement activities (SCG and CEI) and capacitybuilding initiatives.
- WP2.1: Ms. U. Powsiga presented on the rapid evaluation efforts in the Northern Province.
- WP2.2: Dr. Supun discussed the development of clinical guideline recommendations for chronic diseases including diabetes, hypertension, and mental health conditions.
- WP4 & WP5: Dr. Tiffany Gooden provided progress updates on feasibility studies, and discussed the core concepts of reach, implementation, and adoption.

The meeting concluded with interactive group discussions, where participants addressed key challenges and proposed solutions related to each work package. These discussions were instrumental in shaping the next phase of the project.







### **Next Steps for DIGIPATHS**

- Continued engagement with local stakeholders across Sri Lanka
- WP2.1: Pathway mapping in additional provinces
- WP2.2: Finalizing clinical guideline recommendations
- WP3: Identifying stakeholder preferences for Digital Integrated Care Pathways (DICPs)
- WP4 & WP5: Securing ethical approvals and PMCU permissions
- Establishing subcontracts and recruiting staff at partner universities
- Selecting implementation sites for rollout

The DIGIPATHS Annual Meeting-2025 reinforced the commitment to building a digitally-enabled, data-driven health system for Sri Lanka. With clear strategies and collaborative momentum, the project is well-positioned to transform the future of healthcare delivery in the region.

## Capacity building









## Competency Development Workshop

A workshop for CIE members, the DIGIPATHS team, and staff was held on 22 July 2025 at the Faculty of Medicine, University of Jaffna.

Key topics included negotiation and conflict resolution skills, professionalism, and worklife balance.

Prof. Thavam (USA) and Hon. Mr. Sai Murali, Consul General of India, served as the key resource persons to this workshop.

## CoDE's Implementation Research Team Engages in Insightful Discussion with Prof. Srisala

The Centre for Digital Epidemiology (CoDE) continues to reach significant milestones, attracting multiple research grants and expanding its impact. Building on this momentum, CoDE is now developing an Implementation Research Team to translate research into real-world action.

Recently, the team organized an insightful discussion with Prof. Srisala, focusing on emerging international collaborations, the growing need for dedicated Implementation Research Centres, and the crucial role of implementation science in bridging research and practice. The conversation also highlighted future directions, including cross-border knowledge exchange, integration of digital technologies, and context-specific strategies to strengthen implementation outcomes.

## Strengthening RCC Through Capacity Building

The Regional Collaborating Centre (RCC), inaugurated in April 2024 at the Faculty of Medicine, University of Jaffna by the SingHealth Duke-NUS Global Health Institute (SDGHI) in collaboration with the University of Jaffna, continues to strengthen its role in global health.

The Centre for Digital Epidemiology (CoDE) is actively supporting capacity building of RCC staff, fostering skills and expertise to advance collaborative research and public health initiatives.



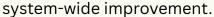




## Capacity building

## Workshop on Holistic wellbeing for Individuals with multiple long-term conditions

A thought-provoking workshop on Holistic Well-Being for Individuals with Multiple Long-Term Conditions was recently conducted for the general public and primary care providers. The session aimed to create a shared understanding of the complex challenges faced by both patients and healthcare professionals, while also exploring opportunities for system-wide improvement.









Key discussions during the workshop focused on:

- Barriers Faced by Patients: Participants highlighted common issues such as fragmented care, lack of personalized support, and the emotional burden of managing multiple conditions.
- Challenges for Healthcare Providers: Time constraints, limited resources, and communication gaps between specialties were identified as major obstacles in delivering coordinated, patient-centered care.
- Improving Healthcare Delivery: Ideas for improvement included better integration of services, enhanced patient-provider communication, and the incorporation of mental and social well-being into treatment plans.
- Current State of Healthcare: The workshop also reflected on the existing healthcare infrastructure, noting both strengths and areas that require attention to better serve individuals with complex health needs.

The event served as a platform for open dialogue and collaboration, reinforcing the need for a more holistic, inclusive approach to chronic disease management in both public health and primary care settings.



## Capacity building



### **Needs Assessment for Postgraduate Diploma**

A needs assessment was conducted among primary care doctors for the Postgraduate Diploma. This course aims to strengthen their knowledge and skills in preventing, diagnosing, and managing cardiovascular, metabolic, and renal diseases. The assessment sought to understand their preferences and expectations for the course, using a Google Form with 10 questions.



## Collaborators

### Regional

### 1. Faculty of Medicine

- DCFM
- Dept. of Paediatrics
- Dept. of Surgery
- Dept. of Psychiatry
- Dept. of Obstetrics & Gynaecology
- 2. NGOs-CANE, JMA
- 3. Centre for Open and Distance Learning (CoDL)
- 4. Ministry of Health, Northern Province.
- Teaching Hospital Jaffna
- Women Health Centre
- Teaching hospital development forum
- Day Surgical Unit

### National

- Eastern University of Sri Lanka.
- University of Kelaniya
- University of Colombo
- · Sabaragamuwa University of Sri Lanka
- Asia Foundation
- Institute of Health Policy

### International

- National Institute of Health Research- UK (NIHR)
- University of Birmingham, UK.
- University of Oxford, UK.
- Toronto Metropolitan University, Canada.
- Duke University, USA.
- University of Manchester, UK.
- University of Manitoba, Canada.
- University of Saskatchewan, Canada.
- · Amrita Vishwa Vidyapeetham, India
- University of Malaya, Malasia
- NGOs-IMHO

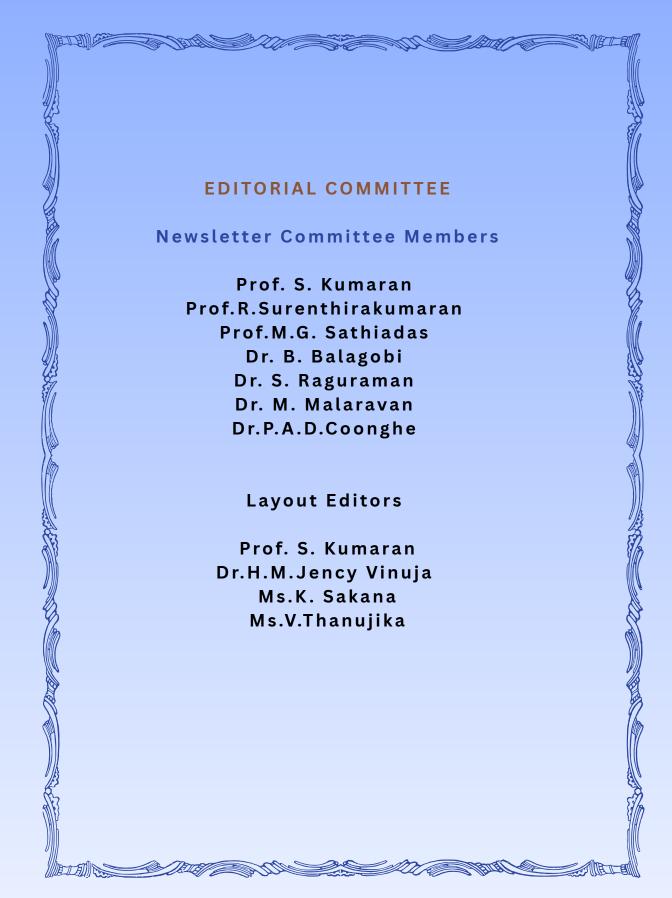
RESILIENX Publications

## **Publications**

- 1. Malaravan, M., 2025. Above and beyond barriers: A clearer vision via massive cataract surgery programs in resource-constrained settings [Poster presentation]. Presented at 2030 IN SIGHT LIVE, International Agency for the Prevention of Blindness, Kathmandu, Nepal, 30 April-1 May.
- 2. Malaravan, Muthusamy & Kumanan, Thirunavukarasu & Jayaratnam, Thurga. (2024). Mass Cataract Surgery Program as an Effective Approach to eradicate the Cataract backlog in Resource Constraint Settings-A real life experience. Jaffna Medical Journal. 36. 48 49. 10.4038/jmj.v36i1.209.
- 3. Sivalingarajah Raguraman ,Balasingam Balagobi ,Yaalini Shanmuganathan Uruthirakumar Powsiga ,Shribavan Kanesamoorthy ,Tharmarajah Kiruththiga, Gopalamoorthy Rajeev, Subashchandran Kumaran. Prevalence of subfertility and associated factors in Jaffna District, Sri Lanka: A cross sectional study [Internet]. [cited 2024 Aug 16]. Available from: https://cmj.sljol.info/articles/10.4038/cmj.v68i3.982
- 4. The epidemiology of stroke in Northern Sri Lanka: A population-based descriptive cross-sectional study Kumaran, S.1, Shribavan, K. 1, Powsiga, U.1, Sheron, V.A.1, Jency Vinuja, H.M.1, Arasalingam, A.2 1 Department of Community and Family Medicine.
- 5. A Descriptive Study of a Geriatric Cohort in the Northern Province of Sri Lanka. Shribavan Kanesamoorthy, Powsiga Uruthirakumar, Vethanayagam Antony Sheron. Kumaran Subaschandran WONCA conference. 2024.
- 6. The incidence of hypothyroidism in patients undergoing radiotherapy for head and neck cancer Chrishanthi Rajasooriyar, Gaayathri Nadarajah. In: Thanujah Murugathas, Uthayatharani Kathiravetpillai, Subathra Saravanabavananthan, Kavitha Indranath.
- 7. Sivalingarajah, Raguraman. (2024). A pragmatic approach to Subfertility care in Low-Middle-Income Countries-Northern Sri Lankan Perspective- Oration Book.

## **Publications**

- 8. Ida Chrishanthi Rajasooriyar, Sreekanthan Gobishangar, Vikneswaran Namasivayam, Chandu De Silva, Priyani Amaratunga, Sundaramoorthy Iyer Thuraisamy Sarma, Vinayagamoorthi Thusyanthan, Anuradha Kajendran, Antony Joseph Thanenthiran, Thanuja Murugathas, Karthiha Balendran, Jathavani MM Theepan, Rajendra Surenthirakumaran, 435. PREVALENCE OF OESOPHAGEAL PREMALIGNANT LESIONS AMONG PATIENTS REFERRED FOR GASTRO-OESOPHAGEAL-DUODENOSCOPY AT A TERTIARY CARE HOSPITAL IN NORTHERN, SRI LANKA, Diseases of the Esophagus, Volume 37, Issue Supplement\_1, September 2024, doae057.185, https://doi.org/10.1093/dote/doae057.185
- 9. Chandrasekar, K., Shanmugathas, S., Kannan, N. and Sriskandarajah, N. (eds.) (2023). Proceedings of the Midway symposium 2022. Jaffna: WASPAR Team, AHEAD Project, Faculty of Graduate Studies, University of Jaffna. xxi, 68p.
- 10. a.Karthiga, I., Rameshwaran, P., Ketheesan, B., &Sriskandarajah, N. (2023). Groundwater mapping and locally engaged water governancein a small island terrain: Case study of Karainagar island, Northern Sri Lanka. WorldWater Policy, 9(3), 456-480. https://doi.org/10.1002/wwp2.12112480.
- 11. a.Rubini, S., Kumarendran, B., Raguram, S., & Sriskandarajah, N. (2023). Newspaper coverage of water security issues in the waterstressed Northern Province of Sri Lanka: An explorative study of three Tamil dailies. World Water Policy, 9(3), 437-455. https://doi.org/10.1002/wwp2.12123
- 12. Karthiga, I., et al., (2024). A water stressed islet in Indian Ocean and Lessons from its Hydrology in Practice: Groundwater Dynamics alongside Community Engagement. Abstract publication and presentation delivered at British Hydrological Society (BHS) Symposium, 23-24 September 2024, University of Oxford. pp 38



### RESILIENX



# "EXCELLENCE IS A CONTINUOUS PROCESS AND NOT AN ACCIDENT" -Dr A P J Abdul Kalam-



Contact us:
Adiyapatham Road,
Kokuvil West, Kokuvil,
Jaffna, Sri Lanka.
e-mail:
code@med.jfn.ac.lk