

Frequently Asked Questions (FAQs)

1. What are the aims and objectives of this programme?

The aim of this programme is to provide an opportunity for Family Medicine (FM) doctors to develop an interest in academic family medicine and primary care by learning and participating in research primarily and education under supervision.

Under supervision, the Scholars will achieve the following objectives:

- Participate in one research project(s) in the Department of Family Medicine (DFM) with supervision from the research supervisor and the research team.
- Learn research skills such as:
 - Answering suitable research questions to address important research gaps in FM or primary care practice.
 - Understanding and applying principles of research methodologies in a research project.
 - Analysing study findings and reaching a conclusion to answer the research question(s).
 - Working in a multidisciplinary research team.
- Disseminate study findings via publications or oral/poster presentation in a conference. This is encouraged but not mandatory.
- Participate in educational activities of the Department in discussion with the DFM Education Director.

2. How much time will I spend in the Department of Family Medicine (DFM) in this programme?

You are expected to spend two days per week in DFM (approximately 100 days a year). In this period of time, you will participate in the research and education activities of the Department. In addition to developing in research, scholars are expected to spend 25 per cent of their time in academic work on teaching; this translates to a minimum of 80 hours of teaching each academic year (approximately 10 days a year).

3. Will I be supervised in this programme?

Yes. Research and education activities will be supervised by supervisors from DFM and support will be provided from the Department. You will receive written learning objectives and deliverables for each activity. You should meet your supervisors on a regular basis. Activities and milestones will be recorded on the Scholars' report form. All activities are under the purview of the DFM Head of Department.

4. What are the deliverables in the programme?

- Scholars will participate and assist in one existing research project as their main research.
- Scholars should help out with one or two other research projects. However, they cannot embark on new projects as Principal Investigators. Scholars also will not be allowed to participate in projects without first obtaining approval from the DFM Head of Department or Research Director.
- Scholars will be trained in formal research programmes and under direct supervision at least for the first 12 months.
- Scholars will participate in the research teaching in the DFM.
- Scholars will participate in two to three key undergraduate education items and contribute a minimum of 80 hours of teaching each year (about 10 days in a year).

5. How will the Scholars be selected for this programme?

Scholars will be selected based on their responses in the application form. Selection interviews will be held before the final selection.

6. Would I be allowed to opt out of the programme midway?

The minimum duration for this programme is a year to optimise the learning opportunities for you. You will be encouraged to continue and complete the programme. If you encounter any issues, please alert Dr Goh Lay Hoon and the team will do our best to support you in order for you to complete the programme.

7. What evaluations are needed for this programme?

Scholars will complete the Scholars' report at mid-point and end-point of the programme. The report will document the Scholars' activities in the programme and can be used during feedback sessions with supervisors.

8. How can interested applicants sign up for this programme?

Interested applicants can send their enquiries to Dr Goh Lay Hoon at mdcglh@nus.edu.sg.

To apply, you can send the completed application form and applicant's CV to Ms Leong Foon Leng at mdcv381@partner.nus.edu.sg.

Applications for the training programme will open on 12 December 2022 and close on 31 January 2023 at 9am.

Interviews of applicants with the DFM Head of Department and Research Director or their representatives will be held in February 2023.

9. What projects can the Scholars be assigned to?

You can find the list of projects in [Annex A](#) of this document.

10. Are there other Scholars in the Programme?

We have six Scholars since the programme started in 2020. The Scholars' activities and achievements during the time they spent in the programme can be found in [Annex B](#) of this document.

Annex A – List of Projects

1. Late-life depression and help-seeking in primary care research programme

Supervisor: Dr Anna Szuecs

Late-life depression is often underdiagnosed and undertreated in primary care, leading to increased frailty, loss of autonomy and suicide risk in many older adults. Primary care plays a crucial role in the early detection and treatment of depression in older adults, whose self-awareness of mental illness tends to be lower than in younger age groups. This gatekeeper role has its own set of challenges in Singapore, given the short consultation times, the country's multi-ethnic population, and the lower depression literacy of older adults. This research programme aims to further our understanding of the barriers to depression detection in older primary care patients and use these findings to devise novel tailored educational interventions. The research programme encompasses several interconnected projects, ranging from systematic literature reviews to qualitative and quantitative cross-sectional studies. Applicants joining the programme will be able to choose from a diverse range of skillset to acquire in clinical research, such as evidence synthesis, qualitative data collection and analysis, quantitative study design, biostatistics, and scientific writing. Applicants will need to be self-driven and curious about the overall topic, however, their level of involvement and role(s) can be flexibly discussed with the research team upon application and tailored to their interest.

2. Rational self-examination systematic reviews

Supervisors: Prof Jose Valderas and Dr Anna Szuecs

Remote consultations (telehealth) have been increasingly used in family medicine, as they represent cost-effective solutions for many types of routine check-ups and can also serve as an entry point for acute consultations in scenarios where in-person consultations are difficult. Yet, physical examination is usually completely missing from these consultations, with a few exceptions such as breast self-examination. It has nonetheless been proposed that adequately instructed patients could examine themselves and provide their physician with reliable and valid information, which can improve the diagnostic performance of tele-consultations in terms of sensitivity and specificity. The aim of this project is to review the existing literature on self-examination for a series of common conditions and synthesise it in the same form as the recently published [JAMA series on standard examination](#). Depending on the time at their disposal, the applicants taking up this project could consider focusing on one pathology (e.g., self-exam in appendicitis; self-exam in pyelonephritis) or several. They can expect to learn systematic evidence synthesis and scientific writing. They will be in charge of the project under the guidance of their mentors.

3. Chronic disease data project

Supervisor: Dr Goh Lay Hoon

National University Polyclinics (NUP) routinely collect patients' and clinic-based data as part of clinical work in particular for the provision of chronic care delivery. The electronic health records contain patient characteristics and other information that can be used to discover gaps in delivery of health services that impact on health outcomes. Improved clinical outcomes for chronic diseases has been associated with implementation of the guidelines in clinical practice. Presently, there is a lack of knowledge about the characteristics of the NUP patients with common chronic conditions in primary care in relation to their clinical outcomes and their adherence to treatment guidelines. The aim of this project is to i) profile the characteristics of a cohort of patients with diabetes, hypertension, hyperlipidemia, chronic kidney disease, osteoarthritis and depression; ii) measure adherence to annual chronic disease management guidelines process indicators; and iii) develop predictive models of adherence to process indicators and outcome indicators. Applicants are expected to join the team as a co-investigator; participate in literature review, data management, data analysis and dissemination, and work in a multidisciplinary research team. Applicants are also expected to meet the supervisor about 3 times a month, about 1-2 hours, to discuss their progress. Applicants can use a sub-study of the project for a scholarly activity.

4. Patient and Family Engagement (PFE) interventions on patients' safety in primary care setting: Systematic review

Supervisor: Prof Jose Valderas, Dr Anna Szuecs and Dr Goh Lay Hoon

In recent decades, a new emerging approach where both patients and their families (PFs) also play a vital role in actively managing patient safety. The provision of safe primary care is a priority. Understanding the magnitude and nature of harm in primary care is essential because most health care is now delivered in this setting. However, most patient safety research has focused on the hospital setting, and primary care is scarce. Several reviews have attempted to address this issue. Still, they have mainly either focused explicitly on the hospital setting, a specific level of care involvement (direct care), or factors influencing PFE implementation and evaluation. This project aims to review the existing literature to have a comprehensive insight into the types and effects of interventions that have been performed to promote PFE in patients' safety and gaps in knowledge with respect to these interventions. The applicants taking up this project can expect to learn systematic review methodologies and scientific manuscript preparation.

5. Other Projects

Projects	Principal Investigator	Co-Investigator
Diabetes/Chronic Disease		
The perspectives of patients with diabetes towards care and support planning (CSP) consultations in PACE-D	Victor Loh	Doris Young
Systematic review of the enablers and barriers of diabetes self-care in the primary care setting in Asia	Tan Wee Hian	Victor Loh
The role of primary care networks in diabetes care delivery in Singapore	Goh Lay Hoon	Doris Young Rosalind Siah Tai E Shyong Monica Lazarus
Quality indicators for the detection and management of chronic kidney disease in primary care: an exploratory study using electronic medical record data in Singapore	Desmond Ong	Tang Xin Kai Goh Lay Hoon Ling Zheng Jye
Harnessing human Potential and improving health sPan in women and their children study (HAPPY)	Johan Eriksson (NUS)	Doris Young, Monica Lazarus Desmond Ong Goh Lay Hoon
Patient Reported Indicator Survey (PaRIS): Int. survey on outcomes and experiences of patients with chronic conditions	Dolf Boer (Institute for Health Services Research (NIVEL), Netherlands)	Jose Valderas
Strengthening the patient voice in health service evaluation: machine learning on free text comments from surveys and online sources	Øyvind Andresen Bjertnæs (Norwegian Institute for Public Health, Norway)	Jose Valderas
Implementing PROMs and PREMs in routine clinical care: assessment of requirements and impact	Garin O (Hospital del Mar Medical Research Institute, Spain)	Jose Valderas
Cancer Care		
Following up on the follow up - Looking into breast cancer patients and their carers' views on follow-up care	Lim Fong Seng	Prof Linda He Dr Samuel Ow Dr Rose Fok Mr Mohd Sufyan
The SPOTting Cancer among Comorbidities (SPOCC) programme. Supporting clinical decision making in patients with symptoms of cancer and pre-existing conditions	Gary Abel (University of Exeter, UK)	Jose Valderas

Mental Health		
Primary care physicians' perspectives on the identification and management of postnatal mental health problems in primary care	Liow Yiyang	Monica Lazarus- Victor Loh Shefaly Shorey <i>Collaborators:</i> Jose Valderas Doris Young Cornelia Chee
Late-life depression and help-seeking research programme: <ul style="list-style-type: none"> • Depression literacy in older adults: a systematic review • Personality and help-seeking for emotional distress: a systematic review • General practitioners' perspective on late-life depression: a qualitative study 	Anna Szuecs	-
Youth mental health in Singapore – A survey of the perspective of primary care physicians	Victor Loh	Monica Lazarus Doris Young Chua Ying Xian Guo Xiao Xuan Eugene Chua Leong Choon Kit John Wong
Healthy Longevity		
A multi-level approach to understanding the perceived barriers and enablers to participating in lifestyle intervention among multi-ethnic older adults with pre-frailty and frailty: A qualitative study	Richard Hui (NUP)	Janice Liew Dr Zhang Zhi Peng (CCK Poly site co-I) Dr Kwek Sing Cheer (BBK site co-I)
SCREEN II tool: Upstream Identification of Nutritional Risk and its Determinants amongst Patients \geq 55 years old in Primary Care in Singapore	Tan Hwei Ming	Goh Lay Hoon Ruth Teh (University of Auckland, New Zealand) Chan Yiong Huak Verena Tan (Singapore Institute of Technology) Tan Wee Hian
Exploring the health seeking behaviour and utilization of primary health care services among older adults during COVID-19 pandemic: A qualitative study	Janice Liew (NUS)	Tan Hwei Ming Monica Lazarus

The development and validation of a patient-reported outcome measure for older people with frailty and acute care needs	van Oppen J, University of Leeds	Jose Valderas
Infectious Disease		
SENTIVAC: SENTINEL GP/FP cohort study to address COVID 19 VACCine uptake and hesitancy	Victor Loh	Leong Choon Kit Sky Koh Doris Young
Prescribing antiBiOtics in pRimary care for UTI (PRIOR-UTI)	Sky Koh	Victor Loh Doris Young Tracy Ng
Primary Care Antimicrobial Stewardship (PC-AMS) Subtheme of CoSTAR-HS: Collaborative Solutions Targeting Antimicrobial Threats in Health Systems	Victor Loh, Meena Sundram (NUP)	Sky Koh Vivien Lee Doris Young
INTRePID: International Consortium of Primary Care Big Data Researchers	Goh Lay Hoon	Ling Zheng Jye
Patient Safety		
Patient & Family Engagement Interventions on patients' safety in Primary Care Setting: a systematic review and meta-analysis	Pang Yan	Foon Leng Jose Valderas Anna Szuecs Goh Lay Hoon Jaheeda Gangannagaripalli Nacho Ricci Cabello
Patient complaints within general practice in Singapore using the Healthcare Complaints Analysis Tool (General Practice): A mixed methods study	Sky Koh	Jose Valderas Queenie Quek Mehul Motani Tan Chong Min
Family Orientation		
Family orientation in family medicine	Monica Lazarus	Anna Szuecs Vivien Lee Alicia Ong Jose Valderas
Vulnerable Populations (People with Disability)		
Communication with Persons with Disabilities (PWD): Pre- and Post-workshop surveys	Vivien Lee	Victor Loh Jeffrey Jiang Anna Szucs

EMERGING RESEARCH TOPICS

1. Family in Family Medicine
2. Patient and family engagement in primary care safety
3. Routine use of patient reported information in Family Medicine outcomes, experiences and capabilities
4. Self-examination for tele-health
5. Healthier SG: care planning, patient and family empowerment, policy analysis

EMERGING RESEARCH METHODS

1. Evidence synthesis: scoping review, systematic review, meta-synthesis, meta-analysis
2. Qualitative research: interviews, focus groups
3. Survey methods

PUBLICATIONS

2022

Coste, J., Valderas, J. M., & Carcaillon-Bentata, L. (2022). The epidemiology of multimorbidity in France: Variations by gender, age and socioeconomic factors, and implications for surveillance and prevention. *PloS one*, 17(4), e0265842. <http://doi.org/10.1371/journal.pone.0265842>

de Boer, D., van den Berg, M., Ballester, M., Bloemeke, J., Boerma, W., de Bienassis, K., Groenewegen, P., Groene, O., Kendir, C., Klazinga, N., Porter, I., Sunol, R., Thomas, L., Valderas, J. M., Williams, R., & Rijken, M. (2022). Assessing the outcomes and experiences of care from the perspective of people living with chronic conditions, to support countries in developing people-centred policies and practices: study protocol of the International Survey of People Living with Chronic Conditions (PaRIS survey). *BMJ open*, 12(9), e061424. <https://doi.org/10.1136/bmjopen-2022-061424>

Delgado, J., Evans, P. H., Gray, D. P., Sidaway-Lee, K., Allan, L., Clare, L., Ballard, C., Masoli, J., Valderas, J. M., & Melzer, D. (2022). Continuity of GP care for patients with dementia: impact on prescribing and the health of patients. *British Journal of General Practice*, 72(715), e91–e98. <http://doi.org/10.3399/BJGP.2021.0413>

Del Cura-González, I., López-Rodríguez, J. A., Leiva-Fernández, F., Gimeno-Feliu, L. A., Pico-Soler, V., Bujalance-Zafra, M. J., Domínguez-Santaella, M., Polentinos-Castro, E., Poblador-Plou, B., Ara-Bardají, P., Aza-Pascual-Salcedo, M., Rogero-Blanco, M., Castillo-Jiménez, M., Lozano-Hernández, C., Gimeno-Miguel, A., González-Rubio, F., Medina-García, R., González-Hevilla, A., Gil-Conesa, M., ... Group, M. U. L. T. I. P. A. P. P. L. U. S. (2022). Effectiveness of the MULTIPAP Plus intervention in youngest-old patients with multimorbidity and polypharmacy aimed at improving prescribing practices in primary care: study protocol of a cluster randomized trial. *Trials*, 23(1), 479–479. <https://doi.org/10.1186/s13063-022-06293-x>

Del Cura-González, I.; López-Rodríguez, J.A.; Leiva-Fernández, F.; Gimeno-Miguel, A.; Poblador-Plou, B.; López-Verde, F.; Lozano-Hernández, C.; Pico-Soler, V.; Bujalance-Zafra, M.J.; Gimeno-Feliu, L.A.; Aza-Pascual-Salcedo, M.; Rogero-Blanco, M.; González-Rubio, F.; García-de-Blas, F.; Polentinos-Castro, E.; Sanz-Cuesta, T.; Castillo-Jimena, M.; Alonso-García, M.; Calderón-Larrañaga, A.; Valderas, J.M.; Marengoni, A.; Muth, C.; Prados-Torres, J.D.; Prados-Torres, A.; Multi-PAP Group. How to Improve Healthcare for Patients with Multimorbidity and Polypharmacy in Primary Care: A Pragmatic Cluster-Randomized Clinical Trial of the MULTIPAP Intervention. *Journal of Personalized Medicine*, 12(5), 752.
<https://doi.org/10.3390/jpm12050752>

Emery, J., Wong, M. C., & Young, D. (2022). The development of the Asia-Pacific Primary Care Cancer Research Group. *European Journal of Cancer Care*, e13579-e13579. <http://doi.org/10.1111/ecc.13579>

Evans, J. P., Gibbons, C., Toms, A. D., & Valderas, J. M. (2022). Use of computerised adaptive testing to reduce the number of items in patient-reported hip and knee outcome scores: an analysis of the NHS England National Patient-Reported Outcome Measures programme. *BMJ open*, 12(7), e059415.
<http://doi.org/10.1136/bmjopen-2021-059415>

Gangadharan, S., Tomari, S., Levi, C. R., Weaver, N., Holliday, E., Bajorek, B., Lasserson, D., Valderas, J. M., Dewey, H. M., Barber, P. A., Spratt, N. J., Cadilhac, D. A., Feigin, V. L., Rothwell, P. M., Zareie, H., Garcia-Esperon, C., Davey, A., Najib, N., Sales, M., & Magin, P. (2022). Rural versus metropolitan comparison of processes of care in the community-based management of TIA and minor stroke in Australia (an analysis from the INSIST study). *The Australian journal of rural health*, 10.1111/ajr.12950. Advance online publication. <https://doi.org/10.1111/ajr.12950>

Jordan, A. N., Anning, C., Wilkes, L., Ball, C., Pamphilon, N., Clark, C. E., Bellenger, N. G., Shore, A. C., Sharp, A. S. P., & Valderas, J. M. (2022). Cross-cultural adaptation of the Spanish MINICHAL instrument into English for use in the United Kingdom. *Health and quality of life outcomes*, 20(1), 39.
<https://doi.org/10.1186/s12955-022-01943-9>

Klapproth, C. P., Sidey-Gibbons, C. J., Valderas, J. M., Rose, M., & Fischer, F. (2022). Comparison of the PROMIS Preference Score (PROPr) and EQ-5D-5L Index Value in General Population Samples in the United Kingdom, France, and Germany. *Value in health : the journal of the International Society for Pharmacoeconomics and Outcomes Research*, 25(5), 824–834.
<https://doi.org/10.1016/j.jval.2021.10.012>

Koh, S. W. C., Liow, Y., Loh, V. W. K., Liew, S. J., Chan, Y. H., & Young, D. (2022). COVID-19 vaccine acceptance and hesitancy among primary healthcare workers in Singapore. *BMC primary care*, 23(1), 1-9. <https://doi.org/10.1186/s12875-022-01693-z>

Koh, S. W. C., Tan, H. M., Lee, W. H., Mathews, J., & Young, D. (2022). Covid-19 vaccine booster hesitancy among healthcare workers: a retrospective observational study in Singapore. *Vaccines*, 10(3), 464. <https://doi.org/10.3390/vaccines10030464>

Liow, Y., Young, D., Stavdal, A., & Valderas, J. M. (2022). From Astana to Singapore: Primary Health Care is key to the long-term success of Singapore's health system. *Annals of the Academy of Medicine, Singapore*, 51(9), 528–530. <https://doi.org/10.47102/annals-acadmedsg.2022194>

Lim, T. S. C., Ismail-Pratt, I., & Goh, L. H. (2022). Cervical cancer screening and vaccination: understanding the latest guidelines. *Singapore medical journal*, 63(3), 125. <http://doi.org/10.11622/smedj.2022045>

Mounce, L. T. A., Salema, N. E., Gangannagaripalli, J., Ricci-Cabello, I., Avery, A. J., Kadam, U. T., & Valderas, J. M. (2022). Development of 2 Short Patient-Report Questionnaires of Patient Safety in Primary Care. *Journal of patient safety*, 18(3), 161–170. <https://doi.org/10.1097/PTS.0000000000000880>

Ng, C. H., Chan, K. E., Chin, Y. H., Zeng, R. W., Tsai, P. C., Lim, W. H., ... & Muthiah, M. (2022). The Effect of Diabetes and Prediabetes on the Prevalence, Complications and Mortality in Non-alcoholic Fatty Liver Disease. *Clinical and Molecular Hepatology*. <https://doi.org/10.3350/cmh.2022.0096>

Ng, C. H., Lim, W. H., Chin, Y. H., Yong, J. N., Zeng, R. W., Chan, K. E., ... & Muthiah, M. (2022). Living in the non-alcoholic fatty liver disease silent epidemic: a qualitative systematic review of patients' perspectives. *Alimentary Pharmacology & Therapeutics*, 56(4), 570-579. <https://doi.org/10.1111/apt.17121>

Osorio, J., Madrazo, Z., Videla, S., Sainz, B., Rodríguez-Gonzalez, A., Campos, A., Santamaria, M., Pelegrina, A., Gonzalez-Serrano, C., Aldeano, A., Sarriugarte, A., Gómez-Díaz, C. J., Ruiz-Luna, D., García-Ruiz-de-Gordejuela, A., Gomez-Gavara, C., Gil-Barrionuevo, M., Vila, M., Clavell, A., Campillo, B., ... Group, C. O. V. I. D.-C. I. R. C. (2022). Use of failure-to-rescue after emergency surgery as a dynamic indicator of hospital resilience during the COVID-19 pandemic. A multicenter retrospective propensity score-matched cohort study. *International Journal of Surgery (London, England)*, 106, 106890–106890. <https://doi.org/10.1016/j.ijsu.2022.106890>

Serrano-Ripoll, M. J., Fiol-deRoque, M. A., Valderas, J. M., Zamanillo-Campos, R., Llobera, J., de Labry Lima, A. O., Pastor-Moreno, G., & Ricci-Cabello, I. (2022). Feasibility of the SINERGIAPS ("Sinergias entre profesionales y pacientes para una Atención Primaria Segura") intervention for improving patient safety in primary care. *Family practice*, 39(5), 843–851. <https://doi.org/10.1093/fampra/cmab015>

Sit, R. W., Wang, B., Ng, W. S., Abullah, A., Ismail, I. Z., Goh, L. H., & Wong, S. Y. (2022). Prevalence and association of chronic musculoskeletal pain on self-management, glycemic control and quality of life among Chinese type 2 diabetes patients in primary care. *Primary Care Diabetes*. <https://doi.org/10.1016/j.pcd.2022.04.004>

Serrano-Ripoll, M. J., Llobera, J., Valderas, J. M., de Labry Lima, A. O., Fiol-deRoque, M. A., Ripoll, J., & Ricci-Cabello, I. (2022). Cross-Cultural Adaptation, Validation, and Piloting of the Patient Reported Experiences and Outcomes of Safety in Primary Care Questionnaire for Its Use in Spain. *Journal of patient safety*, 18(2), 102–110. <https://doi.org/10.1097/PTS.0000000000000819>

Szücs, A., Edershile, E. A., Wright, A. G., & Dombrowski, A. (2022). Rivalry and Admiration-Seeking in a Social Competition: From Traits to Behaviors Through Contextual Cues. <https://doi.org/10.31234/osf.io/cwtvp>

Tan, G. H. C., Hong, D. Z., Lim, I. C. Z. Y., Toh, Y. P., Loh, V. W. K., & Lien, V. (2022). Mindful Caring: A pilot study of an online mindfulness workshop for medical students to improve self-compassion. <https://orcid.org/0000-0001-8637-6225>

Tan, W. B., Szücs, A., Burkill, S. M., Ong, S. H., Young, D., & Goh, L. H. (2022). Nephrologist referrals of elderly CKD patients in Singapore: A cross-sectional study. *BJGP open*. <https://doi.org/10.3399/BJGPO.2021.0155>

Tu, K., Sarkadi Kristiansson, R., Gronsbell, J., de Lusignan, S., Flottorp, S., Goh, L. H., Hallinan, C. M., Hoang, U., Kang, S. Y., Kim, Y. S., Li, Z., Ling, Z. J., Manski-Nankervis, J.-A.,

Ng, A. P. P., Pace, W. D., Wensaas, K.-A., Wong, W. C., Stephenson, E., & INTRePID. (2022). Changes in primary care visits arising from the COVID-19 pandemic: an international comparative study by the International Consortium of Primary Care Big Data Researchers (INTRePID). *BMJ Open*, 12(5), e059130–e059130. <http://doi.org/10.1136/bmjopen-2021-059130>

van Oppen, J. D., Alshibani, A., Coats, T. J., Graham, B., Holch, P., Lalseta, J., ... & Conroy, S. P. (2022). A systematic review and recommendations for prom instruments for older people with frailty in emergency care. *Journal of patient-reported outcomes*, 6(1), 1-11. <http://doi.org/10.1186/s41687-022-00438-x>

van Oppen, J. D., Coats, T. J., Conroy, S. P., Lalseta, J., Phelps, K., Regen, E., Riley, P., Valderas, J. M., & Mackintosh, N. (2022). What matters most in acute care: an interview study with older people living with frailty. *BMC geriatrics*, 22(1), 156. <https://doi.org/10.1186/s12877-022-02798-x>

Wong, M. C., Wang, B., Lim, F. S., Teo, S. H., Huang, J., & Young, D. (2022). Cancer control in primary care in Asia: Current challenges and future perspectives. *European Journal of Cancer Care*, 31(5), e13580. <https://doi.org/10.1111/ecc.13580>

Zhu, C. S., Yap, R. K. F., Lim, S. Y. S., Toh, Y. P., & Loh, V. W. K. (2022). Humanism in Asian medical education-A scoping review. <https://doi.org/10.29060/TAPS.2022-7-1/RA2460>

2021

Garratt, A. M., Coste, J., Rouquette, A., & Valderas, J. M. (2021). The Norwegian PROMIS-29: psychometric validation in the general population for Norway. *Journal of patient-reported outcomes*, 5(1), 1-11. <https://doi.org/10.1186/s41687-021-00357-3>

Guo, H., Hildon, Z. J. L., Loh, V. W. K., Sundram, M., Ibrahim, M. A. B., Tang, W. E., & Chow, A. (2021). Exploring the social ecology for appropriate antibiotic prescribing and stewardship in primary care: presenting the VALUE driven model of practice derived from qualitative analysis of public and private care settings in Singapore. <https://doi.org/10.21203/rs.3.rs-268842/v1>

Guo, H., Hildon, Z. J., Loh, V., Sundram, M., Ibrahim, M., Tang, W. E., & Chow, A. (2021). Exploring antibiotic prescribing in public and private primary care settings in Singapore: a qualitative analysis informing theory and evidence-based planning for value-driven intervention design. *BMC family practice*, 22(1), 205. <https://doi.org/10.1186/s12875-021-01556-z>

Kong, J. S. M., Teo, B. S., Lee, Y. J., Pabba, A. B., Lee, E. J. D., & Sng, J. C. G. (2021). Virtual integrated patient: An ai supplementary tool for second-year medical students. *The Asia Pacific Scholar*, 6(3), 87–90. <https://doi.org/10.29060/TAPS.2021-6-3/SC2394>

Lau, S. S. M., Koh, S. W. C., & Lui, Y. S. (2021). Managing unhealthy alcohol use in general practice. *Singapore Medical Journal*, 62(2), 69. <https://doi.org/10.11622/smedj.2021016>

Liow, Y., Loh, V. W., Goh, L. H., Tan, D. H., Tan, T. L., Leong, C. K., & Young, D. Y. (2021). COVID-19 primary care response and challenges in Singapore: a tale of two curves. *Hong Kong Med J*, 27(1), 70-2. <https://doi.org/10.12809/hkmj208764>

Teo, B. S., Li, E., Khoo, Y. L., Evaristo, M., Fang, Y., & Smith, H. E. (2021). A mobile swabbing booth to address Singapore GPs' concerns about swabber protection: human-centred design during the COVID-19 pandemic. *BMC Family Practice*, 22(1). <https://doi.org/10.1186/s12875-021-01531-8>

Wong, S. Y., Tan, D. H., Zhang, Y., Ramiah, A., Zeng, X., Hui, E., & Young, D. Y. (2021). A Tale of 3 Asian Cities: How is Primary Care Responding to COVID-19 in Hong Kong, Singapore, and Beijing?. *The Annals of Family Medicine*, 19(1), 48-54. <https://doi.org/10.1370/afm.2635>

2020

Jain, S. R., Sui, Y., Ng, C. H., Chen, Z. X., Goh, L. H., & Shorey, S. (2020). Patients' and healthcare professionals' perspectives towards technology-assisted diabetes self-management education. A qualitative systematic review. *PloS one*, 15(8), e0237647. <https://doi.org/10.1371/journal.pone.0237647>

Tan, H. Q. M., Chin, Y. H., Ng, C. H., Liow, Y., Devi, M. K., Khoo, C. M., & Goh, L. H. (2020). Multidisciplinary team approach to diabetes. An outlook on providers' and patients' perspectives. *Primary Care Diabetes*, 14(5), 545-551. <https://doi.org/10.1016/j.pcd.2020.05.012>

GRANTS

Following up on the follow-up: Breast cancer patients' & their carers views	Dr Fong Seng LIM
SPriNT study - Dr Doris YOUNG	Dr Doris YOUNG
Postnatal mental health – Primary care physicians' perspective	Dr Yiyang LIOW
Primary care networks in Diabetes care delivery in Singapore	Dr Lay Hoon GOH
Quality indicators – CKD in primary care	Dr Desmond ONG
SENTIVAC – COVID-19 Vaccine communication & messaging	Dr Victor LOH
Youth mental health in Singapore – A perspective of primary care physicians	Dr Victor LOH

Annex B – Scholars' Achievements

YEAR 2020 – 2022

Dr Desmond Ong

Projects

- Value-driven Outcomes (VDO) project in NUP
- Quality indicators for the detection and management of chronic kidney disease in primary care: an exploratory study using electronic medical record data in Singapore

Grants

- [NUHS Seed Grant] Quality Indicators for the Detection and Management of Chronic Kidney Disease in Primary Care: An Exploratory Study Using Electronic Medical Records

Conferences

- APMEC 2021: Turning Virtual into Reality: Using Zoom-enabled Simulated Clinical Training to substitute for live clinical training
- APMEC 2022: Field Observations in Primary Care: The Family Medicine Academic Project

Teaching

- Residency EBM Workshop – March 2022
- R1 Research Workshop – 2022

Forums

- Presented CKD study at NUP-DFM Research Forum in May 2022

Dr Liow Yiyang

Projects

- Principal Investigator: Perspectives of Primary Care Physicians on the identification and management of Postnatal Mental Health Problems in a multi-ethnic Asian country: a qualitative study —awarded NUHS FM/PC/HSR Seed Fund Grant of \$50,000 in March 2021, completed study, pending publication

Grants

- NUHS Primary Care Seed Grant awarded March 2021

Publications

- Liow, Y., Young, D., Stavdal, A., & Valderas, J. M. (2022). From Astana to Singapore: Primary Health Care is key to the long-term success of Singapore's health system. *Annals of the Academy of Medicine, Singapore*, 51(9), 528-530. <https://doi.org/10.47102/annals-acadmedsg.2022194>
- Koh, S. W. C., Liow, Y., Loh, V. W. K., Liew, S. J., Chan, Y. H., & Young, D. (2022). COVID-19 vaccine acceptance and hesitancy among primary healthcare workers in Singapore. *BMC primary care*, 23(1), 1-9. <https://doi.org/10.1186/s12875-022-01693-z>
- Liow, Y., Loh, V. W., Goh, L. H., Tan, D. H., Tan, T. L., Leong, C. K., & Young, D. Y. (2021). COVID-19 primary care response and challenges in Singapore: a tale of two curves. *Hong Kong Med J*, 27(1), 70-2. <https://doi.org/10.12809/hkmj208764>
- Liow, Y., Loh, V. W. K., & Young, D. (2020). 100 days on: the primary care response to COVID-19 in Singapore. *Singapore Med J*, 1, 8. <https://doi.org/10.11622/smedj.2018150>
- Tan, H. Q. M., Chin, Y. H., Ng, C. H., Liow, Y., Devi, M. K., Khoo, C. M., & Goh, L. H. (2020). Multidisciplinary team approach to diabetes. An outlook on providers' and patients' perspectives. *Primary Care Diabetes*, 14(5), 545-551. <https://doi.org/10.1016/j.pcd.2020.05.012>

Teaching

- Adjunct Lecturer, Department of Medicine, NUS Yong Loo Lin School of Medicine (NUSMed)
- Lead for NUSMed Phase 1 Patient-Based Programme (Polyclinic)
- Lead for NUSMed Phase 2 Clinical Skills Foundation Programme (Campus)
- Tutor for NUSMed Phase 3 Family Medicine Posting
- Physician Faculty for NUHS Family Medicine Residency Programme

Forums

- Presentation at NUP-DFM Research Forum in May 2022 on project titled 'Perspectives of Primary Care Physicians on the identification and management of Postnatal Mental Health Problems in a multi-ethnic Asian country: a qualitative study'

YEAR 2021 – 2023

Dr Sky Koh

Projects

- PI: PRescribing antlbiOtics in pRimary care for UTI (PRIOR-UTI) – Awarded Co-STAR-HS seed grant Feb 2022 (\$32,000)
- PI: Patient complaints within general practice in Singapore using the Healthcare Complaints Analysis Tool (General Practice): a mixed methods study – Awarded NUHS Family Medicine/Primary Care/Health Services Research (FM/PC/HSR) Seed Grant Mar 2022 (\$44,000)
- Co-I: Collaborative Solutions Targeting Antimicrobial Resistance Threats in Health Systems (CoSTAR-HS) – CAT 2 NMRC Grant (from 2021-2025, PI: Prof Hsu Li Yang, SSHSPH)
 - Main PI: Antibiotic prescribing in primary care clinics in Singapore: an observational study
 - Main PI: Routine antibiogram surveillance of urinary tract infections within primary care in Singapore: Linking clinical practice to resistance genes
 - Co-I: Antibiotic prescribing for Paediatrics in primary care clinics in Singapore: an observational study (PI: Dr Vivien Lee, NUP)
- Co-I: Addressing COVID-19 hesitancy and promoting population acceptance – NMRC COVID-19 Grant (from 2020-2022, PI: Prof May O'Lwin, NTU)
 - Main PI: Electronic mailbox study to address COVID-19 vaccine hesitancy
 - Co-I: SENTIVAC (Sentiments of primary care providers on news regarding COVID-19 vaccination and measures) (PI: Dr Victor Loh, NUS)
- Co-I: Building a Value-Driven Primary Care for Singapore (from 2022-2026, PI: Dr Meena Sundram, NUP)
- Co-I: A cross-sectional study on weight perception and management across Singaporeans and their spouses (PI: A/Prof Tan Ker Kan, NUH)
- Co-I: Cardiometabolic Diseases in Primary Care (PI: Dr Nicholas Chew, NUH)
- Co-I: Exploratory Study of Big Data in National University Polyclinics (PI: Dr Goh Lay Hoon, NUS)

Grants

- Co-STAR-HS seed grant Feb 2022 (\$32,000)
- NUHS Family Medicine/Primary Care/Health Services Research (FM/PC/HSR) Seed Grant Mar 2022 (\$44,000)

Publications

- Koh, S. W. C., Tan, H. M., Lee, W. H., Mathews, J., & Young, D. (2022). Covid-19 vaccine booster hesitancy among healthcare workers: a retrospective observational study in Singapore. *Vaccines*, 10(3), 464. <https://doi.org/10.3390/vaccines10030464>
- Koh, S. W. C., Liow, Y., Loh, V. W. K., Liew, S. J., Chan, Y. H., & Young, D. (2022). COVID-19 vaccine acceptance and hesitancy among primary healthcare workers in Singapore. *BMC primary care*, 23(1), 1-9. <https://doi.org/10.1186/s12875-022-01693-z>
- Lau, S. S. M., Koh, S. W. C., & Lui, Y. S. (2021). Managing unhealthy alcohol use in general practice. *Singapore Medical Journal*, 62(2), 69. <http://doi.org/10.11622/smedj.2021016>

Conferences

- Presented 3 posters at the 10th International Congress of the Asia Pacific Society of Infection Control (July 2022)

Teaching

- Tutor for NUHS Family Medicine Residency Research Workshop (2021, 2022)
- Supervisor for NUHS Family Medicine Residency Research Elective (2021)

Forum

- Chair, NUP-DFM Research Forum (May 2022)

Awards

- NUS DFM: Best Paper of the Year Award (2022)
- NUS DFM: Early Career Researcher of the Year Award (2022)

Dr Tan Hwei Ming

Projects

- SCREEN II: Upstream Identification of Nutritional Risks and its Determinants amongst Older Adults in Primary Care in Singapore (PI)
- Assessing COVID-19 booster uptake: An observational study (Site PI)
- Qualitative study exploring the perceived barriers and enablers to participating in lifestyle interventions amongst pre-frail and frail older adults (Co-I)
- Volunteerism in Prefrail Older Adults Improves Physical Function, Cognition and Enhances Resilience (Co-I)
- Research with Asia-Pacific Academic Primary Care Group - conceptualisation phase with team (Co-I)

Grants

- NUP Research Grant- SCREEN II: Upstream Identification of Nutritional Risks and its Determinants amongst Older Adults in Primary Care in Singapore

Publications

- Koh, S. W. C., Tan, H. M., Lee, W. H., Mathews, J., & Young, D. (2022). Covid-19 vaccine booster hesitancy among healthcare workers: a retrospective observational study in Singapore. *Vaccines*, 10(3), 464. <https://doi.org/10.3390/vaccines10030464>

Teaching

- Tutor for R1 Research workshop

YEAR 2022 – 2024

Dr Alicia Ong

Projects

- Family Orientation in Family Medicine - A scoping review (Co-I)
- Primary Care oncology data project (PI)
- Chronic disease data analysis project (Co-I)
- Qualitative study - GPs' perspectives on LLD (collaborator)
- Mixed Methods depression study (Collaborator)
- Value-driven outcomes Systematic Review (Collaborator)

Teaching

- Respiratory Workshop, Phase 3 Family Medicine Foundations Workshop

- Difficult Conversations Workshop, Phase 3 Family Medicine Foundations Workshop
- Family Medicine Residency Research Workshop

Forums

- Facilitator, Inaugural Primary Care Cancer Learning Series, Singapore PRImary Care Cancer NeTwork (SPriNT)

Dr Vivien Lee

Projects

- Family Orientation in Family medicine: a scoping review
- Antimicrobial use in Primary care
- Depression literacy in older adults: a systematic review
- Personality and help-seeking for psychological distress: a systematic review
- Late-life depression and help-seeking in Singapore - general practitioners' perspective
- Understanding the personality Features of Late-life Depression (UNFOLD): a mixed-methods study
- Attitudes of Medical Students and Tutors toward Persons with Disabilities after a Family Medicine teaching workshop

Conferences (presented in 2021 and 2022)

- Poster presentation at Singapore Palliative Care Conference 2021: Journeying with a Patient's Loved Ones in the Face of Imminent Death: A Quality Improvement Project Addressing the Guidance & Education of Loved Ones of Dying Patients

Teaching

- Clinical lecturer at Yong Loo Lin School of Medicine
- M3 Communications with Persons with Disabilities workshop
- M3 Women's Health workshop
- M3 Family Medicine supervisor
- Family Medicine residency faculty
- Family Medicine residency research workshop
- Residents' Continuity Clinic preceptor
- Clinical teacher and practice facilitator, Lee Kong Chian School of Medicine