



## **Glass George Fredrick Jr**

Senior Nurse Researcher, Nursing Implementation, Translation & Research Office (NITRO), Nursing Service, Tan Tock Seng Hospital

Research Interests:

- Artificial Intelligence
- Realist Evaluation
- Implementation Science
- Health Digitalization
- Caregivers of older persons
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### **Biography**

George Glass is a nurse researcher at Tan Tock Seng Hospital. His undergraduate nursing training was at the University of Edinburgh. He focused on quantitative research methodology and regression modelling in his Master of Science of Medicine (Clinical Epidemiology) at the University of Sydney. He completed the Foundations in Artificial Intelligence Programme with AI Singapore in 2024.

He started his research career focusing on caregivers of older persons, aimed towards ‘improving care for the (informal) carer’. Together with other nurse researchers, he has examined the potential protective effect of caregiver mastery on the stress of caregiving, and the unique experiences of different caregiver personas. These findings guided the development of a holistic hospital-to-home support system for caregivers at TTSH.

He was one of the first nurse researchers to explore patient activation, examining predictors for a patient’s knowledge, skills and confidence for effective management of their conditions and self-care.

With NGEMR, he has been active in applying data extraction and analysis to gain better insights in patient care as well, currently examining a cohort of caregivers and their loved ones post-discharge.

He led the development of a mobile application to better equip and enable caregivers of older persons. This includes the development of recommendation systems to ‘push’ appropriate content to users based on their profiled needs.

He is now driving research on the development, acceptance and adoption of Artificial Intelligence (AI) and Implementation Science, centred on integrating effective care innovations into clinical practice.

## Selected Publications

- Chan, E Y, Glass, GF, Chua, KC, Ali, N, & Lim, W. S. (2018). Relationship between mastery and caregiving competence in protecting against burden, anxiety and depression among caregivers of frail older adults. *The Journal of Nutrition, Health & Aging*, 22(10), 1238-1245. <https://doi.org/10.1007/s12603-018-1098-1>
- Glass GF, Goh CCK, Cheong RQ, Ong ZL, Khong PCB, Chan EY. (2021) Effectiveness of skin cleanser and protectant regimen on incontinence-associated dermatitis outcomes in acute care patients: A cluster randomised trial. *Int Wound J*. Dec;18(6):862-873. DOI: 10.1111/iwj.13588 Epub 2021 May 7. PMID: 33960676.
- Chan EY, Glass GF, Cheong RQ, Chin GF, Chng DYJ. (2021) Patient Activation and its Predictors in Hospitalized Older Adults in Singapore. *Geriatr Nurs*. 2021 Mar-Apr;42(2):336-343. DOI: 10.1016/j.gerinurse.2021.01.006 Feb 6. PMID: 33556900.
- Glass GF, Tan H, Chan EY. (2021) Effect of an evidence-based poster on the knowledge of delirium and its prevention in student nurses: A quasi-experimental study. *Contemp Nurse*. Dec;57(6):462-471. DOI: 10.1080/10376178.2022.2044872 Epub 2022 Mar 9. PMID: 35184674.
- Chan, EY, Wu, LT, Ng, EJY, Glass GF, Tan HTR (2022) Applying the RE-AIM framework to evaluate a holistic caregiver-centric hospital-to-home programme: a feasibility study on Carer Matters. *BMC Health Serv Res* 22, 933. <https://doi.org/10.1186/s12913-022-08317-3>
- Kwok MWS, Glass GF Jr, Loke S, Loi JN, Chan EY. I see, I learn, I do: Development and evaluation of a video-enhanced nasogastric tube feeding training programme for caregivers. *Nurs Open*. 2023 Apr;10(4):2357-2365. doi: 10.1002/nop2.1491. Epub 2022 Nov 23. PMID: 36419224; PMCID: PMC10006659. <https://doi.org/10.1002/nop2.1491>

## Notable Research Awards & Grants from Past 5 Years

Name of Awards & Grants	Year Obtained
NMRC National Innovation Challenge on Active and Confident Ageing – Project Carer Matters 2 (Co-investigator)	2022

## Translating Research/Innovation Into Healthcare

- 27 Feb 2022, Channel News Asia:  
Link: [Commentary: Caregiver collapse is real and hospitals can smoothen the transition home](#)
- 4 Jul 2019, Channel News Asia:  
Link: [TTSH's pilot programme to introduce framework for better caregiving management](#)

- 4 Jul 2019, The Straits Times:  
Link: [More help for caregivers to cope emotionally with roll-out of new TTSH programme](#)
- 5 Jul 2019, The Straits Times:  
Link: [Pilot scheme to check on caregivers' emotional well-being](#)