Session title:

"The problems and challenges of using long-term care dataset and its linkage with health care and social cost in Taiwan"

Introduction of the Long-term Care utilization research and LTC data set use

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Abstract:

Population ageing is a global phenomenon. Faced with an increasing ageing population, Taiwan can benefit from understanding how the impact of population aging to the society and how to support older people. Prof. Liu's research is in the field of Social Gerontology. Based on her discipline of Social Policy and Management in Aged Care, her research explores the long-term care policy and utilizations/outcomes of service delivery and quality of life of elderly people by deferential aging. Her recent research centers on the combating ageism, enhancing quality of life of elderly people and person-environment interactions, including integration of social care into health care system and intrinsic capacities of elderly people. Focusing on these issues, most of her research using primary data collection from the fields and some benefit from analyzing LTC care management data by targeting specific issues authorized by the central/local government. To emphasize the integrating of the social care into health care and comprehensive view of aged care in aging society, it is necessary that the governmental agencies can release the aged care and LTC-related data to allow scholars to convert data into information for policy reform, enhancing aged care quality and wellbeing of elderly people as a whole.

Improving cost-effectiveness for geriatric health policy:
Using real-world data for outcome evaluation and prevention

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Abstract:
Under the vision of a healthy Taiwan(健康臺灣), President Lai, Cheng-Te, and his administration have proposed three goals for developing the long-term care (LTC) system: Health promotion(健康促進), aging in place(在地老化), and hospice palliative care (安寧善終). Simultaneously, the governmental spending of LTC has increased from 16.3 billion NTD in 2018 to 77.4 billion NTD in 2024, or a more than 4-fold increase in 7 years. Although it is understandable to accelerate the funding and establish the infrastructure for LTC, we must also focus on outcome evaluation to secure the value and sustainability of such services. Using real-world data, my team has been developing new statistical methods of analyzing the cost-effectiveness of different technologies for preventing and treating major catastrophic illnesses. Namely, we interlinked different databases to establish a cohort and extrapolated survival function to the lifetime. We multiplied it with a second function (namely, quality of life, or functional disability, or medical costs, etc.). We summed up throughout life to estimate the lifetime impacts (mortality, functional disability, and total costs) of the technology of the specific illness. After comparing age-, sex-, and calendar-year matched referents from the general population, we could quantify the lifetime impact, or cost per QALY (quality-adjusted life year), of a healthcare technology on the illness. As resources are always limited, we call for the attention of LTC-related governmental agencies to share their data so that scholars can quantify the cost-effectiveness and equity of different care services, including preventive technology. In this way, we shall improve our society's efficiency, equity, and welfare.

The challenge and problems of linking LTC data set and related issues

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Abstract:
The long-term care (LTC) database in Taiwan is systematically designed to collect and integrate multi-source data related to long-term care, providing essential support for the government, healthcare institutions, and researchers in policy formulation, resource allocation, and research analysis. We have previously accessed data from the Care Management Database of the Social and Family Affairs Administration, Ministry of Health and Welfare. This database consists of three key components: basic data files (基本資料檔), program data files (計畫資料檔), and assessment data files (評估資料檔), enabling the assessment of functional changes in individual cases. However, to accurately measure service quality and cost-effectiveness, it is necessary to link the LTC database with the National Health Insurance (NHI) database. This process is fraught with multiple challenges. First, the completeness, timeliness, and accuracy of personal data directly impact the effectiveness of LTC database analysis. Furthermore, ensuring data privacy and security, especially when sharing and analyzing data across institutions, presents a significant challenge. In addition, this presentation will also explore the analytical challenges associated with other related databases, specifically focusing on the limitations of data integration and the difficulties of ensuring operational feasibility.

Stroke care policy insights from Korean NHIS-NSC data and potential applications of the long-term care dataset

Soyeon Cheon
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Dr. Soyeon Cheon will present insights for stroke care policy derived from Korean stroke cohorts. Drawing on analyses of the National Health Insurance Service–National Sample Cohort (NHIS-NSC) and Korea Health Panel (KHP) data, she will explore how functional disabilities evolve over time and their lifelong impact on stroke survivors. Key findings—such as the growing need for assistance with activities like bathing—and contrasts between ischemic and hemorrhagic stroke will be highlighted. These results provide valuable evidence for optimizing resource allocation and policy decisions in long-term stroke care. The talk will conclude by introducing the Korean long-term care dataset and outline its potential applications for future research.