CONFERENCE ABSTRACT

Understanding the predictors of services use in older people to plan for and provide quality cost effective care

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Introduction: It is anticipated that by 2030 the number of older people and people living with long term conditions will have significantly increased. At the same time, it is expected that there will be a shift to providing more health care in the community. Browning et al [1] using a prospective 16-year longitudinal study of 1000 older Australians described three ageing groups (i) ageing well (30%); initially ageing well then deteriorating (50%); consistently ageing poorly (20%). Understanding the predictors of services use in older people is important in planning and providing quality care. Predictors of general practice service use from a small community-based studies have included: lower age, fewer medical conditions, restful sleep, good nutrition, decreased stress, being a non-smoker and good social support [2].

Using our existing data linkage resource, the Central and Eastern Sydney Primary and Community Health Cohort/Resource (CES-P&CH), which includes questionnaire data, primary care records, prescribing information, hospital records, emergency department records, cancer registry, and vital statistics on over 30,000 participants in CES aged 45 years and over (over 250,000 in NSW for comparison) we identified the predictors of service use (including general practice, pharmaceuticals, emergency departments, hospitalisations) amongst people aged over 75 years.

Methods: A record linkage study using 45 and Up Study questionnaire data, MBS claims, PBS claims, Emergency Department visits, hospitalisations and deaths was undertaken. Participant characteristics at baseline (2006-2009) included demographics, health behaviours, social capital, functional status, and health conditions. Service characteristics included type of service, length of stay, location. Predictive models were developed to examine the participant/service characteristics with higher/lower service use over time.

Results and Discussion: We identified 6,067 participants who were aged over 75 years in CES at baseline. Of these 59.0% had seen a GP 8 times or more in 2008, 19.6% had seen a specialist 8 times or more, 26.7% had attended an ED at least once, and 44.2% had been hospitalised at least once. In 2014 rates of GP use, specialist use and hospital admissions remained the same however ED visits had increased by 5%. This paper will discuss the different predictive models that were developed to describe service use. This paper will also provide the results from the predictive

models and how this information is being/can be used to better plan and provide quality care for older people in CES.

Limitations and suggestions for future research: Because the research study used an existing record linkage resource we were limited to the participant and service characteristics that were available. This research study would benefit from the inclusion on non-admitted data such as outpatient, community services and aged care services.

References:

1- Browning C, Enticott J, Thomas S and Kendig H. 2017. Trajectories of ageing well among older Australians: a 16-year longitudinal study. Ageing and Society. 2017; 1-22.

2 -Korten AE, Jacomb PA, Jiao Z, Christensen H, Jorm AF, Henderson AS, Rodgers B. Predictors of GP service use: a community survey of an elderly Australian sample. Aust N Z J Public Health. 1998; 22: 609-615.