11 Health care utilisation

11.1 Background

Health care utilisation is defined as being an indicator of 'chronicity'. That is, people who attend GPs and physicians frequently, who use high numbers of medications, are admitted to hospital, reside in nursing homes or have certain morbidity types (e.g. cognitive impairment, incontinence) are deemed to have more indicators of chronic and unstable conditions than people who do not utilise the same mix of services and resources. General practice is well positioned to meet the needs of patients with chronic and complex conditions. Increased life expectancy will see an increase in the number of elderly people with chronic medical problems. Most elderly people will continue to be looked after in the community rather than in acute settings. General practitioners will therefore be in a unique position to face the challenges of coordinating patient care.

The NSW Department of Health has forecast that by 2001 in New South Wales almost 50% of old people will be in the 'old-old' group, i.e. frail and aged 75 years and over (NSW Health Department 1990). The frail aged will be likely to have more complex care needs and require integrated care and coordination of services. The Australian Coordinated Care Trials are currently under way in an attempt to address some of these issues (Commonwealth Department of Health and Aged Care 1999b).

The Jamison Inquiry (Jamison 1980) noted from a NSW survey into hospital service utilisation that the aged (60 years and over) comprised 8.6% of the population but occupied 30% of acute hospital beds and consumed 40% of prescribed drugs. General practice patients have received little attention, mainly due to deficits in available information sources. This SAND topic aimed to establish levels of health services utilisation among patients attending general practice and to identify those who would fulfil the 'chronicity' criteria.

11.2 Research questions

1. How many prescribed and over-the-counter medications are taken routinely by general practice patients in Australia over a six-month period?
2. How many visits are made to GPs in Australia by general practice patients, in a six-month period?
3. How many general practice patients are admitted to hospital in a six-month period?
4. How many general practice patients attend allied health professionals in a six-month period?
5. What is the lifestyle/dependency status of patients attending GPs?
6. What is the prevalence of various indicators of 'chronicity'—falls, cognitive impairment, social isolation, incontinence—in the general practice population?

11.3 SAND questions

Box 11.1: Health care utilisation

GPs asked the patients the following questions, all of which were preceded by 'In the past 6 months'

♦ *Number of medications routinely taken?*	*Prescribed*
	OTC (over-the-counter)
	Number of GP visits (any GP)?
	Number of hospital admissions (including day surgery)?
	Number of AHP consultations?
♦ *Lifestyle: (tick box for 'yes')*	*In the community* *Living independently?* *Dependent on carer /other?* *In an institution?*
GP assessment *(tick box for 'yes')*	
♦ *Present status:* *(Multiple response allowed)*	*Falls / poor mobility?* *Cognitive impairment / psychiatric problem?* *Socially isolated, carer stress, loneliness?* *Incontinent?* *Department of Veterans' Affairs health care plan?* *Other coordinated care plan*

Notes:

1. Routinely = usually taken at least once daily but could be taken on a regular basis less frequently (e.g. Ventolin)
2. OTC: may include pharmacy medicines (S3), vitamins, alternative therapies, anti-oxidants etc.
3. Allied health professional (AHP) could include home nursing visits, physiotherapist, chiropractor, psychologist etc.

11.4 Results

Sample size was 7,992 patient encounters from 200 GPs.

The highest response rates were for those questions dealing with GP consultations i.e. number of prescribed medications (91.8%) and number of GP visits (94.8%). Response rates decreased for questions dealing with other aspects of health service utilisation—hospital admissions (81.3%), number of over-the-counter (OTC) medications (67.6%) and allied health professional consultations (81.9%).

At least one prescribed medication had been taken routinely in the past six months by patients at 63.1% of the encounters. Of these, 69.0% had routinely taken between one and three medications. In comparison, 31.6% had routinely taken at least one OTC medication. The rate of use of both prescribed and OTC medications increased with age. The proportion of females who routinely took at least one prescribed medication was 66.7% compared with that for males, 58.7%. Similarly, more females than males had routinely taken at least one OTC medication over the previous six months. At 4.9% of encounters, the patients stated that they had routinely taken seven or more medications (prescribed and/or over-the-counter).

It was estimated that 92.6% of patient encounters had seen a GP at least once in the previous six months. Of these, the majority (52.3%) had seen a GP between one and four times. Males and females had similar rates of GP attendance with only slightly more females (94.0%) than males (91.0%) having at least one GP visit in the past six months. At least one admission to hospital in the previous six months was reported at 16.0% of encounters. The majority of these, 70.9%, had one admission only. At least one visit to an allied health professional, in the previous six months, was reported by patients at 17.5% of encounters.

At 75.7% of encounters, patients stated that they were living independently, while 12.5% said that they were dependent on a carer or other. Only 2.6% of the total sample were institutionalised.

The prevalence of falls/poor mobility and cognitive impairment/psychiatric problems was similar, 5.3% for those living independently and 5.2% for those who were dependent on a carer. The prevalence of social isolation/carer stress/loneliness was 3.9%, while the prevalence of incontinence was 1.3%. All of these indicators were more prevalent in those who were dependent on a carer and for those who were institutionalised.

'Chronicity' was defined as having at least one of the following (in the previous six-months): falls/poor mobility, cognitive impairment, social isolation, incontinence, more than two hospital admissions, more than 11 AHP consultations, 7+ prescribed and/or OTC medications (Table 11.1).

Table 11.1: Indicators of chronicity

Chronicity indicator (n=7,992)	n	%	95% CI
Falls/poor mobility	421	5.3	4.0–6.5
Cognitive impairment	414	5.2	3.2–7.1
Social isolation etc.	308	3.9	2.6–5.2
Incontinence	107	1.3	0.0–2.7
>2 hospital admissions	302	3.8	2.6–5.0
11+ AHP consultations	109	1.4	0.0–3.4
7+ prescribed and/or OTC medications	393	4.9	3.7–6.2

Note: Abbreviations: AHP=allied health professional, OTC=over-the-counter

It was estimated that 16.4% of respondents could be classified as having at least one indicator of chronicity. Of those with at least one chronicity indicator, 64.2% had only one indicator, 21.0% had two indicators while the remaining 15.0% had three or more. The prevalence of all indicators of chronicity increased with age. Participants in DVA health care plans were identified at only 27 encounters (0.3%). A further 80 people (4.4%) had other health care plans.

11.5 Discussion

It was demonstrated with good reliability that using the SAND method, health utilisation indicators could be identified for patients attending general practitioners. These indicators may be of future benefit in the planning and delivery of health services for those with complex care needs. The advent of the new Medicare item numbers for patient care assessment and managed care, which were introduced in November 1999 (Commonwealth Department of Health and Aged Care 1999c), should provide an incentive for GPs to assess and coordinate complex patient care. The uptake of these will be worthy of future monitoring, particularly the patient profiles.