EPC encounters in Australian general practice

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The BEACH program, a continuous national study of general practice activity in Australia, gives us an overview of the content of Enhanced Primary Care (EPC) encounters in Australian general practice. The EPC program was introduced on 1 November 1999, and contained three major aspects of care – health assessments, care plans and case conferences.[1]

Between April 2000 and March 2005, there were a total of 1071 Enhanced Primary Care (EPC) items recorded in the BEACH study (0.3% of all encounters over this period). Of these, 598 were health assessments and 436 were care plans. The remainder included 21 case conferences, 15 domiciliary medication management reviews and one Aboriginal and Torres Strait Islander adult health check. This article will focus on the patients seen, problems managed, and the treatments provided during health assessments and care plans.

Health assessments

There are two types of health assessments, those for patients aged 75 years and over, and those for Aboriginal and Torres Strait Islander peoples aged 55 years and over. There were 598 health assessments recorded by 346 general practitioners in BEACH between 2000 and 2005 (0.15% of all encounters, 8.7% of all general practitioner participants). The majority of patients (97.3%) were aged 75 years and over, (receiving 75+ health assessments), and 1.9% of patients were aged 65–74 years. Almost 60% of the patients receiving health assessments were female (*Table 1*). This figure aligns with the overall proportion of attendances in the 75 years and over age group.[2]

Reasons for encounter were recorded at a rate of 139 per 100 encounters at health assessments (*Table 2*), the most common being related to check-ups (86.6 per 100 encounters). There were 174 problems managed per 100 health assessment encounters. New problems were managed at a rate of 51 per 100 encounters, significantly more often than at encounters for all patients aged 75 years and over (37 per 100 encounters),[2] indicating the value of health assessments in the identification of new problems in older patients. While the most common problem label was general check-up, other frequently managed problems were hypertension, osteoarthritis and diabetes (*Table 3*).

Medications were prescribed, advised for over-the-counter purchase, or supplied at a rate of 73 per 100 encounters. This rate was almost half that for all encounters with patients aged 75 years and over (130 per 100 encounters).[2] Nonpharmacological treatments were given at a rate of 29 per 100 encounters, also significantly less often than for all patients aged 75 years and over (45 per 100 encounters).[2] The majority of these were clinical treatments (advice, education and counselling) at a rate of 18 per 100 encounters, while procedures were performed at one in every 10 encounters.

Referrals (17 per 100 encounters) were made equally as often to specialists and allied health professionals (both at a rate of 7.9 per 100 encounters). While the referral rate for specialists aligns with the overall rate for patients aged 75 years and over, the rate to allied health professionals was nearly three times that for all patients aged 75 years and over (2.8 per 100 encounters).[2] Orders for pathology tests were given at a rate of 39 per 100 encounters, and imaging tests at a rate of 6 per 100 encounters (*Table 2*).

Care plans

Care plans for the multidisciplinary management of patients with chronic and complex care needs[1] were recorded in BEACH on 436 occasions by 203 GPs (0.11% of all encounters, 5.1% of all GP participants).

Table 1. Age and sex

Patient variable	2000–2001 to 2004–2005 Health assessments* Percent (n=598)	Age and sex specific rates	Care plans Percent (n=436)	Age and sex specific rates
Sex				
Male	41.1	0.15	48.8	0.13
Female	58.9	0.15	51.2	0.10
Age in years				
1–4	–	–	0.2	0.01
5–14	–	–	0.2	<0.01
15–24	–	–	1.9	0.02
25–44	–	–	10.4	0.05
45–64	0.9	<0.01	31.7	0.13
65–74	1.9	0.02	25.0	0.23
75+	97.3	1.14	30.6	0.26

* All health assessments, including 75+ health assessments and the 55+ health assessments for Aboriginal and Torres Strait Islander patients

Table 2. Reasons for encounter

Variable	2000–2001 to 2004–2005 Health assessments* Rate per 100 encounters (n=598)	95% CI	Care plans Rate per 100 encounters (n=436)	95% CI
Reasons for encounter	139.3	(132.5–146.1)	149.1	(137.8–160.3)
Problems managed	173.8	(164.2–183.3)	186.9	(172.0–201.9)
– new problems	51.0	(44.1–57.9)	27.1	(19.6–34.5)
Medications	72.6	(61.3–83.9)	102.5	(85.1–120.0)
Nonpharmacological treatments	28.8	(22.9–34.6)	57.6	(45.6–69.5)
– clinical treatments	18.2	(13.8–22.7)	49.5	(38.4–60.7)
– procedural treatments	10.5	(7.3–13.8)	8.0	(5.1–11.0)
Referrals	16.6	(12.2–21.0)	45.6	(34.2–57.1)
– allied health	7.9	(5.0–10.7)	24.1	(16.7–31.5)
– specialist	7.9	(5.1–10.6)	19.7	(13.9–25.6)
Pathology	39.3	(25.5–53.1)	49.8	(34.3–65.2)
Imaging	5.9	(3.3–8.4)	7.6	(3.1–12.0)

* All health assessments, including 75+ health assessments and the 55+ health assessments for Aboriginal and Torres Strait Islander patients

CI = confidence interval

Females accounted for only 51% of the patients at care plan encounters, a significantly lower proportion than for females at all general practice encounters (57%).[3] The likelihood of having a care plan encounter increased with age (*Table 1*).

Reasons for encounter were recorded at a rate of 149 per 100 encounters during care plans. There were 187 problems managed per 100 encounters during care plans, significantly more than the average for all encounters (146 per 100 encounters)[3] (*Table 2*). The most common

Table 3. Most frequently managed problems

Health assessments	Care plans
General check-up*	Diabetes*
Hypertension*	Hypertension*
Immunisation (all)*	Consult with primary care provider
Osteoarthritis*	Lipid disorders
Diabetes*	Admin procedure not otherwise specified

* Includes multiple ICPC-2 or ICPC-2 plus codes

problem managed during care plans was diabetes, followed by hypertension. Lipid disorders were also frequently managed (*Table 3*).

Medications were prescribed, advised or supplied at a rate of 103 per 100 encounters during care plans. The most common medication subgroup prescribed was hypoglycaemics (19 per 100 encounters). Nonpharmacological treatments were given at a rate of 58 per 100 encounters. Clinical treatments were the most common (49.5 per 100 encounters), while procedures were performed at only eight per 100 encounters, significantly less often than at all general practice encounters (15 per 100 encounters).[3] Orders for pathology tests were given at a rate of 50 per 100 encounters (compared with 35 per 100 encounters overall), while orders for imaging were made at eight per 100 encounters.

During care plan encounters, referrals were given at four times the average rate for all general practice encounters (46 per 100 care plan encounters compared with 12 per 100 encounters overall).[3] In particular, referrals were given to allied health professionals at a rate of 24 per 100 encounters, eight times the average for all encounters, and referrals to specialists (20 per 100 care plan encounters) were made twice as often (*Table 2*).

Discussion

The characteristics of encounters for which EPC items were claimed are substantially different from other general practice encounters. These data suggest that GPs are using health assessments as an opportunity to assess the patient's overall health rather than to treat individual conditions presented or diagnosed at each encounter. As such, medication rates, along with the rates of both clinical and procedural treatments, were significantly lower than at all encounters with patients aged 75 years and over, while the management rate of new problems was significantly higher.

The greater number of problems managed at care plan encounters suggests that the multidisciplinary team is considering the care of the patient in a holistic manner. The markedly higher rate of referrals, particularly to allied health professionals during both health assessments and care plans, suggests a willingness to move toward a more multidisciplinary care approach for these patients.

The data not only demonstrate the differences between EPC encounters and other types of consultations, but also show that GPs use the different types of EPC items for different purposes, as shown by the difference in the types of management provided at health assessments and care plans.

Data from the BEACH study can be used to identify the characteristics of EPC encounters. With the recently introduced changes to the EPC program, including the new chronic disease management items, the BEACH study can be used to monitor the resulting changes in patterns of practice in the future.

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