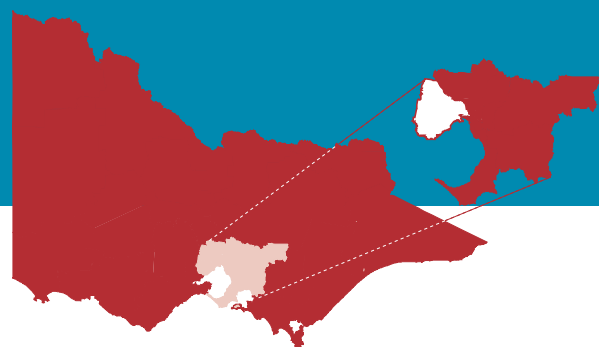


ACSC 2002–2003 Update

Western Metropolitan Region and Primary Care Partnerships



Victorian Ambulatory Care Sensitive Conditions Study

Ambulatory care sensitive conditions (ACSCs) are those for which hospitalisation is thought to be avoidable if preventive care and early disease management are applied, usually in an ambulatory setting¹. In theory, access to timely and effective ambulatory care can reduce the risks of hospitalisation.

The Victorian Ambulatory Sensitive Conditions Study is updated annually by the Health Surveillance and Evaluation Section of the Department of Human Services (DHS). This fact sheet presents analyses of ACSCs for the DHS Western Metropolitan Region as a whole and for the Primary Care Partnerships in this region, using the Victorian Admitted Episodes Dataset (VAED) from 1993–94 to 2002–03. Rates of admission were age- and sex-standardised to the Victorian population (1996) using the direct method.

Western Metropolitan Region²

The Western Metropolitan Region is the most culturally diverse region in the state (an estimated 34.3 per cent of the regions speaks a language other than English at home). It covers an area of 1,420 square kilometres, including inner suburban areas and semi-rural areas. The region had an estimated population of 787,178 in 2003. It includes three Primary Care Partnerships – Moonee Valley/Melbourne, WestBay, and Brimbank/Melton.

Variations in rates of ACSCs admissions, 1993–94 to 2002–03

There were 19,210 admissions for total ACSCs in 2002–03, with an average of 5.16 bed days. The admission rate for total ACSCs increased from 22.71 per 1,000 persons (22.29–23.12) in 1993–94 to 34.31 per 1,000 persons (33.83–34.80) in 2002–2003 (Figure 1).

Variations in rate ratios of ACSCs admissions, 1993–94 to 2002–03

The Western Metropolitan region's admission rate ratios for total ACSCs declined during the study period but were still above the Victorian averages (Figure 2).

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Figure 1: ACSCs admission rates, Western Metropolitan Region, 1993–94 to 2002–03

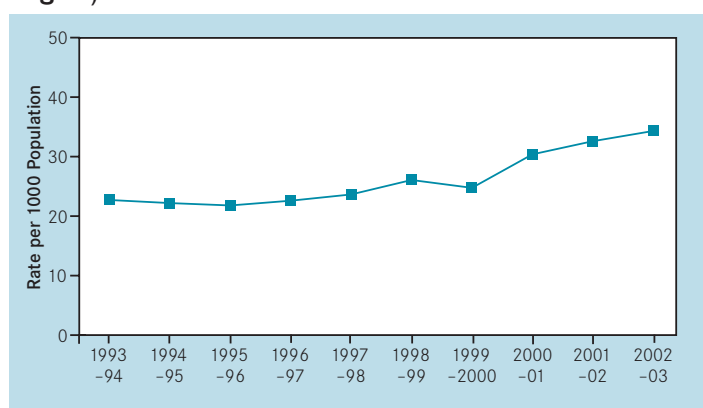
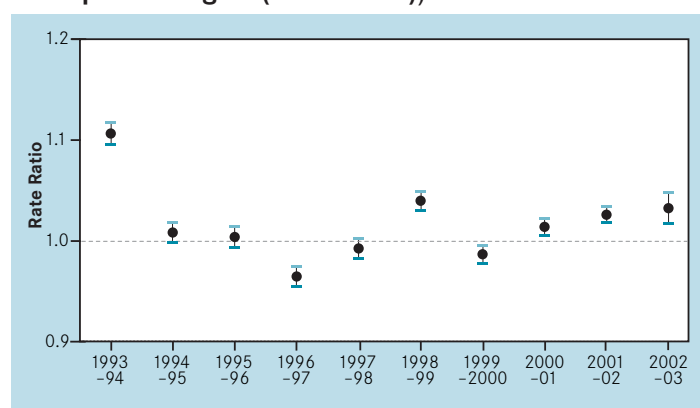


Figure 2: Total ACSCs admission rate ratios, Western Metropolitan Region (Victoria = 1), 1993–94 to 2002–03



1 Billings J, Zeitel L, Lukomnik J, Carey T, Blank A, Newman L. Impact of socioeconomic status on hospital use in New York City. *Health Affairs*, 1993, 12, 162–173.

2 In February 2004 the Western Metropolitan Region was combined with the Northern Metropolitan Region to form the North and West Metropolitan Region. Next year's ACSC update will report findings for the North and West Metropolitan Region.



Top 10 individual ACSCs admissions, 2002–03

Table 1 summarises the admission rates and average bed days for the top 10 ACSCs in 2002–03. In addition to including chronic ACSCs, the top five also includes admissions for dehydration and gastroenteritis and pyelonephritis. The top 10 ACSCs accounted for 92.09 per cent of the total ACSCs admission in the region. The average bed days for the top 10 ACSCs was 5.47 in 2002–03.

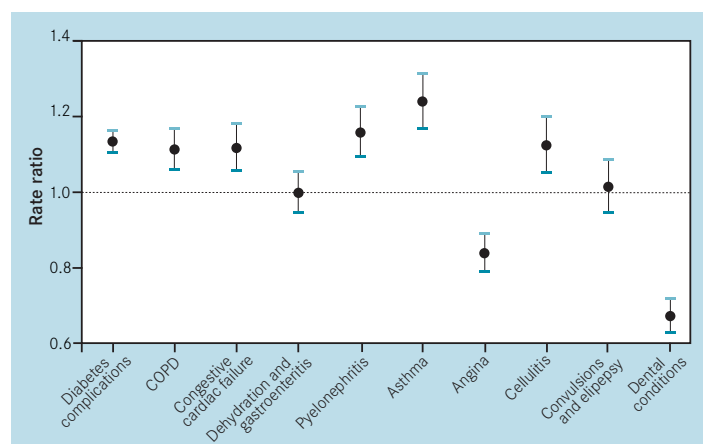
Table 1: Top 10 ACSCs in Region 1 – Western Metropolitan, 2002–03

ACSCs	Number of admissions	Rate per 1000 persons	Lower CI	Upper CI	Average bed days	Total bed days
Diabetes complications	6332	11.6969	11.41	11.99	8.36	52,934
Chronic obstructive pulmonary disease	1821	3.4186	3.27	3.58	6.22	11,322
Congestive cardiac failure	1395	2.6776	2.54	2.82	6.44	8,990
Dehydration and gastroenteritis	1486	2.5184	2.39	2.65	2.62	3,892
Pyelonephritis	1340	2.3780	2.25	2.51	4.16	5,577
Asthma	1291	2.1881	2.07	2.31	1.91	2,464
Angina	1156	2.0929	1.98	2.22	2.36	2,724
Cellulitis	991	1.7056	1.60	1.82	5.02	4,978
Convulsions and epilepsy	939	1.5838	1.49	1.69	2.90	2,726
Dental conditions	939	1.5752	1.48	1.68	1.18	1,104

Admission rate ratios for top 10 ACSCs, Western Metropolitan Region, (Victoria = 1), 2002–03

Compared with the Victorian average, the region's admission rate ratios were significantly lower for angina and dental conditions (Figure 3). The regions' admission rate ratios were significantly higher than the Victorian averages for diabetes complications, chronic obstructive pulmonary disease, congestive cardiac failure, pyelonephritis, asthma and cellulitis. Asthma accounted for the region's highest admission rate ratio, which was 1.23 (1.17–1.31).

Figure 3: Top 10 ACSCs admission rate ratios for Western Metropolitan Region, (Victoria = 1), 2002–03



Key findings – Western Metropolitan Region

- Admission rates for ACSCs increased in the region over the ten-year study period.
- In addition to including chronic conditions, the top 5 ACSCs also included dehydration and gastroenteritis and pyelonephritis.
- The region's admission rate ratios for angina and dental conditions were significantly lower than the Victorian averages in 2002–03.
- Asthma accounted for the region's highest admission rate ratio, which was 1.23 (1.17–1.31).

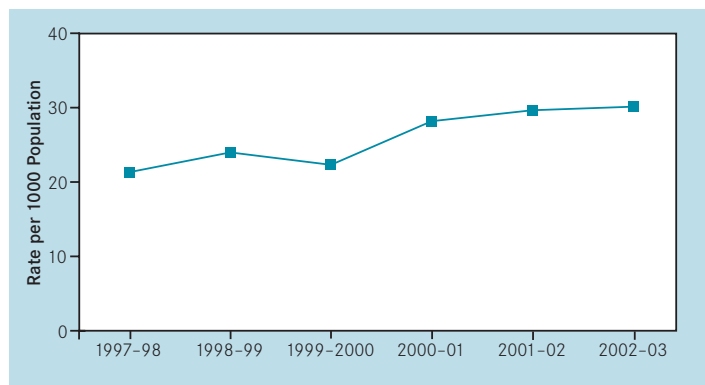


Moonee Valley/Melbourne Primary Care Partnership (PCP 22)

Variations in rates of ACSCs admissions, 1997-98 to 2002-03

The Primary Care Partnership's (PCP) admission rates for total ACSCs increased over the six-year period. The admission rates for total ACSCs increased from 21.33 per 1,000 persons (20.58-22.08) in 1997-98 to 30.13 per 1,000 persons (29.30-30.99) in 2002-03 (Figure 4).

Figure 4: ACSCs admission rates in Moonee Valley/Melbourne PCP, 1997-98 to 2002-03



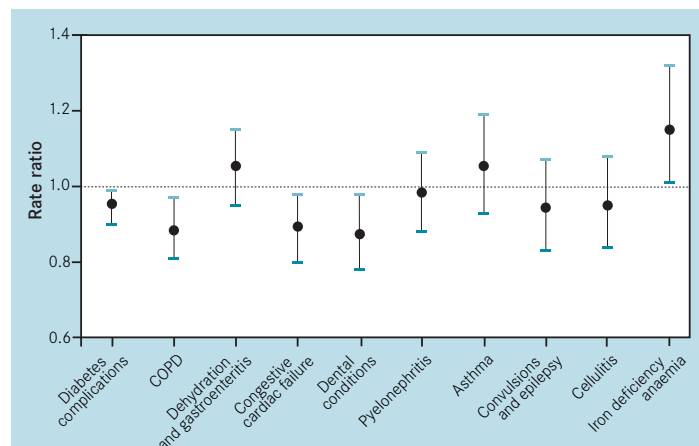
Top 10 Individual ACSCs admissions, 2002-03

Table 2 summarises the admission rates and average bed days for the top 10 ACSCs in 2002-2003. Diabetes complications and chronic obstructive pulmonary disease were the PCP's two leading causes of ACSC admissions in 2002-03. The top 10 individual ACSCs admissions accounted for 91.37 per cent of the total ACSCs admissions in the region. The average bed days for the top 10 ACSCs was 5.84 in 2002-03.

Admission rate ratios for the top 10 individual ACSCs, (Victoria = 1), 2002-03

The PCP's admission rate ratios for the top 10 ACSCs (except iron deficiency anaemia) were either similar to or lower than the Victorian averages in 2002-03 (Figure 5). The PCP's highest admission rate ratio was for iron deficiency anaemia, which was 1.15 (1.01-1.32).

Figure 5: Top 10 ACSC admission rate ratios in Moonee Valley/Melbourne PCP, (Victoria = 1), 2002-03



Key findings – PCP22 – Moonee Valley/Melbourne

- The PCP's admission rate for total ACSCs increased over the six-year period.
- The PCP's admission rate ratios for the top 10 ACSCs (except iron deficiency anaemia) were similar to or significantly lower than the Victorian averages for 2002-03.
- The PCP's highest admission rate ratio in 2002-03 was for iron deficiency anaemia.

Table 2: Top 10 ACSCs in PCP22 – Moonee Valley/Melbourne, 2002-03

ACSC	Number of admissions	Rate per 1000 persons	Lower CI	Upper CI	Average bed days	Total bed days
Diabetes complications	1,612	9.76	9.29	10.24	9.21	14,846
Chronic obstructive pulmonary disease	448	2.72	2.48	2.98	6.66	2,985
Dehydration and gastroenteritis	456	2.64	2.41	2.89	2.46	1,123
Congestive cardiac failure	372	2.13	1.92	2.36	6.44	2,394
Dental conditions	297	2.04	1.82	2.29	1.16	345
Pyelonephritis	334	2.00	1.80	2.23	4.59	1,532
Asthma	268	1.86	1.65	2.10	2.02	542
Convulsions and epilepsy	238	1.47	1.29	1.67	2.94	699
Cellulitis	242	1.45	1.28	1.64	5.28	1,278
Iron deficiency anaemia	232	1.42	1.25	1.61	2.24	520

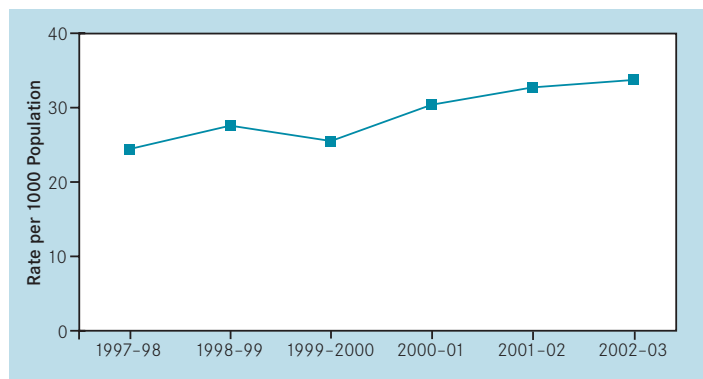


WestBay Primary Care Partnership (PCP 23)

Variations in rates of ACSCs Admissions, 1997-98 to 2002-03

The Primary Care Partnership's (PCP) admission rates for total ACSCs increased over the six-year period. The PCP's admission rates for total ACSCs increased from 24.43 per 1,000 persons (23.74-25.12) in 1997-98 to 33.72 per 1,000 persons (32.97-34.50) in 2002-03 (Figure 6).

Figure 6: ACSCs admission rates in WestBay PCP, 1997-98 to 2002-03



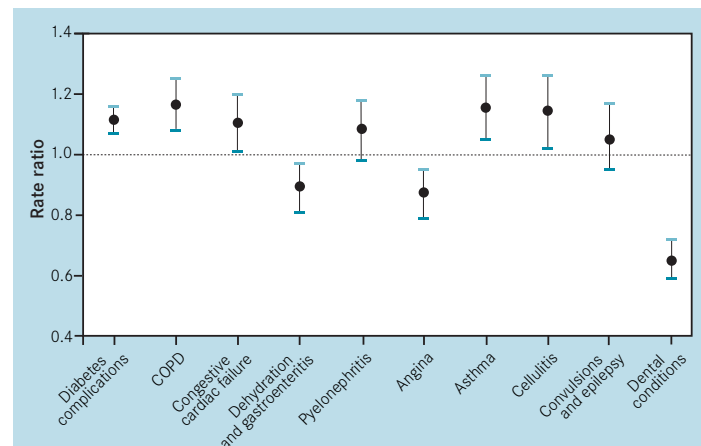
Top 10 individual ACSCs admissions, 2002-03

Table 3 summarises the admission rates and average bed days for the top 10 ACSCs in 2002-2003. Diabetes complications and chronic obstructive pulmonary disease were the PCP's two leading causes of ACSC admissions in 2002-03. The top 10 individual ACSCs admissions accounted for 92.10 per cent of the total ACSCs admissions in the region. The average bed days for the top 10 ACSCs was 5.67 in 2002-03.

Admission rate ratios for the top 10 individual ACSCs, (Victoria = 1), 2002-03

The PCP's admission rate ratios were significantly higher than the Victorian averages for diabetes complications, chronic obstructive pulmonary disease, congestive cardiac failure, asthma and cellulitis (Figure 7). The PCP's highest admission rate ratio was for COPD, which was 1.16 (1.08-1.25).

Figure 7: Top 10 ACSC admission rate ratios in WestBay PCP, (Victoria = 1), 2002-03



Key findings – PCP23 – WestBay

- The PCP's admission rates for total ACSCs increased over the six-year period.
- The PCP's admission rate ratio in 2002-03 was highest for chronic obstructive pulmonary disease, which was 1.16 (1.08-1.25).
- Dental conditions had the lowest admission rate ratio in 2002-03.

Table 3: Top 10 ACSCs in PCP23 – WestBay, 2002-03

ACSC	Number of admissions	Rate per 1000 persons	Lower CI	Upper CI	Average bed days	Total bed days
Diabetes complications	2,459	11.49	11.04	11.95	8.46	20,803
Chronic obstructive pulmonary disease	752	3.57	3.33	3.84	6.57	4,940
Congestive cardiac failure	549	2.64	2.43	2.87	6.99	3,836
Dehydration and gastroenteritis	505	2.24	2.05	2.44	2.65	1,338
Pyelonephritis	489	2.22	2.03	2.42	4.60	2,248
Angina	473	2.17	1.98	2.37	2.28	1,077
Asthma	481	2.03	1.86	2.23	1.96	945
Cellulitis	389	1.72	1.56	1.90	5.16	2,006
Convulsions and epilepsy	385	1.65	1.49	1.82	3.09	1,188
Dental conditions	361	1.53	1.38	1.69	1.12	404

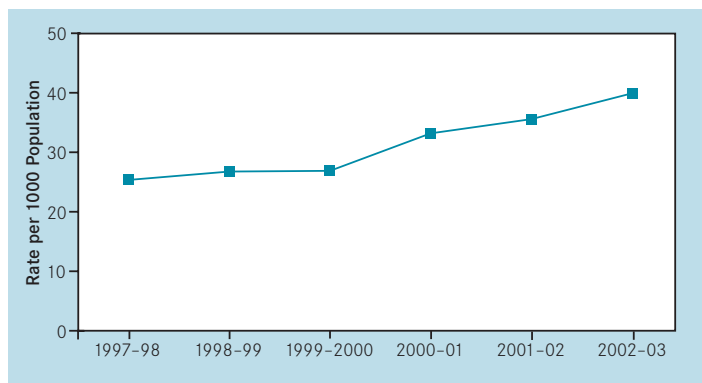


Brimbank/Melton Primary Care Partnership (PCP 24)

Variations in rates of ACSCs admissions, 1997–98 to 2002–03

The Primary Care Partnership's (PCP) admission rates for total ACSCs increased over the six-year period. The PCP's admission rates for total ACSCs increased from 25.35 per 1,000 persons (24.50–26.20) in 1997–98 to 39.91 (38.97–40.86) in 2002–2003 (Figure 8).

Figure 8: ACSCs admission rates in Brimbank/Melton PCP, 1997–98 to 2002–03



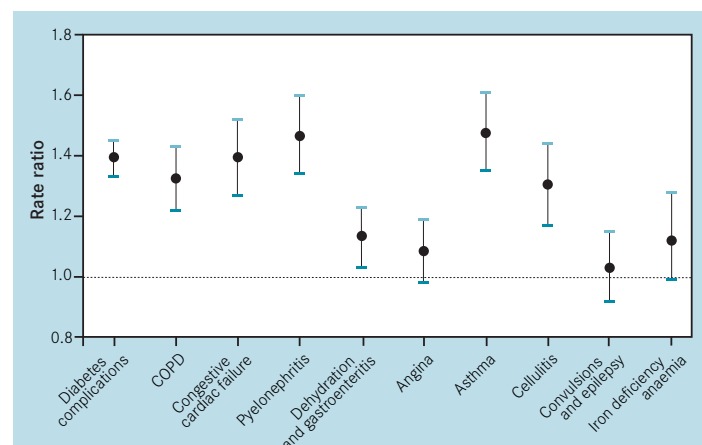
Top 10 individual ACSCs admissions, 2002–03

Table 4 summarises the admission rates and average bed days for the top 10 ACSCs in 2002–2003. Diabetes complications and chronic obstructive pulmonary disease were the PCP's two leading causes of ACSC admissions in 2002–03. The top 10 individual ACSCs admissions accounted for 91.88 per cent of the total ACSCs admissions in the region. The average bed days for the top 10 ACSCs was 5.00 in 2002–03.

Admission rate ratios for the top 10 individual ACSCs, (Victoria = 1), 2002–03

The PCP's admission rate ratios were significantly higher than the Victorian averages for most ACSCs in 2002–03 (Figure 9). The PCP's highest admission rate ratio was for asthma, which was 1.47 (1.35–1.61).

Figure 9: Top 10 ACSC admission rate ratios in Brimbank/Melton PCP, (Victoria = 1), 2002–03



Key findings – PCP24 – Brimbank/Melton

- The PCP's admission rates for total ACSCs increased over the six-year period.
- Most of the PCP's admission rate ratios for the top 10 ACSCs were significantly higher than the Victorian averages for 2002–03.
- The PCP's highest admission rate ratio in 2002–03 was for asthma.

Table 4: Top 10 ACSCs in PCP24 – Brimbank/Melton, 2002–03

ACSC	Number of admissions	Rate per 1000 persons	Lower CI	Upper CI	Average bed days	Total bed days
Diabetes complications	2,261	14.35	13.77	14.96	7.64	17,285
Chronic obstructive pulmonary disease	621	4.06	3.75	4.39	5.47	3,397
Congestive cardiac failure	474	3.33	3.04	3.64	5.82	2,760
Pyelonephritis	517	3.00	2.76	3.28	3.48	1,797
Dehydration and gastroenteritis	525	2.84	2.61	3.09	2.73	1,431
Angina	446	2.69	2.45	2.95	2.05	913
Asthma	542	2.60	2.39	2.83	1.80	977
Cellulitis	360	1.97	1.78	2.19	4.71	1,694
Convulsions and epilepsy	316	1.60	1.43	1.79	2.66	839
Iron deficiency anaemia	237	1.38	1.21	1.56	1.65	392

Suggested citation

Health Surveillance & Evaluation Section, Public Health, Department of Human Services (2004). *Ambulatory care sensitive conditions 2002–03 update: Western Metropolitan Region and Primary Care Partnerships*. Melbourne, Victoria: Victorian Government.

Additional information

Full details of the methodology are available from earlier ACSC reports which can be downloaded from the Department of Human Services website at:

www.health.vic.gov.au/healthstatus

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