Bureau of Health Information

Performance Profiles

Potentially avoidable admissions for COPD and CHF, July 2009 to June 2010

Illawarra Shoalhaven Local Health Network

The Insights Series
Volume 2, PART 1

Bulli District Hospital: Activity profiles, potentially avoidable admissions for COPD and CHF

July 2009 to June 2010

		Same period last year	Change since one year ago
Total hospitalisations[1]	1,790	2,977	-40%
Select medical hospitalisations[2]	1,100	1,083	2%
Total potentially preventable hospitalisations[3]	201	454	-56%
Chronic Obstructive Pulmonary Disease (COPD) admissions[4]	23	25	-8%
Congestive Heart Failure (CHF) admissions[4]	29	35	-17%

Rates per 1,000 select medical hospitalisations[5]

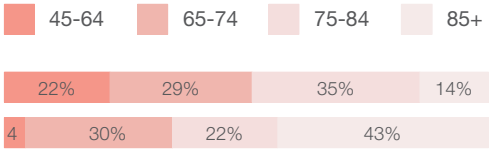
COPD[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)	CHF[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
Actual	21.0	23.3	41.4	Actual	26.4	32.6	22.5
Standardised	12.7	13.2	38.8	Standardised	*	20.2	24.1
95% CI	(6.7 - 21.0)	(8.3 - 19.8)	(36.4 - 41.3)	95% CI	*	(12.6 - 29.9)	(21.8 - 26.4)

Bulli District Hospital: Patient profiles, potentially avoidable admissions for COPD and CHF

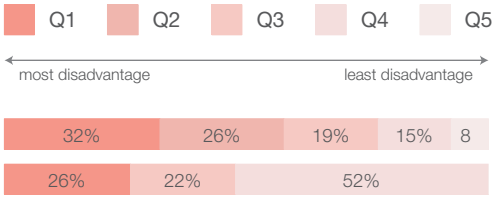
July 2009 to June 2010

Potentially avoidable COPD admissions [1,4]

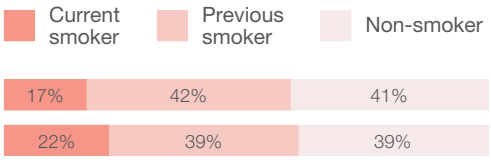
Age profile (years)



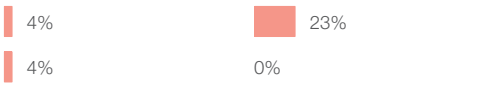
Socioeconomic status [6] (quintile of disadvantage)



Smoking status at admission [7]

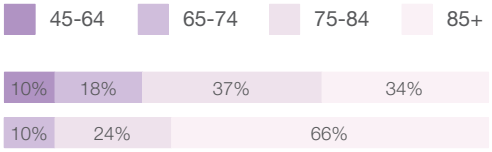


Aboriginal status [8] Rural postcode [9]

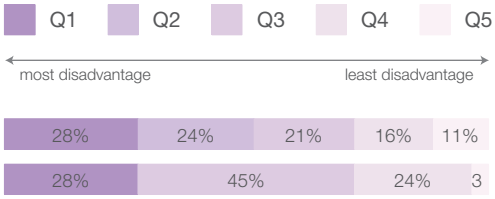


Potentially avoidable CHF admissions [1,4]

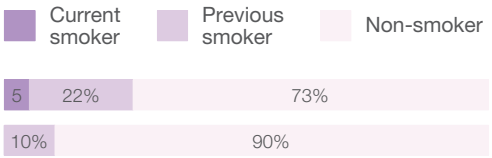
Age profile (years)



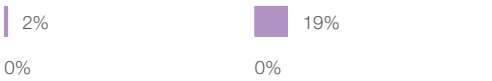
Socioeconomic status [6] (quintile of disadvantage)



Smoking status at admission [7]



Aboriginal status [8] Rural postcode [9]



Bulli District Hospital: Hospital stay profiles, potentially avoidable admissions for COPD and CHF

July 2009 to June 2010

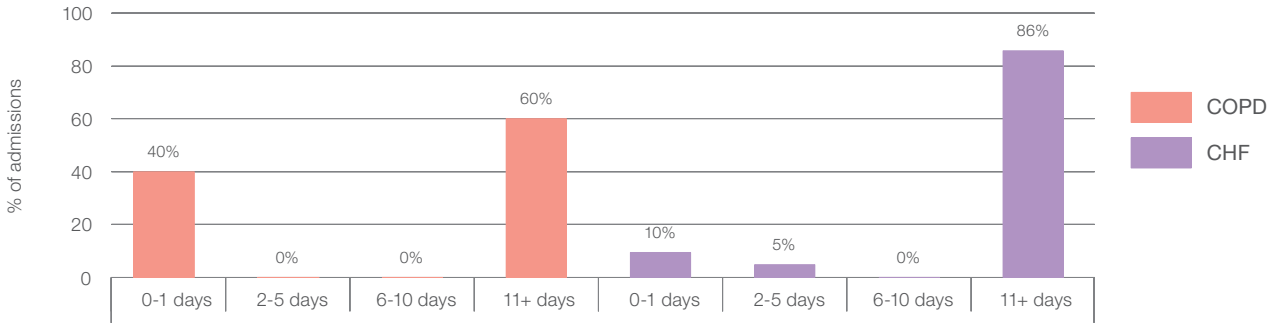
COPD admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	100%	100%	97%
% from ED[‡]	0%	0%	77%

CHF admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	100%	100%	97%
% from ED[‡]	0%	0%	70%

COPD average length of stay in days[4]			
Actual	14.0	10.9	5.8

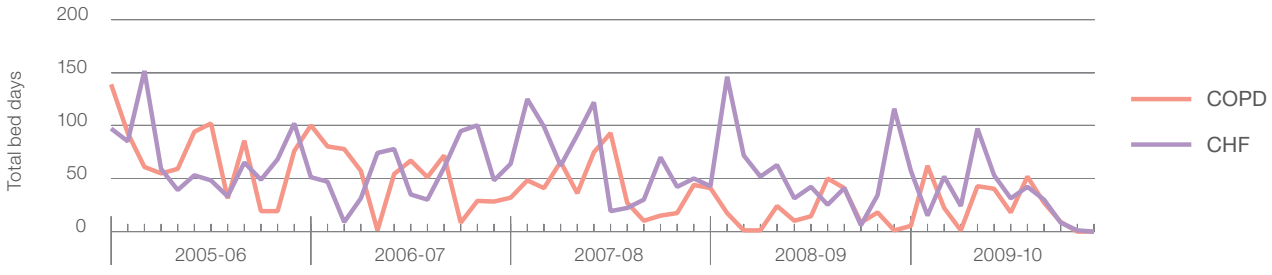
CHF average length of stay in days[4]			
Actual	23.4	16.9	6.7

Length of stay profiles



Bulli District Hospital: Total bed days, potentially avoidable admissions for COPD and CHF

July 2005 to June 2010 (monthly)



	2005-06	2006-07	2007-08	2008-09	2009-10
COPD[4]	834	625	504	226	279
CHF[4]	850	658	796	671	410

(*) Suppressed: relative standard error ≥ 40%. (†) Interpret with caution: 30% ≤ relative standard error < 40%.

1. A hospitalisation corresponds to one 'episode of care'. A single patient can have multiple hospitalisations in the time period.
2. Excludes hospitalisations for renal dialysis, obstetrics, psychiatry, and all surgery.
3. Potentially preventable hospitalisations as defined in: *The health of the people of NSW – Report of the Chief Health Officer 2010*.
4. For criteria used for COPD / CHF admissions, see *Technical Supplement* at www.bhi.nsw.gov.au
5. Rates are directly standardised to the NSW admitted patient population 2009-10 on the basis of age, sex, and socioeconomic status.
6. Index of Relative Social Disadvantage (IRSD), as defined by the Australian Bureau of Statistics.
7. Smoking status as recorded on admission: termed *current* if patient smoked tobacco within last month; *previous* if patient smoked tobacco in the past but excluding last month.
8. We use the term Aboriginal, rather than Aboriginal and Torres Strait Islander in line with NSW Health usage, which recognises that Aboriginal people are the original inhabitants of NSW.
9. Postcode of usual residence at time of admission classified as outer regional or remote.
10. Admissions with emergency status of 'non-emergency / planned'. (‡) Emergency Department

Note: Only records with valid and non-missing data are included in each analysis.

Note: Length of stay and total bed days calculated on 'acute' episodes only (comprising 98.7% COPD and 97.4% CHF PAAs).

Note: Additional detail and definitions can be found in the Bureau's *Technical Supplement* at www.bhi.nsw.gov.au

Source: Admitted Patient Data Collection. Health Information Exchange, NSW Health. Data extracted on 28 February 2011.

Milton and Ulladulla Hospital: Activity profiles, potentially avoidable admissions for COPD and CHF

July 2009 to June 2010

		Same period last year	Change since one year ago
Total hospitalisations[1]	2,956	2,595	14%
Select medical hospitalisations[2]	1,931	1,746	11%
Total potentially preventable hospitalisations[3]	536	451	19%
Chronic Obstructive Pulmonary Disease (COPD) admissions[4]	66	59	12%
Congestive Heart Failure (CHF) admissions[4]	29	49	-41%

Rates per 1,000 select medical hospitalisations[5]

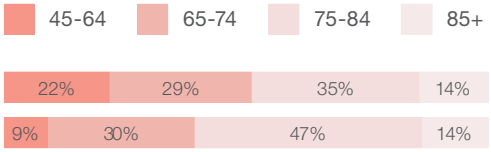
COPD[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)	CHF[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
Actual	34.4	33.5	41.4	Actual	15.1	28.3	22.5
Standardised	23.9	15.2	38.8	Standardised	6.9	29.2†	24.1
95% CI	(13.2 - 36.9)	(8.8 - 23.0)	(36.4 - 41.3)	95% CI	(4.0 - 10.7)	(8.2 - 55.3)	(21.8 - 26.4)

Milton and Ulladulla Hospital: Patient profiles, potentially avoidable admissions for COPD and CHF

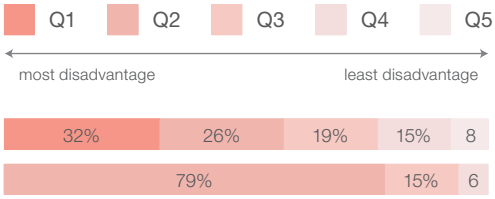
July 2009 to June 2010

Potentially avoidable COPD admissions[1,4]

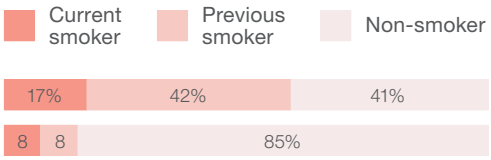
Age profile (years)



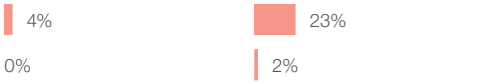
Socioeconomic status[6] (quintile of disadvantage)



Smoking status at admission[7]

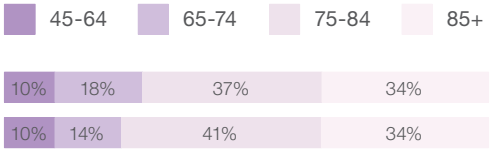


Aboriginal status[8] Rural postcode[9]

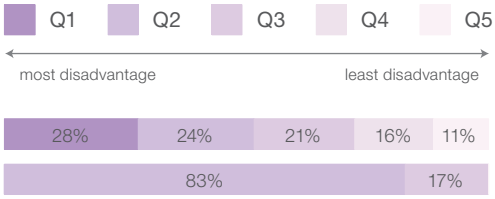


Potentially avoidable CHF admissions[1,4]

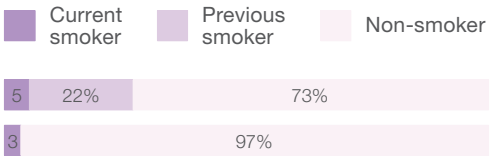
Age profile (years)



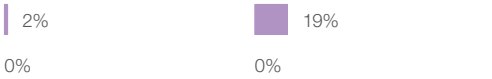
Socioeconomic status[6] (quintile of disadvantage)



Smoking status at admission[7]



Aboriginal status[8] Rural postcode[9]



Milton and Ulladulla Hospital: Hospital stay profiles, potentially avoidable admissions for COPD and CHF

July 2009 to June 2010

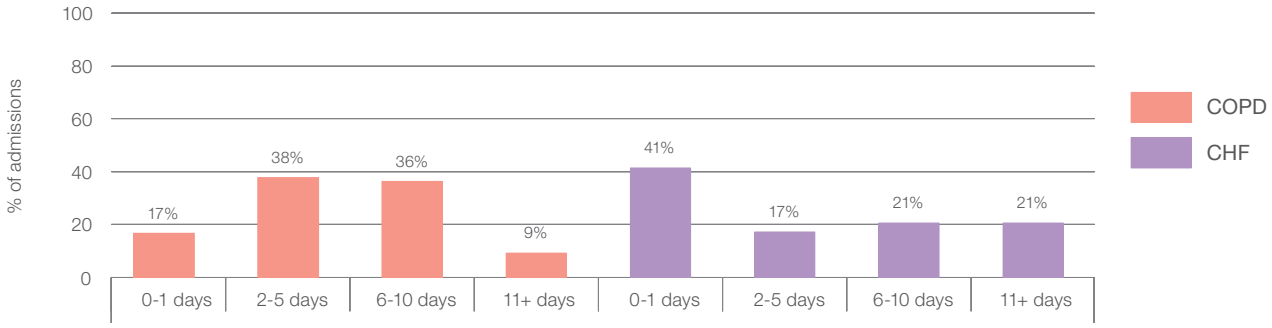
COPD admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	100%	98%	97%
% from ED[‡]	77%	80%	77%

CHF admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	100%	100%	97%
% from ED[‡]	83%	86%	70%

COPD average length of stay in days[4]			
Actual	5.5	6.6	5.8

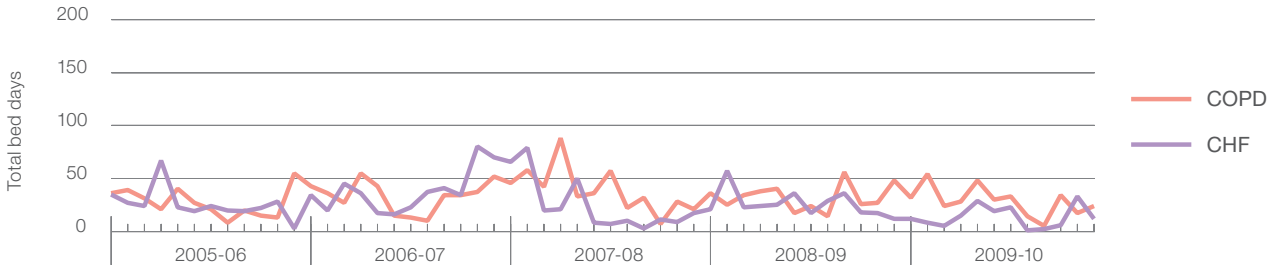
CHF average length of stay in days[4]			
Actual	5.7	6.5	6.7

Length of stay profiles



Milton and Ulladulla Hospital: Total bed days, potentially avoidable admissions for COPD and CHF

July 2005 to June 2010 (monthly)



	2005-06	2006-07	2007-08	2008-09	2009-10
COPD[4]	326	399	470	385	343
CHF[4]	311	453	301	315	165

(*) Suppressed: relative standard error ≥ 40%. (†) Interpret with caution: 30% ≤ relative standard error < 40%.

1. A hospitalisation corresponds to one 'episode of care'. A single patient can have multiple hospitalisations in the time period.
2. Excludes hospitalisations for renal dialysis, obstetrics, psychiatry, and all surgery.
3. Potentially preventable hospitalisations as defined in: *The health of the people of NSW – Report of the Chief Health Officer 2010*.
4. For criteria used for COPD / CHF admissions, see *Technical Supplement* at www.bhi.nsw.gov.au
5. Rates are directly standardised to the NSW admitted patient population 2009-10 on the basis of age, sex, and socioeconomic status.
6. Index of Relative Social Disadvantage (IRSD), as defined by the Australian Bureau of Statistics.
7. Smoking status as recorded on admission: termed *current* if patient smoked tobacco within last month; *previous* if patient smoked tobacco in the past but excluding last month.
8. We use the term Aboriginal, rather than Aboriginal and Torres Strait Islander in line with NSW Health usage, which recognises that Aboriginal people are the original inhabitants of NSW.
9. Postcode of usual residence at time of admission classified as outer regional or remote.
10. Admissions with emergency status of 'non-emergency / planned'. (‡) Emergency Department

Note: Only records with valid and non-missing data are included in each analysis.

Note: Length of stay and total bed days calculated on 'acute' episodes only (comprising 98.7% COPD and 97.4% CHF PAAs).

Note: Additional detail and definitions can be found in the Bureau's *Technical Supplement* at www.bhi.nsw.gov.au

Source: Admitted Patient Data Collection. Health Information Exchange, NSW Health. Data extracted on 28 February 2011.

Shellharbour Hospital: Activity profiles, potentially avoidable admissions for COPD and CHF

July 2009 to June 2010

		Same period last year	Change since one year ago
Total hospitalisations[1]	16,424	16,068	2%
Select medical hospitalisations[2]	6,386	6,139	4%
Total potentially preventable hospitalisations[3]	2,326	2,017	15%
Chronic Obstructive Pulmonary Disease (COPD) admissions[4]	444	368	21%
Congestive Heart Failure (CHF) admissions[4]	182	210	-13%

Rates per 1,000 select medical hospitalisations[5]

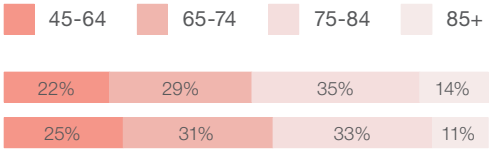
COPD[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)	CHF[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
Actual	69.7	60.1	42.3	Actual	28.6	34.2	27.8
Standardised	48.7	62.9	41.0	Standardised	21.4	39.2	27.9
95% CI	(37.4 - 60.7)	(41.7 - 85.7)	(39.0 - 42.9)	95% CI	(14.1 - 29.7)	(18.8 - 61.9)	(26.3 - 29.6)

Shellharbour Hospital: Patient profiles, potentially avoidable admissions for COPD and CHF

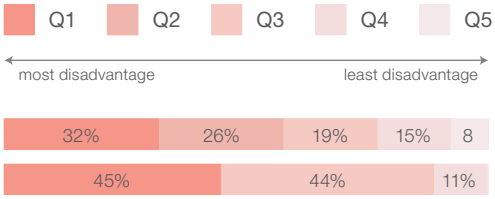
July 2009 to June 2010

Potentially avoidable COPD admissions[1,4]

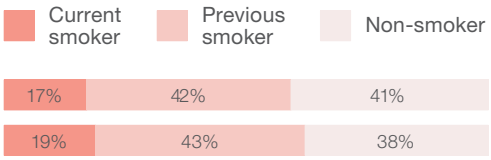
Age profile (years)



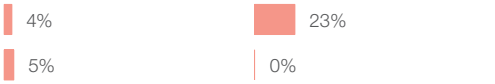
Socioeconomic status[6] (quintile of disadvantage)



Smoking status at admission[7]

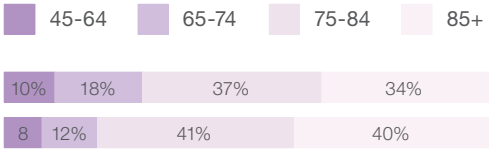


Aboriginal status[8] Rural postcode[9]

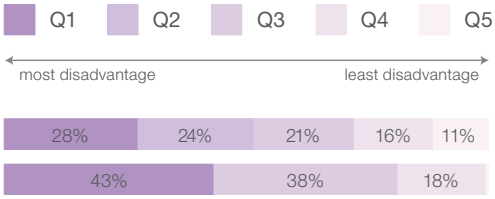


Potentially avoidable CHF admissions[1,4]

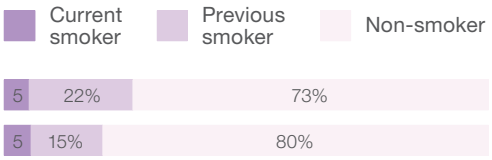
Age profile (years)



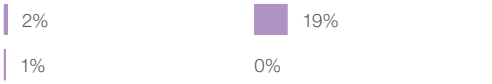
Socioeconomic status[6] (quintile of disadvantage)



Smoking status at admission[7]



Aboriginal status[8] Rural postcode[9]



Shellharbour Hospital: Hospital stay profiles, potentially avoidable admissions for COPD and CHF

July 2009 to June 2010

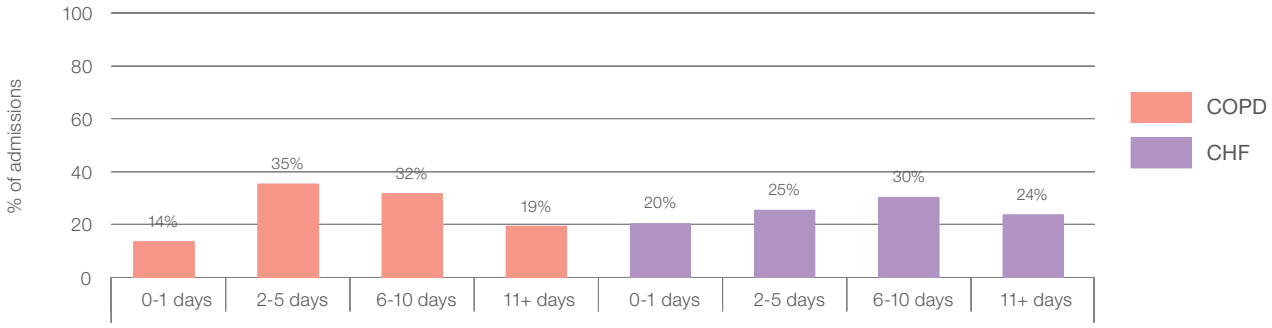
COPD admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	99%	100%	98%
% from ED[‡]	66%	61%	73%

CHF admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	100%	100%	98%
% from ED[‡]	58%	61%	80%

COPD average length of stay in days[4]			
Actual	7.0	7.2	5.5

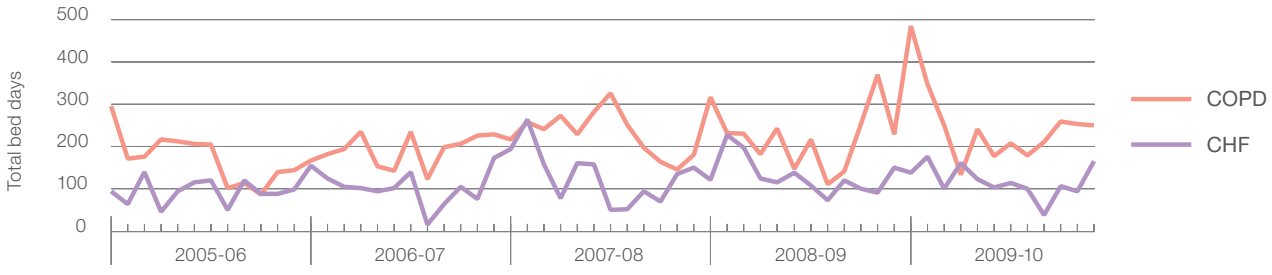
CHF average length of stay in days[4]			
Actual	8.2	7.4	6.5

Length of stay profiles



Shellharbour Hospital: Total bed days, potentially avoidable admissions for COPD and CHF

July 2005 to June 2010 (monthly)



	2005-06	2006-07	2007-08	2008-09	2009-10
COPD[4]	2,076	2,297	2,771	2,678	2,997
CHF[4]	1,123	1,262	1,570	1,573	1,426

(*) Suppressed: relative standard error ≥ 40%. (†) Interpret with caution: 30% ≤ relative standard error < 40%.

1. A hospitalisation corresponds to one 'episode of care'. A single patient can have multiple hospitalisations in the time period.
2. Excludes hospitalisations for renal dialysis, obstetrics, psychiatry, and all surgery.
3. Potentially preventable hospitalisations as defined in: *The health of the people of NSW – Report of the Chief Health Officer 2010*.
4. For criteria used for COPD / CHF admissions, see *Technical Supplement* at www.bhi.nsw.gov.au
5. Rates are directly standardised to the NSW admitted patient population 2009-10 on the basis of age, sex, and socioeconomic status.
6. Index of Relative Social Disadvantage (IRSD), as defined by the Australian Bureau of Statistics.
7. Smoking status as recorded on admission: termed *current* if patient smoked tobacco within last month; *previous* if patient smoked tobacco in the past but excluding last month.
8. We use the term Aboriginal, rather than Aboriginal and Torres Strait Islander in line with NSW Health usage, which recognises that Aboriginal people are the original inhabitants of NSW.
9. Postcode of usual residence at time of admission classified as outer regional or remote.
10. Admissions with emergency status of 'non-emergency / planned'. (‡) Emergency Department

Note: Only records with valid and non-missing data are included in each analysis.

Note: Length of stay and total bed days calculated on 'acute' episodes only (comprising 98.7% COPD and 97.4% CHF PAAs).

Note: Additional detail and definitions can be found in the Bureau's *Technical Supplement* at www.bhi.nsw.gov.au

Source: Admitted Patient Data Collection. Health Information Exchange, NSW Health. Data extracted on 28 February 2011.

Shoalhaven and District Memorial Hospital: Activity profiles, potentially avoidable admissions for COPD and CHF
July 2009 to June 2010

		Same period last year	Change since one year ago
Total hospitalisations[1]	21,193	20,567	3%
Select medical hospitalisations[2]	6,862	6,624	4%
Total potentially preventable hospitalisations[3]	2,148	2,261	-5%
Chronic Obstructive Pulmonary Disease (COPD) admissions[4]	245	220	11%
Congestive Heart Failure (CHF) admissions[4]	189	227	-17%

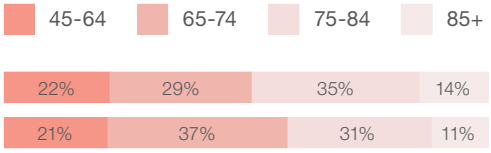
Rates per 1,000 select medical hospitalisations[5]

COPD[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)	CHF[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
Actual	35.5	33.1	38.6	Actual	27.7	34.4	24.2
Standardised	32.5	26.5	34.8	Standardised	28.9	23.7	25.1
95% CI	(24.5 - 41.2)	(20.0 - 33.8)	(32.4 - 37.3)	95% CI	(19.1 - 39.8)	(20.3 - 27.5)	(22.3 - 28.1)

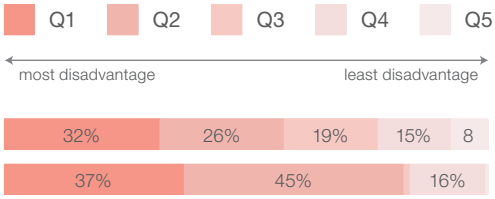
Shoalhaven and District Memorial Hospital: Patient profiles, potentially avoidable admissions for COPD and CHF
July 2009 to June 2010

Potentially avoidable COPD admissions[1,4]

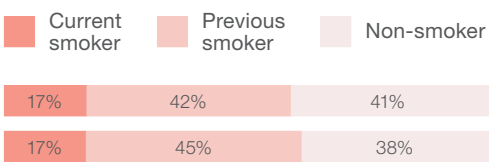
Age profile (years)



Socioeconomic status[6] (quintile of disadvantage)

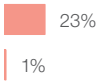


Smoking status at admission[7]



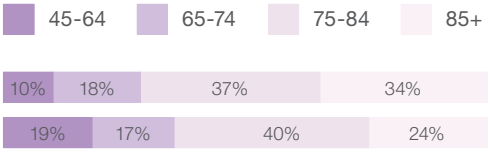
Aboriginal status[8]

Rural postcode[9]

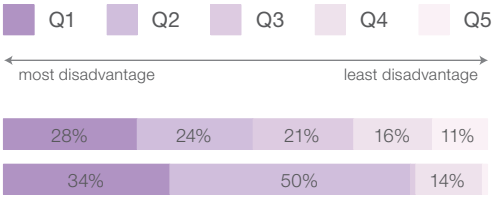


Potentially avoidable CHF admissions[1,4]

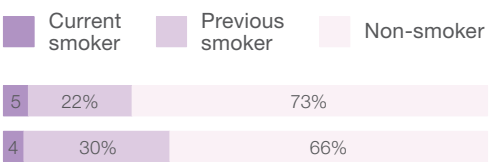
Age profile (years)



Socioeconomic status[6] (quintile of disadvantage)



Smoking status at admission[7]



Aboriginal status[8]

Rural postcode[9]

Shoalhaven and District Memorial Hospital: Hospital stay profiles, potentially avoidable admissions for COPD and CHF
July 2009 to June 2010

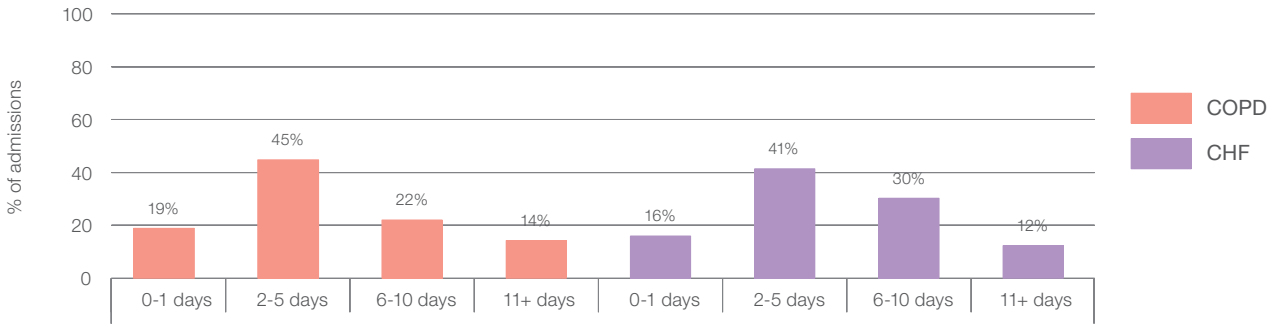
COPD admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	94%	96%	97%
% from ED‡	82%	80%	85%

CHF admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	99%	96%	99%
% from ED‡	86%	85%	88%

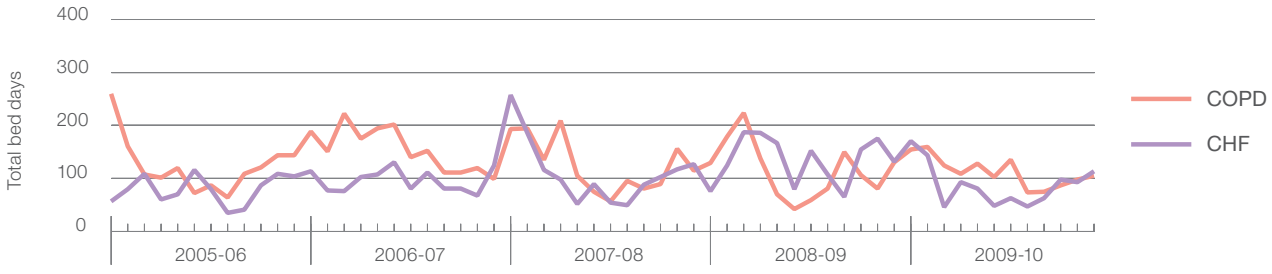
COPD average length of stay in days[4]			
Actual	5.6	6.2	5.6

CHF average length of stay in days[4]			
Actual	5.8	7.2	6.2

Length of stay profiles



Shoalhaven and District Memorial Hospital: Total bed days, potentially avoidable admissions for COPD and CHF
July 2005 to June 2010 (monthly)



	2005-06	2006-07	2007-08	2008-09	2009-10
COPD[4]	1,486	1,866	1,502	1,386	1,350
CHF[4]	944	1,148	1,333	1,603	1,055

(*) Suppressed: relative standard error ≥ 40%. (†) Interpret with caution: 30% ≤ relative standard error < 40%.

1. A hospitalisation corresponds to one 'episode of care'. A single patient can have multiple hospitalisations in the time period.
2. Excludes hospitalisations for renal dialysis, obstetrics, psychiatry, and all surgery.
3. Potentially preventable hospitalisations as defined in: *The health of the people of NSW – Report of the Chief Health Officer 2010*.
4. For criteria used for COPD / CHF admissions, see *Technical Supplement* at www.bhi.nsw.gov.au
5. Rates are directly standardised to the NSW admitted patient population 2009-10 on the basis of age, sex, and socioeconomic status.
6. Index of Relative Social Disadvantage (IRSD), as defined by the Australian Bureau of Statistics.
7. Smoking status as recorded on admission: termed *current* if patient smoked tobacco within last month; *previous* if patient smoked tobacco in the past but excluding last month.
8. We use the term Aboriginal, rather than Aboriginal and Torres Strait Islander in line with NSW Health usage, which recognises that Aboriginal people are the original inhabitants of NSW.
9. Postcode of usual residence at time of admission classified as outer regional or remote.
10. Admissions with emergency status of 'non-emergency / planned'. (‡) Emergency Department

Note: Only records with valid and non-missing data are included in each analysis.
Note: Length of stay and total bed days calculated on 'acute' episodes only (comprising 98.7% COPD and 97.4% CHF PAAs).
Note: Additional detail and definitions can be found in the Bureau's *Technical Supplement* at www.bhi.nsw.gov.au
Source: Admitted Patient Data Collection. Health Information Exchange, NSW Health. Data extracted on 28 February 2011.

Wollongong Hospital: Activity profiles, potentially avoidable admissions for COPD and CHF

July 2009 to June 2010

		Same period last year	Change since one year ago
Total hospitalisations[1]	42,882	44,830	-4%
Select medical hospitalisations[2]	11,257	12,274	-8%
Total potentially preventable hospitalisations[3]	4,090	4,354	-6%
Chronic Obstructive Pulmonary Disease (COPD) admissions[4]	440	462	-5%
Congestive Heart Failure (CHF) admissions[4]	339	363	-7%

Rates per 1,000 select medical hospitalisations[5]

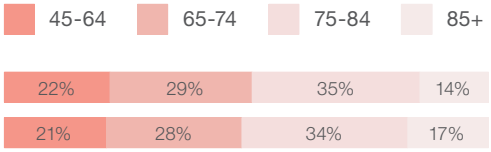
COPD[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)	CHF[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
Actual	39.2	37.5	27.1	Actual	30.2	29.8	23.4
Standardised	28.4	29.4	28.3	Standardised	29.0	20.6	24.4
95% CI	(23.1 - 34.2)	(24.6 - 34.7)	(27.4 - 29.2)	95% CI	(19.9 - 38.8)	(18.3 - 23.1)	(23.6 - 25.3)

Wollongong Hospital: Patient profiles, potentially avoidable admissions for COPD and CHF

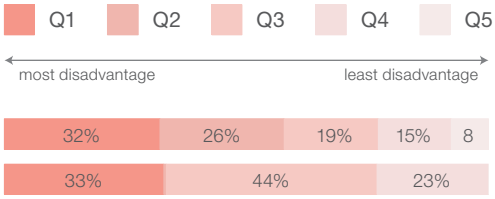
July 2009 to June 2010

Potentially avoidable COPD admissions[1,4]

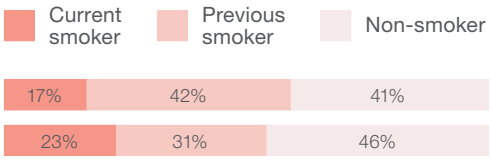
Age profile (years)



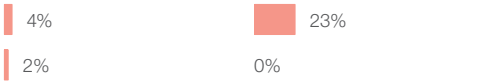
Socioeconomic status[6] (quintile of disadvantage)



Smoking status at admission[7]

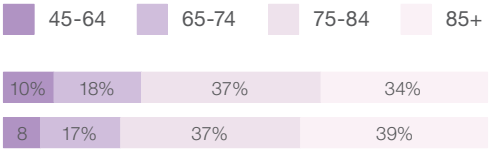


Aboriginal status[8] Rural postcode[9]

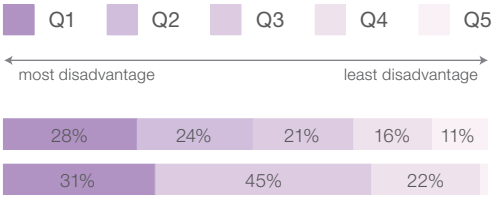


Potentially avoidable CHF admissions[1,4]

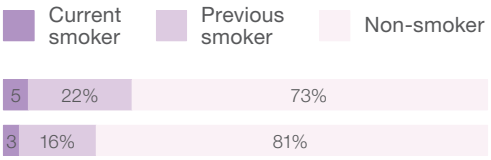
Age profile (years)



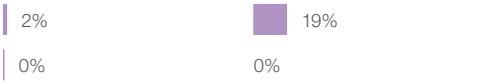
Socioeconomic status[6] (quintile of disadvantage)



Smoking status at admission[7]



Aboriginal status[8] Rural postcode[9]



Wollongong Hospital: Hospital stay profiles, potentially avoidable admissions for COPD and CHF

July 2009 to June 2010

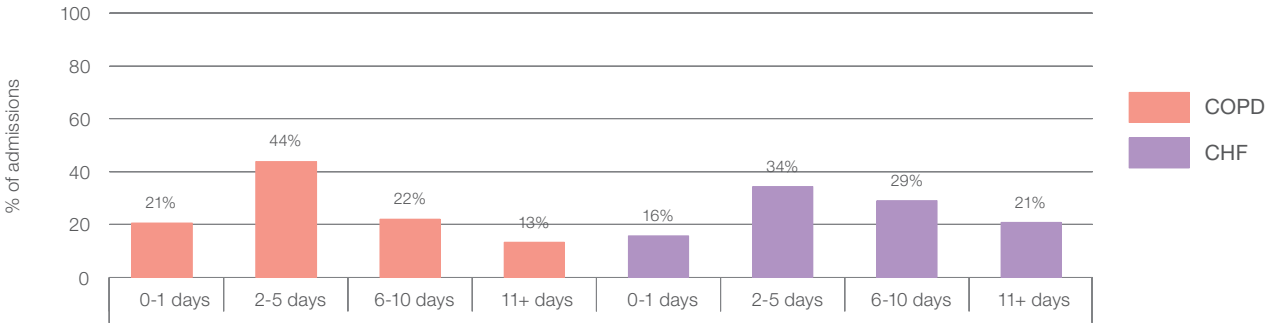
COPD admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	99%	99%	97%
% from ED[‡]	78%	77%	87%

CHF admissions[4]	This period (2009-10)	Last period (2008-09)	Peer group (2009-10)
% Unplanned[10]	99%	99%	98%
% from ED[‡]	77%	79%	86%

COPD average length of stay in days[4]			
Actual	5.4	6.1	6.1

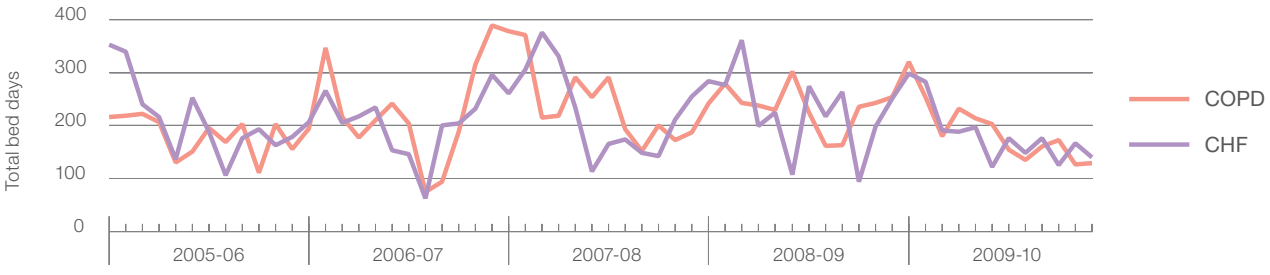
CHF average length of stay in days[4]			
Actual	7.0	7.6	7.1

Length of stay profiles



Wollongong Hospital: Total bed days, potentially avoidable admissions for COPD and CHF

July 2005 to June 2010 (monthly)



	2005-06	2006-07	2007-08	2008-09	2009-10
COPD[4]	2,182	2,653	2,926	2,816	2,283
CHF[4]	2,543	2,425	2,718	2,752	2,213

(*) Suppressed: relative standard error ≥ 40%. (†) Interpret with caution: 30% ≤ relative standard error < 40%.

1. A hospitalisation corresponds to one 'episode of care'. A single patient can have multiple hospitalisations in the time period.
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9. Postcode of usual residence at time of admission classified as outer regional or remote.
10. Admissions with emergency status of 'non-emergency / planned'. (‡) Emergency Department

Note: Only records with valid and non-missing data are included in each analysis.

Note: Length of stay and total bed days calculated on 'acute' episodes only (comprising 98.7% COPD and 97.4% CHF PAAs).

Note: Additional detail and definitions can be found in the Bureau's *Technical Supplement* at www.bhi.nsw.gov.au

Source: Admitted Patient Data Collection. Health Information Exchange, NSW Health. Data extracted on 28 February 2011.

Download our reports

The report, Chronic Disease Care: A piece of the picture - admissions for chronic obstructive pulmonary disease (COPD) and congestive heart failure (CHF), July 2009 to June 2010 and related reports are available at www.bhi.nsw.gov.au

The suite of products includes:

- *Main report*
- *Performance Profiles* (reports for 79 hospitals and NSW as a whole)
- *Technical Supplement*

About the Bureau

The Bureau of Health Information provides the community, healthcare professionals and the NSW Parliament with timely, accurate and comparable information on the performance of the NSW public health system in ways that enhance the system's accountability and inform efforts to increase its beneficial impact on the health and wellbeing of the people of NSW.

The Bureau is an independent, board-governed statutory health corporation. The conclusions in this report are those of the Bureau and no official endorsement by the NSW Minister for Health, the NSW Department of Health or any other NSW statutory health corporation is intended or should be inferred.

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Please note that there is the potential for minor revisions of data in this report. Please check the online version at www.bhi.nsw.gov.au for any amendments.