Performance Profiles

Chronic Disease Care:
Another piece of the picture
Sydney Local Health District

Hospitalisations and unplanned readmissions for
Chronic Obstructive Pulmonary Disease (COPD)
and Congestive Heart Failure (CHF)
July 2009 to June 2010

The Insights Series
Volume 2, PART 2
Sydney LHD: Hospitalisation patterns for adults living in the LHD
July 2009 to June 2010

1. Adults resident in the LHD admitted into any NSW hospital (excluding Albury Base Hospital) between July 2005 and June 2009, with COPD listed in the first 20 diagnostic codes were analysed for hospitalisations in 2009–10.
2. Episodes of care for which COPD was coded as the principal diagnosis (ICD codes are listed on page 26). If two episodes of care with primary diagnosis of COPD were separated only by a type change separation or a transfer, then these two episodes were treated as one hospitalisation. Excludes hospitalisations for dialysis.
3. Only Principal Referral, B Metropolitan and B Non-Metropolitan hospital results are tabulated. All other public hospitals in the LHD are included in ‘Other’. For private hospital data, see Chronic Disease Care: Another piece of the picture.
4. Discharges followed by unplanned readmissions for COPD to any NSW hospital within 28 days, per 100 total COPD principal diagnosis hospitalisations.
5. Rate per 100 discharges standardised for age and sex.
6. Percentage of hospitalisations with DRG code catastrophic or severe comorbidities or complications.
7. Percentage of hospitalisations that were for adults living in the most socioeconomically disadvantaged quintile.

(*) Suppressed due to small numbers or relative standard error ≥40%.
(†) Interpret with caution: relative standard error ≥30% and <40%.
n/a Not applicable because there were no readmissions.

Note: 512 of the adults alive at the end of 2009–10 had both COPD and CHF.
Source: HOIST, Centre for Epidemiology and Evidence, NSW Ministry of Health. Data extracted 8 August, 2011.
### Sydney LHD hospitals: COPD hospitalisations, readmissions within 28 days and context  
**July 2009 to June 2010**

<table>
<thead>
<tr>
<th>Sydney Local Health District (SYDLHD)</th>
<th>Number of COPD hospitalisations</th>
<th>Crude readmission rate</th>
<th>Standardised readmission rate</th>
<th>Percent coded as severe</th>
<th>Percent most disadvantaged quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canterbury Hospital</td>
<td>227</td>
<td>15.4</td>
<td>14.7</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>Concord Hospital</td>
<td>292</td>
<td>10.6</td>
<td>11.7</td>
<td>46</td>
<td>9</td>
</tr>
<tr>
<td>Royal Prince Alfred Hospital</td>
<td>554</td>
<td>15.9</td>
<td>15.5</td>
<td>39</td>
<td>12</td>
</tr>
<tr>
<td>Other SYDLHD</td>
<td>*</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Total SYDLHD</td>
<td>1,076</td>
<td>14.3</td>
<td>14.2</td>
<td>44</td>
<td>19</td>
</tr>
<tr>
<td>Total NSW</td>
<td>17,469</td>
<td>13.0</td>
<td>13.0</td>
<td>34</td>
<td>31</td>
</tr>
</tbody>
</table>

**Sydney LHD hospitals: Unplanned readmissions within 28 days relative to NSW rate  
July 2009 to June 2010**

<table>
<thead>
<tr>
<th>Number of COPD hospitalisations²</th>
</tr>
</thead>
<tbody>
<tr>
<td>High volume: &gt;400 hospitalisations</td>
</tr>
<tr>
<td>Medium volume: 201–400 hospitalisations</td>
</tr>
<tr>
<td>Low volume: &lt;200 hospitalisations</td>
</tr>
</tbody>
</table>

Dot colour indicates standardised unplanned readmission rate relative to the NSW rate

- Lower than or equal to NSW rate (8.8 per 100 discharges)
- Higher than NSW rate (13.0 per 100 discharges)
**Sydney LHD:** Hospitalisation patterns for adults living in the LHD
July 2009 to June 2010

**Adults with CHF alive at start of 2009–10:**
Those who died from any cause during 2009–10
Adults with CHF alive at end of 2009–10

<table>
<thead>
<tr>
<th>Adults with CHF alive at end of 2009–10</th>
<th>All-cause</th>
<th>CHF-principal diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 hospitalisations</td>
<td>Number (%)</td>
<td>Bed days (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 hospitalisation</td>
<td>1,099 (47%)</td>
<td>2,107 (90%)</td>
</tr>
<tr>
<td>2 hospitalisations</td>
<td>533 (23%)</td>
<td>4,533 (19%)</td>
</tr>
<tr>
<td>3+ hospitalisations</td>
<td>291 (12%)</td>
<td>5,352 (23%)</td>
</tr>
<tr>
<td>478 (17%)</td>
<td>13,568 (58%)</td>
<td>538 (23%)</td>
</tr>
</tbody>
</table>

**Sydney LHD:** CHF hospitalisations and associated bed days among adults with CHF
July 2009 to June 2010

<table>
<thead>
<tr>
<th>Percentage of adults with CHF by number of hospitalisations (2,330 patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No CHF hospitalisations</td>
</tr>
</tbody>
</table>

- 165 CHF patients (7%) were hospitalised once, accounting for 1,212 (53%) CHF bed days
- 34 CHF patients (1%) were hospitalised twice
- 24 CHF patients (1%) were hospitalised 3+ times

<table>
<thead>
<tr>
<th>Percentage of CHF bed days used by adults with CHF (2,306 bed days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>53%</td>
</tr>
</tbody>
</table>

1. Adults resident in the LHD admitted into any NSW hospital (excluding Albury Base Hospital) between July 2005 and June 2009, with CHF listed in the first 20 diagnostic codes were analysed for hospitalisations in 2009–10.
2. Episodes of care for which CHF was coded as the principal diagnosis (ICD codes are listed on page 26). If two episodes of care with primary diagnosis of CHF were separated only by a type change separation or a transfer, then these two episodes were treated as one hospitalisation. Excludes hospitalisations for dialysis.
3. Only Principal Referral, B Metropolitan and B Non-Metropolitan hospital results are tabulated. All other public hospitals in the LHD are included in ‘Other’. For private hospital data, see Chronic Disease Care: Another piece of the picture.
4. Discharges followed by unplanned readmissions for CHF to any NSW hospital within 28 days, per 100 total CHF principal diagnosis hospitalisations.
5. Rate per 100 discharges standardised for age and sex.
6. Percentage of hospitalisations with DRG code catastrophic or severe comorbidities or complications.
7. Percentage of hospitalisations that were for adults living in the most socioeconomically disadvantaged quintile.

* Suppressed due to small numbers or relative standard error ≥40%.
† Interpret with caution: relative standard error ≥30% and <40%.
n/a Not applicable because there were no readmissions.

Note: 512 of the adults alive at the end of 2009–10 had both COPD and CHF.

Source: HOIST, Centre for Epidemiology and Evidence, NSW Ministry of Health. Data extracted 8 August, 2011.
Sydney LHD hospitals\(^1\): CHF hospitalisations, readmissions within 28 days and context
July 2009 to June 2010

<table>
<thead>
<tr>
<th>Sydney Local Health District (SYDLHD)</th>
<th>Number of CHF hospitalisations(^2)</th>
<th>Crude readmission rate(^2)</th>
<th>Standardised readmission rate(^3)</th>
<th>Percent coded as severe(^6)</th>
<th>Percent most disadvantaged quintile(^7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canterbury Hospital</td>
<td>199</td>
<td>12.6</td>
<td>12.3</td>
<td>30</td>
<td>51</td>
</tr>
<tr>
<td>Concord Hospital</td>
<td>286</td>
<td>9.8</td>
<td>8.8</td>
<td>43</td>
<td>13</td>
</tr>
<tr>
<td>Royal Prince Alfred Hospital</td>
<td>356</td>
<td>10.1</td>
<td>10.0</td>
<td>39</td>
<td>9</td>
</tr>
<tr>
<td>Other SYDLHD</td>
<td>*</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Total SYDLHD</td>
<td>842</td>
<td>10.6</td>
<td>10.3</td>
<td>38</td>
<td>20</td>
</tr>
<tr>
<td>Total NSW</td>
<td>11,088</td>
<td>8.8</td>
<td>8.8</td>
<td>28</td>
<td>27</td>
</tr>
</tbody>
</table>

**Number of CHF hospitalisations\(^2\)**
- High volume: >400 hospitalisations
- Medium volume: 201–400 hospitalisations
- Low volume: <200 hospitalisations

Dot colour indicates standardised unplanned readmission rate relative to the NSW rate
- Lower than or equal to NSW rate (8.8 per 100 discharges)
- Higher than NSW rate (8.8 per 100 discharges)

Sydney LHD hospitals: Unplanned readmissions within 28 days relative to NSW rate
July 2009 to June 2010

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\(^1\) Sydney Local Health District

\(^2\) Number of CHF hospitalisations

\(^3\) Standardised readmission rate

\(^6\) Percent coded as severe

\(^7\) Percent most disadvantaged quintile
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.

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