Can Community Psychogeriatric Outreach Service for the Private Aged Homes Prevent Psychiatric Admission?

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7 June 2011

HA Convention
HA Annual Plan 2008-2009

• Build up services to prevent avoidable hospitalization

(b) To provide community PG outreach service to private residential care homes for the elderly to assess and treat elderly residents with mental illness and to provide carer training
The obvious answer is NO.

How about “…REDUCES psychiatric admission?”

1. Background
2. Service statistics
3. Review of TPH & SH admissions
4. Results and conclusion
Elderly Population Projections
Cluster Map of the Hospital Authority (HA)

NTEC
# Population Growth by District

<table>
<thead>
<tr>
<th>Year 2006</th>
<th>North District</th>
<th>Tai Po</th>
<th>Shatin</th>
<th>NTE</th>
<th>HK Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>280,730</td>
<td>293,542</td>
<td>607,544</td>
<td>1,243,386</td>
<td>6,861,280</td>
</tr>
<tr>
<td>Elderly population aged ≥ 65 (%)</td>
<td>10.1%</td>
<td>9.5%</td>
<td>10.3%</td>
<td>10.0%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Median household monthly income</td>
<td>HK16,000 (~US 2,000)</td>
<td>HK18,000 (~US 2,300)</td>
<td>HK19,320 (~US 2,500)</td>
<td><strong>HK18,205 (~US 2,300)</strong></td>
<td>HK17,260 (~US 2,200)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2016</th>
<th>North District</th>
<th>Tai Po</th>
<th>Shatin</th>
<th>NTE</th>
<th>HK Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>318,900</td>
<td>315,100</td>
<td>687,300</td>
<td>1,394,300</td>
<td>7,450,000</td>
</tr>
<tr>
<td>Elderly population aged ≥ 65 (%)</td>
<td>13.0%</td>
<td>13.3%</td>
<td>13.9%</td>
<td>13.4%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>
Provision of Residential Care Services for Elders
(Subsidised versus Non-subsidised Places) (as at 31.12.2010)

- Self-financing and contract homes (non-subsidised places) 5300 places (7%)
- Subvented, self-financing and contract homes (subsidised places) 17563 places (23%)
- Private homes 44986 places (60%)
- Places under Enhanced Bought Place Scheme (EBPS) 7184 places (10%)

Note 1: Self-financing homes participating in the Nursing Home Place Purchase Scheme (NHPPS)
75.2% of those 50,800 doctor consultations were attributed to doctors in OPDs of hospitals under the Hospital Authority while private practitioners of Western medicine accounted for another 17.7%.

Of those 71,400 institutional residents who had diseases that required long-term follow-up by doctors, 29.5% had mental disorders (e.g. dementia, schizophrenia and depression).

Of those 26,100 institutional residents who had been admitted into hospitals, 65.0% were females and 35.0% were males, 92.2% were aged 65 and over.
## Distribution of residential homes in NTE

<table>
<thead>
<tr>
<th>Year 2008</th>
<th>North District</th>
<th>Tai Po</th>
<th>Shatin</th>
<th>NTE</th>
<th>HK Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of subsidized home by NGO</td>
<td>9</td>
<td>8</td>
<td>13</td>
<td>30 (23.3%)</td>
<td>129</td>
</tr>
<tr>
<td>Bed capacity</td>
<td>1,452</td>
<td>1,268</td>
<td>1,195</td>
<td>3,915 (24.1%)</td>
<td>16,220</td>
</tr>
<tr>
<td>No. of private home enrolled in enhanced BPS</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>11 (8.5%)</td>
<td>129</td>
</tr>
<tr>
<td>No. of private home</td>
<td>38</td>
<td>27 (26 in 2011)</td>
<td>19 (20 in 2011)</td>
<td>84 (14.5%)</td>
<td>579</td>
</tr>
<tr>
<td>Bed capacity</td>
<td>2649</td>
<td>2611</td>
<td>1707</td>
<td>6,967 (12.2%)</td>
<td>56,960</td>
</tr>
</tbody>
</table>
Outreach Service Model in NTEC

- Visiting psychiatrist North 09Q4
- Remote CMS
- Advanced practice nurse 09Q1
- Visiting psychiatrist South 09Q2
- SOPDs

Monthly visit to POAH
- Shatin: 10
- Tai Po: 5
- North District: 7
## Service Statistics

<table>
<thead>
<tr>
<th></th>
<th>2008/9</th>
<th>2009/10</th>
<th>2010/11</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>1024</td>
<td>3785</td>
<td>3160</td>
<td>7969</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2008/9</th>
<th>2009/10</th>
<th>2010/11</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 31 Mar 2011</td>
<td>Active cases</td>
<td>Inactive cases</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>NDH</td>
<td>309</td>
<td>23</td>
<td>332</td>
<td></td>
</tr>
<tr>
<td>AHNH</td>
<td>88</td>
<td>12</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>PWH</td>
<td>153</td>
<td>8</td>
<td>161</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>550</td>
<td>43</td>
<td>593</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dementia</td>
<td>372</td>
</tr>
<tr>
<td>Depression</td>
<td>69</td>
</tr>
<tr>
<td>Delusional</td>
<td>119</td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>593</td>
</tr>
</tbody>
</table>
No. of PG admission at TPH
No. of PG admission at TPH

![Graph showing the number of PG admissions at TPH over time, with different line colors representing Total adm, All OAH, All POAH, and post-OR POAH.]
No. of PG admission at SH
No. of PG admission at SH

![Graph showing No. of PG admission at SH]

- ND+TP
- ST+TP

Legend:
- Total adm
- all OAH
- POAH
- post-OR
Yearly Admission Rate (TPH)
Yearly Admission Rate (SH)
Results

• Current PG outreach service cover about ¼ (26.2%) of the POAHs within NTEC.
• In line with the Thematic Report (2007), the most common psychiatric diagnoses of the POAH residents were dementia, schizophrenia/delusional disorder and mood disorders.
• TPH serves a greater number of POAH and has higher proportion of PG admission from all types of OAHs (includes POAH).
Can PG outreach service reduce admission for TPH?

- The change in the overall OAH and POAH admission rates follow the trend of total admission in each quarter of the year, esp. for the period without outreach service (i.e. 2005-2008).
- About 1/3 (33.5%) of the total PG admission was from all type of OAHs before fiscal year 2008. It dropped to an average of 27.7% when outreach service became available for some of the private age homes in North District and Tai Po.
Can PG outreach service reduce admission for TPH?

- The yearly POAH admission rate dropped from an average rate of **19.5%** (19.5% for 2005/6, 19.9% for 2006/7, 19.1% for 2007/8) to **15.3%** (15.1% for 2008/9, 18.5% for 2009/10, 12.4% for 2010/11) after having outreach service (i.e. 2008-2011).

- For the same cohort of POAH, the average yearly admission rate after having outreach service has dropped from **8.3%** (4.9% for 2005/6, 11.2% for 2006/7, 8.7% for 2007/8) to **5.1%** (3.9% for 2008/9, 6.3% for 2009/10, 5.2% for 2010/11).
Can PG outreach service reduce admission for SH?

- There was a gradual decline in the admission rate for all type of OAHs for the period 2005-2008 (only subvented homes has outreach service).
- The yearly admission rates for all type of OAHs and POAHs dropped before the service was available (from 21.3 to 12.8%) in Shatin.
- The POAH admission rate increased slightly after the fiscal year 2009 and the number of POAH admission with outreach service in each quarter was very low (0-3).
Can PG outreach service reduce admission for SH?

- The average yearly POAH admission rate for 2009-2011 reduces from an average of **10.3%** (14.5% for 2005/6, 13.2% for 2006/7, 6.6% for 2007/8, & 6.7% for 2008/9) to **6.0%** (5.1% for 2009/10 & 6.9% for 2010/11).

- For the same cohort of POAH, the average admission rate after outreach service has dropped from **5.7%** (8.2% for 2005/6, 8.9% for 2006/7, 3.0% for 2007/8, 2.8% for 2008/9) to **1.8%** (3.0% for 2009/10, 0.5% for 2010/11).
Conclusion

- The results suggest that PG outreach service can reduce psychiatric admission but it is based on internal statistics with many limitations.
- Scientific study should be conducted to address important areas in the future.
- More resource and coordination are needed to develop a comprehensive community PG outreach services.
Acknowledgements

- Ms. Isabella Ho
- Ms. WL Chan
- Ms. Esther Wong
- Mr. SM Tung
- Mr. Raymond Sin
- Dr. Cindy Tam
- Prof. Linda Lam
- Dr. Dicky Chung
- Dr. Daisy Luk
- Ms. SJ Wu
- Ms. Anita Lai
- Ms. Flora Hui
- Ms. Reling Tse
- Ms. Ada Cheung
- Dr. Vivian Leung
- Prof. Helen Chiu