Does Assertive Outreach reduce hospital beds?

Prof. Stefan Priebe
Queen Mary, University of London
ACT vs Standard Care
Hospital Admissions

Review: Assertive community treatment for people with severe mental disorders
Comparison: 01 ACT vs STANDARD CARE
Outcome: 03 Admitted to hospital during study

<table>
<thead>
<tr>
<th>Study</th>
<th>Treatment</th>
<th>Control</th>
<th>Peto Odds Ratio 95% CI</th>
<th>Weight %</th>
<th>Peto Odds Ratio 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audini-London</td>
<td>9 / 33</td>
<td>9 / 33</td>
<td>1.00 [0.34, 2.93]</td>
<td>6.5</td>
<td>1.00 [0.34, 2.93]</td>
</tr>
<tr>
<td>Bond-Chicago1</td>
<td>32 / 45</td>
<td>34 / 43</td>
<td>0.66 [0.25, 1.72]</td>
<td>8.2</td>
<td>0.66 [0.25, 1.72]</td>
</tr>
<tr>
<td>Bond-Indiana1</td>
<td>12 / 50</td>
<td>33 / 53</td>
<td>0.21 [0.10, 0.47]</td>
<td>12.6</td>
<td>0.21 [0.10, 0.47]</td>
</tr>
<tr>
<td>Chandler-California</td>
<td>49 / 252</td>
<td>57 / 264</td>
<td>0.88 [0.57, 1.34]</td>
<td>41.5</td>
<td>0.88 [0.57, 1.34]</td>
</tr>
<tr>
<td>Lehman-Baltimore</td>
<td>42 / 77</td>
<td>45 / 75</td>
<td>0.80 [0.42, 1.52]</td>
<td>18.4</td>
<td>0.80 [0.42, 1.52]</td>
</tr>
<tr>
<td>Test-Wisconsin</td>
<td>15 / 75</td>
<td>26 / 47</td>
<td>0.21 [0.10, 0.45]</td>
<td>12.8</td>
<td>0.21 [0.10, 0.45]</td>
</tr>
</tbody>
</table>

Total (95% CI) 159 / 532 204 / 515 100.0 0.59 [0.45, 0.78]
Test for heterogeneity chi-square=18.78 df=5 p=0.0021
Test for overall effect Z=-3.74 p=0.00
UK 700 Trial Profile

708 patients randomised

353 intensive
- 7 died within 23 months
- 8 lost to follow-up
- 338 with hospital admission data
  - 20 refused interview
  - 318 interviewed

355 standard
- 8 died within 23 months
- 6 lost to follow-up
- 341 with hospital admission data
  - 49 refused interview
  - 292 interviewed

Burns et al., The Lancet, 1999
UK700 Trial: Duration of hospital admissions by case-management

Burns et al., The Lancet, 1999
Annual treatment costs for patients with psychosis

Salize et al., Schizophrenia Research, 2009
251 patients randomised

127 ACT
90 consented to baseline interview
3 died within 18 months
124 with hospital admission data at 18 months
23 refused 9 did not respond 1 emigrated
91 interviewed at 18 months

124 CMHT
78 consented to baseline interview
4 died within 18 months 1 emigrated
119 with hospital admission data at 18 months
28 refused 16 did not respond
75 interviewed at 18 months

Killaspy at al., BMJ, 2006
## REACT: primary outcome

<table>
<thead>
<tr>
<th></th>
<th>ACT n=124</th>
<th></th>
<th>CMHT n=119</th>
<th></th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean (SD)</td>
<td>median</td>
<td>IQR</td>
<td>mean (SD)</td>
<td>median</td>
</tr>
<tr>
<td><strong>Total days</strong></td>
<td>162 (162)</td>
<td>121</td>
<td>27-231</td>
<td>144 (140)</td>
<td>130</td>
</tr>
<tr>
<td><strong>Days per admission</strong></td>
<td>65 (91)</td>
<td>27</td>
<td>0-95</td>
<td>52 (66)</td>
<td>27</td>
</tr>
</tbody>
</table>

Killaspy at al., BMJ, 2006
AO and hospital admissions

- Different findings in US and UK
- Model fidelity
- Comparator in trials
- Probably no influence on hospital admissions as compared to standard community care in the UK
Does Assertive Outreach reduce hospital beds?
Admissions and beds

- Admissions a function of bed numbers and length of stay
- Supply and demand
- Changes of institutionalised care over time
Institutionalised care

- Conventional hospital beds
- Forensic beds
- Supported housing
- Prison
Psychiatric beds - Western Europe

Psychiatric hospital beds per 100000

Source: WHO
Psychiatric hospital beds per 100,000 population in Eastern Europe from 1970 to 2010. The graph shows trends for countries including Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, TFYR Macedonia, and Turkey. The data source is the WHO.

Key:
- Bulgaria
- Croatia
- Czech Republic
- Estonia
- Hungary
- Latvia
- Lithuania
- Poland
- Romania
- Slovakia
- Slovenia
- TFYR Macedonia
- Turkey

Source: WHO
Forensic beds

Rates per 100,000

Priebe et al *Psychiatric Services* 2008
Supported housing

Places per 100,000

AUS  DEN  ENG  GER  IRE  ITA  NET  SPA  SWI

1990  2002  2006

Priebe et al. *Psychiatric Services* 2008
Findings

• No consistency across Europe (reduction of institutions in Ireland and Italy)
• Trend towards fewer conventional hospital beds
• Increase of forensic hospital beds
• Increase of places in supported housing
• Increase of prison population
Changes in bed provision

- De-institutionalisation
- Re-institutionalisation
- Trans-institutionalisation
- What is a psychiatric hospital bed?
- Why would one want to reduce them?
Why have bed numbers decreased?

• New treatments?
• New ideas?
• New practical experiences?
• New evidence?
• New economic situation?
• New societal and political context?
£1bn TO END MURDER IN THE COMMUNITY

Shake-up for mental health

By OURAGH BLACKMAN

A £1Billion revolution in care in the community was launched yesterday.

The shake-up will stop thousands of severely mentally ill people being abandoned on the streets — and put an end to the tragic catalogue of murders and suicides.

In the past year alone Health Department researchers discovered 3,000 murders were carried out by mentally ill people.

Health Secretary Frank Dobson admitted care in the community “has failed” and ordered a widespread shake-up of existing mental health laws.

The key planks of the overhaul announced by Mr. Dobson are:

- **SPECIALIST** secure units in each NER region.
- **LOCAL** accommodation for short-term 24-hour nursing care and supervision.
- **MORE** non-elective care for discharged mental patients, especially those who need medication.
- **SUPPORT** crisis helplines and emergency teams.
- **MORE** acute beds, liaison and support accommodation.
- **EXTRA** counselling and advice on medication and therapies.
- A **NEW** framework to make local services tailormade.

Delighted by the announcement of the new measures, Mental Health Secretary John Stone said: “This is tremendous news.”

“At last it seems some good will come from the tragedy of all these families and patients whose lives have been devastated by a policy so ill-conceived and badly implemented.”

The new plan includes the establishment of a high-powered committee to draw up a blueprint for mental health care by next April.

Junior Health Minister Paul Strasburger said: “It is the heart of what we do.”

The report also makes a series of recommendations about best practice, patient safety, mental health workers, victims, and the role of community mental health teams.
10 inquiries into killings by London mental patients

LONDON health chiefs are carrying out 10 inquiries into killings by mentally ill patients, it emerged today.

Last week Lambeth, Southwark and Lewisham Health Authority published a long-awaited report into the death of Susan Crawford, who was stabbed to death by paranoid schizophrenic Michael Folkes, known as Luke Warm Luke.

The 60-page report raises serious questions about the lack of supervision and proper housing for patients who are allowed to live in the community when they are discharged from hospital.

Across London health officials are facing inquiries of a similar nature, damaging the public's perception of care in the community.

Since the murder of Jonathan Zini by Christopher Clavell there have been 36 public inquiries into such killings but many draw strikingly similar conclusions about the lack of teamwork between different agencies and the lack of facilities in the community to care for such patients.

At the beginning of next year the inquiry will be published into the death of Dr. Nina MacKay, who was killed last year by Magli La Gualdi after she had to break into his flat.

He was a mentally disturbed man under the care of Kensington, Chelsea and Westminster Health Authority.

Lambeth, Southwark and Lewisham has two further inquiries under way, one of which involves Wayne Hutchinson, a schizophrenic who was allowed to leave the Southwes Hospital in Tooting after a treatment session was mistakenly discharged him.

The same authority is also investigating the death of Jack Truisher, who was stabbed on Christmas Day 1985 by a patient, Matthew Hooper.

Other health authorities carrying out inquiries include North Essex, Camden and Islington, Brent and Harrow and Ealing, Hammersmith and Kensingston.

Within the next two weeks Health Secretary Frank Dobson is expected to announce his new mental health strategy. One of the key changes is the introduction of compulsory treatment orders which will enable doctors to force patients back to hospital for medication if they fail to take it while in the community.

It is also thought Mr Dobson will find extra money for setting up new schemes which might take as many as a thousand extra patients who are presently not in hospital.

Dr Michael Howard of the Zini Trust said today: "The number of inquiries being carried out at present says an awful lot about the uncertainty services in London. They are under enormous pressure, with some facing bed occupancy rates of 130 per cent."

"I think we have to realise that the full range of facilities for these vulnerable people are not in place and if we are to discharge people from hospital we need them."

Leader comment: Page 11
Impact of anti-psychotics

• No direct association with de-institutionalisation
• But:
  - they provided the idea of effective treatment
  - strengthened the confidence of the psychiatric profession
  - supported the belief that patients can be cared for in the community
Final statements

• AO has no direct influence on the number of hospital beds
• Even an effective prevention of admissions would not affect bed numbers
• However: There can be a substantial indirect effect on the debate about the provision of in-patient care
• It is important to focus on AO principles rather than defined models