Bed-based person centered intermediate care for older adults with complex care needs in Catalonia

Dr. Marco Inzitari, MD, PhD
Parc Sanitari Pere Virgili
Intermediate care network - Catalonia (2012 data)

Healthcare strategic plan of Catalonia, 2011-2015

[Image of a diagram showing the intermediate care network of Catalonia, including different regions and numbers for units and teams.]

- **Total units**: 5,654
- **Total teams**: 128

Catalonia (units)
- 395
- 311
- 226

(2012 data)

Inclusion of home care teams included.
Goals of care for bed-based services

**Bed-based**
- Early discharge (“post-acute”)
- Admission avoidance (“sub-acute”)
- Palliative care

**Ambulatory/Outpatient**
- Memory clinic
- Falls and Geriatric clinic
- Day hospital
- Frailty clinic (in primary care)

**Home based**
- Palliative care teams
- Geriatric rehabilitation team

Direct activation of social resources
Traditional aim of intermediate care

Reference population around 1.000.000
Early discharge activity

- Overall

<table>
<thead>
<tr>
<th>Centre</th>
<th>Entitat proveïdora</th>
<th>Persones ateses</th>
<th>Episodi</th>
<th>Dies d'estada (episodi finalitzats)</th>
<th>Estada mitjana</th>
<th>Estada mediana*</th>
<th>Estada d'edat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalunya</td>
<td></td>
<td>30.955</td>
<td>31.232</td>
<td>991.244</td>
<td>35.1</td>
<td>34.0</td>
<td>80.4</td>
</tr>
</tbody>
</table>

- Geriatric rehabilitation of higher intensity

<table>
<thead>
<tr>
<th>Centre</th>
<th>Persones en seguiment</th>
<th>Pacients (%)</th>
<th>Estada mediana a l'hospital dels que van a convalescència</th>
<th>Estada mediana a convalescència dels que venen de l'hospital</th>
<th>Episodi amb destinació domicili (%)*</th>
<th>Pacients que han millorat (%)*</th>
<th>Mediana de punts de millora dels pacients que han millorat*</th>
<th>Episodi amb circumstància alta defunció (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalunya</td>
<td>27.954</td>
<td>71,1</td>
<td>35,0</td>
<td>5,0</td>
<td>33,0</td>
<td>73,8</td>
<td>58,4</td>
<td>4,0</td>
</tr>
</tbody>
</table>
Individualized care to stroke survivors

- Research followed by innovation solutions
- Final aim is to develop tailored rehabilitation programs

Identification of profiles

- 384 patients (mean age 79.1±7.9 years, 51% women, 81% ischemic stroke),
- 9 intermediate care hospitals - Catalonia

Patient centered care interventions

Motivational interview for rehabilitation (patients goals)

Support groups for caregivers (by social workers)

Advanced directives

Direct activation of social resources

Palliative care in Catalonia

584 Journal of Pain and Symptom Management

Vol. 33 No. 5 May 2007

Special Article

Catalonia WHO Palliative Care Demonstration Project at 15 Years (2005)

Xavier Gómez-Batiste, MD, PhD, Josep Porta-Sales, MD, PhD, Antonio Pascual, MD, PhD, Maria Nabal, MD, PhD, Jose Espinosa, MD, Silvia Paz, MD, Cristina Minguell, MD, Dulce Rodríguez, MD, Joaquim Esperalba, MD, Jan Stjernswård, MD, PhD, FRCP (Edin), and Marina Geli, MD

on behalf of the Palliative Care Advisory Committee of the Standing Advisory Committee for Socio-Health Affairs, Department of Health, Government of Catalonia

Palliative Care Advisory Committee (X.G.-B., A.P., M.N.), Standing Advisory Committee for Socio-Health Affairs (X.G.-B.), Department of Health (C.M., M.G.), Government of Catalonia; Palliative Care Service (J.P.-S., Jos.E., S.P., J.E.), Institut Català d’Oncologia; Catalan-Balear Society for Palliative Care (D.R.), Barcelona, Spain; Cancer Control and Palliative Care (J.S.), World Health Organization; and International Palliative Care Initiative (J.S.), Open Society Institute, New York, New York, USA
IC Onco-geriatric care & pre-habilitation

Moving from traditional palliative care in Catalonia to new models of onco-geriatric care

2030 → Cancer patients Increase 45% (75% older adults)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Onco-geriatrics</th>
<th>Palliative care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=73</td>
<td>N=173</td>
</tr>
<tr>
<td>Death</td>
<td>12</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>16.4%</td>
<td>91.9%</td>
</tr>
<tr>
<td>Home discharge</td>
<td>27</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>37.0%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Transfer to ER / A&amp;E</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15.1%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Long term facility</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>28.8%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Nursing home</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Length of hospital stay</td>
<td>45.4</td>
<td>16.6</td>
</tr>
<tr>
<td>Functional improvement</td>
<td>5.2 (-60, 60)</td>
<td>-2.4 (-65, 20)</td>
</tr>
</tbody>
</table>

Complexity
- Difficult decisions making
- Difficult standardization
- High needs of monitoring and treatment

New approaches
- Frailty assessment
- Pre-habilitation
- Symptoms control

Inzitari M, Majó J, unpublished data
Admission avoidance strategies

AIS Barcelona Nord

Nursing home
Primary care
Intermediate care
Intermediate care
ER (A&E)

Response to crises and Admission Avoidance

PSPV: a Lab for Intermediate & Integrated Care
Direct admission from the Emergency Department

• 2015; N=460 patients discharged (mean age±SD=85.2±7.6 years, 63% women)
• 95% came from ER/A&E of University General Hospitals
• Main admission reasons: respiratory problems, heart failure; 40-50% cognitive impairment/dementia
• Mean LOS=8.5 days
• 77% discharged at home, 7% dead, 3% return to ED, 13% long term care

Inter-disciplinary geriatric assessment and approach, for prevention and treatment of crises

Evaluation of simple screening tools as predictors of discharge destination
Integrated care & transitions models

In Medicare patients
Readmission from post-acute care at 30 days → 12%
50% of readmissions occurred < 11 days
Preserved motor and cognitive function is associated with reduced risk for readmission

Ottenbacher K, et al. JAMA 2014

Current options to improve transitions at discharge
• Pre-discharge alert (within 48 h to primary care)
• Medication reconciliation
• Early support discharge (in-hospital meeting with primary care when needed and feasible)
• PADES – Palliative Care at home
• Direct activation of municipal social resources (RETORN)
• Nursing discharge coaching
Shared Electronic Health Records

EHR with integrated Minimum Data Set

- Determinar perfil paciente
- Establecer PAI
- Identificar problemas e
- Objectius
- Assignar activitats per assolir objectius

Ordre d'execució

AIS Barcelona Nord

Acute Hospital

Primary care

Intermediate Care

Primary care

Intermediate care

Acute Hospital

Shared Electronic Health Records

EHR with integrated Minimum Data Set

- Determinar perfil paciente
- Establecer PAI
- Identificar problemas e
- Objectius
- Assignar activitats per assolir objectius

Ordre d'execució

AIS Barcelona Nord

Acute Hospital

Primary care

Intermediate Care

Primary care

Intermediate care

Acute Hospital
Take home messages

1. Whereas more home-based approaches should be implemented, bed-based intermediate care should be addressed to manage:
   - More complex patients with special needs
   - Including more intense rehabilitation and reablement (e.g. complex stroke)
   - + when caregiving at home is insufficient

2. More “intensity” of monitoring and treatment, and more specialization will be needed progressively

3. Transitions of care are critical, and integration with primary care and social services is clue