Room for research on a new integrated care system for aged people

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Mission Unit for Integrated Continuous Care
Ministry of Health
continuing need for research in the way that services have to adapt to meet the new challenges brought about by changes in demography, diseases, demands, disability and social support.
Redesigning Services

National Network for Integrated Continuous Care

Health and Social Integration

UMCCI
Mission Unit - National Coordination

ECR
Regional Coordination Team

ECL
Local Coordination Team

Palliative Care Units

Intra Hosp Palliative Support Teams

Convalescence Units

Midterm and Rehabilitation Units

Long term Maintenance Units

Ambulatory Promotion of Autonomy Units

HOSPITAL

Discharge Teams

• integration of care,
• adequate and early discharges to more adequate and cost-effective services,
• social co-payments according to different levels of income, contribute to long-term sustainability

Health Centre Primary Care

• co-operation and partnerships: public private third sector

• creation of integrated service models that will enable public, private and third-sector organizations to adopt new working methods and provide cost-effective services

Unidade de Missão para os Cuidados Continuados Integrados
**LTC Future demand**

Budget pressure for active ageing together with measures to decrease disability in LTC care

*key indicator in assessing future demands for LTC for older people is the prevalence of severe ill-health and functional disabilities in the population*

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![Graph showing the prevalence of severe and somewhat limited health conditions in the population across different age groups (65-74, 75-84, 85+). The categories include Chronic pain, COPD, Stroke, Cancer, Severe and Somewhat limited.](image)

- **Severely limited**
  - 65-74: 3%
  - 75-84: 16%
  - 85+: 29%

- **Somewhat limited**
  - 65-74: 34%
  - 75-84: 57%
  - 85+: 74%

- **Total**
  - 65-74: 31%
  - 75-84: 41%
  - 85+: 45%

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*Unidade de Missão para os Cuidados Continuados Integrados*
How to coordinate and arrange formal and informal care? – Quantify and evaluate both

- Cash entitlements, choice, informal caregivers and disability:
  - More financial sustainable – how to evaluate quality?
  - This type of choice is adequate for the majority of individuals?
    - Level of disability?
    - Living alone? And these are increasing

- Evaluate potential of recovery

- Eligibility and equity:
  - What disability levels and potential of recovery?
  - Assessment → Bio psycho social tool for initial evaluation of needs and of outcomes
<table>
<thead>
<tr>
<th>Quality</th>
<th>Structure</th>
<th>Process</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>Structure</td>
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<td>Process</td>
<td>Outcomes</td>
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<tr>
<td>Quality &amp; Safety</td>
<td>Quality &amp; Safety buildings</td>
<td>Residents rights</td>
<td>Prevalence pressure ulcers</td>
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<td>buildings</td>
<td>Housing environment</td>
<td>Discharge management</td>
<td>Prevalence of falls</td>
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<tr>
<td>Size of rooms</td>
<td>Available core services: e.g.</td>
<td>Rehabilitation</td>
<td>Falls prevention</td>
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<tr>
<td>Waste management</td>
<td>Services needed for high level</td>
<td>Nutrition: loss of weight</td>
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<tr>
<td>Staff ratios</td>
<td>Sufficient qualified staff</td>
<td>Pain management</td>
<td></td>
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<td>Mix of staff qualification</td>
<td>Individual intervention plan - PII</td>
<td>Increase physical autonomy</td>
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<td>Periodic revision of PII</td>
<td>Decrease use wheelchair</td>
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<td>Multidisciplinary PII</td>
<td>Inadequate drug use elderly</td>
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<td>Clinical records and process of</td>
<td>Restraints</td>
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<td>Therapeutic revision</td>
<td>Infections</td>
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<td>Drug storage and best practices</td>
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<td>Drug reconciliation procedures</td>
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<td>Process of continuous quality</td>
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<td></td>
<td>improvement</td>
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<td>Registries of accidents and near</td>
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<td>misses</td>
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**Evaluation of the degree of users' satisfaction**

**Evaluation of the degree of staff satisfaction**
Quality improvement RNCCI

Número de medicamentos inadequados em idosos
• Wide range of services ➔ Post acute and long term care facilities, ambulatory care, home care

• Evaluation of needs and outcomes ➔ Bio psycho social tool

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**Bio psycho social tool**

• **Partnership with a university** to assemble different instruments of evaluation regarding physical autonomy, activities of daily living, mental and cognitive status, nutrition, falls and social.

• At the end the instrument gives a **score** for each parameter analyzed and a combined score.

• **Evaluate users in need of post acute and long term care and their outcomes.**

• **Evaluation** of the users with the tool is made on admission, monthly for post acute care and every three months for long term care

• **Allows ongoing evaluation of different parameters in a holistic approach**
<table>
<thead>
<tr>
<th>IAI – integrated evaluation tool</th>
<th>Bio psycho social evaluation</th>
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<tbody>
<tr>
<td><strong>Bio</strong></td>
<td>Sex</td>
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<td>Age</td>
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<td>Health complaints</td>
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<td>Nutrition status</td>
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<td>Falls</td>
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<td>Locomotion</td>
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<td>Physical autonomy</td>
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<td>ADL autonomy</td>
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<td><strong>Psico</strong></td>
<td>Émotional status</td>
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<td>Cognitive status</td>
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<td><strong>Social</strong></td>
<td>Social status</td>
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<td>Habits</td>
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Bio psycho social tool

Scores of the 12 DOMAINS, sequentially, allow registration of the evaluation.
• Data collection needed to be pertinent to management and for professionals, focusing on feed-back allowing research and benchmarking
• Registration on paper needs further construction of data bases to analyze results.

Online web based system of data management
• Paper-free on-line web based system of data management for the National Network for Continuous Integrated Care (RNCCI).
• Allows on line registration of the evaluation made with the integrated bio-psychosocial tool, data related to patient safety and the registration of data related to referrals and admissions to RNCCI.
• Software prototyping - allows continuous improvement through feed-back from users.
• Has a relational database management system to allow queries and different reports models and different access levels.
• Implementation began in the first trimester of 2008 on a voluntary basis with continuous engagement of professionals
• Allows having real time results at a national, regional, local, and unit level, making possible to obtain a large number of registries.
Degree of physical autonomy on admission and discharge

- Evaluation of 5,784 registries for admission and the same number on discharge
- These results are obtained in a population of users that on admission 43% have incapacity and 52% were dependents, representing 94% of the users.

The data management system allows obtaining a large number of registries for analysis otherwise only possible in prospective or retrospective studies specifically designed for this purpose.
**National Pressure Ulcer Long Term Care study**
- Retrospective cohort study
- 1,524 residents aged 18 and older, with length of stay of 14 days or longer
- Prevalence 29%

**Pressure Ulcers in Two Long-Term Care Facilities in Canada**
- Residents in these two facilities (95 residents in one facility, 92 residents in the other)
- Prevalence 36.8% and 53.2%

**Pressure Ulcer Prevalence Rates in Nursing Homes in the Netherlands and Germany 06**
- Dutch 48 facilities (6,273 residents), German 45 facilities (3,499 residents).
- Prevalence 29.2% and 8.8%

**Prevalence of pressure ulcers in Germany**
- Data 2002, published 2004
- 1347 patients in 15 nursing homes in Patients at Risk
- Prevalence 17.3%

**RNCCI 2009**
- 20,692 users cared in 2009
- Prevalence 19%
- 12.8% if excluded those on admission
- 80.5% users aged 65 or more and 42% aged 80 or more

**The data management system**
*allows obtaining a large number of registries for ongoing quality improvement and evaluation of outcomes*
### Cognitive Status and Falls

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Good</td>
<td>17.8%</td>
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<tr>
<td>Satisfactory</td>
<td>12.1%</td>
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<tr>
<td>Non satisfactory</td>
<td>42.2%</td>
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<tr>
<td>Bad</td>
<td>27.9%</td>
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Total: 70.1%

### Emotional Status and Falls

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Good</td>
<td>11.3%</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>36.3%</td>
</tr>
<tr>
<td>Non satisfactory</td>
<td>34.5%</td>
</tr>
<tr>
<td>Bad</td>
<td>17.9%</td>
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Total: 52.4%

<table>
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<tr>
<th>Condition</th>
<th>Percentage</th>
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<tr>
<td>Falls in patients using wheelchairs</td>
<td>20%</td>
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<tr>
<td>Falls in patients with bed restraints</td>
<td>24%</td>
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• There is arguably no major area of social policy in the European Union (EU) in which Member States differ more than in the way long-term care for people who depend on ongoing social and medical help is organised and funded.

• Very large differences exist between and within countries in the division of labour:
  • between informal care (provided by family members, friends and volunteers)
  • versus professional services funded from public and private sources;
  • or in the mix between home care and residential care provision.

• Benchmarking difficult
• Need for consensus – can we get it?

Long-term sustainability and quality
Thank you for your attention

CUVIDADOS CONTINUADAS
Saúde e Apoio Social