

The Spanish Model of ACT: Methodology and Results



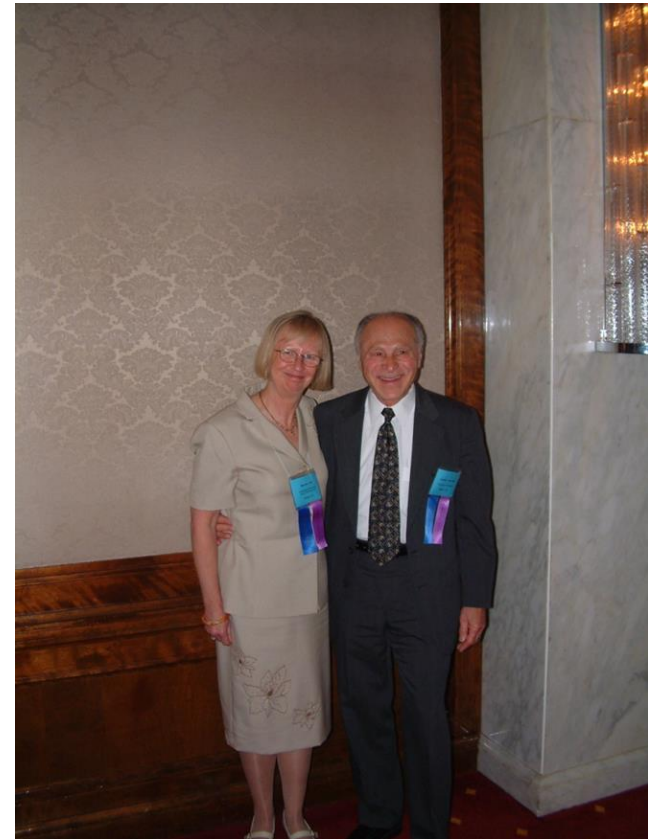
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The Spanish Model of ACT: Methodology



Spanish Model of ACT

- ACT Spanish Model try to be a faithful version of ACT original model (Madison Model).
- But adapted to the social and sanitary reality of Spain in the XXI century.



L. Stein y M. Test



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The Avilés Model of ACT

- The first ACT team of Spain started to work in **1999**, in the city of Avilés.
- In Spain the ACT is called Avilés Model.
- Nowadays there are more than 30 ACTs in Spain.



E. Peñulas, J.J.M. Jambrina



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ACT's Dissemination in Spain

- Since 2004 there have been **11** ***NATIONAL SYMPOSIUM OF ASSERTIVE COMMUNITY TREATMENT IN MENTAL HEALTH.***
- All conferences have been held in the town of Aviles.
- This anual congress has contributed decisively to the spread of ACT in Spain.



Dissemination of the TAC in Spain



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Objective

- Adapt care and social-health resources to the real needs of the patient with **Severe Mental Disorders** in its community environment.



Public and Medical Teams

- ACT Teams of Spain belongs to the Public Mental Health Services. Not depend to the Social Services.
- This makes it easier the relationship with the health system.
- Strong collaboration with the social services of the council.



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Admision Criteria

- Patients with Severe Mental Illness
- We say that a person has a **Severe Mental Disorder** when a combination of clinical criteria, severity and disability are met.



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Severe Mental Disorder: Clinical Criteria

Patients with diagnosis of:

- Schizophrenia (F20)
- Schizotypal disorder (F21)
- Persistent delusional disorders (F22)
- Acute and transient psychotic disorders (F23)
- Schizoaffective disorders (F25)
- Bipolar affective disorder (F31)
- Obsessive-compulsive disorder (F42)

At least 2 year since the diagnosis.

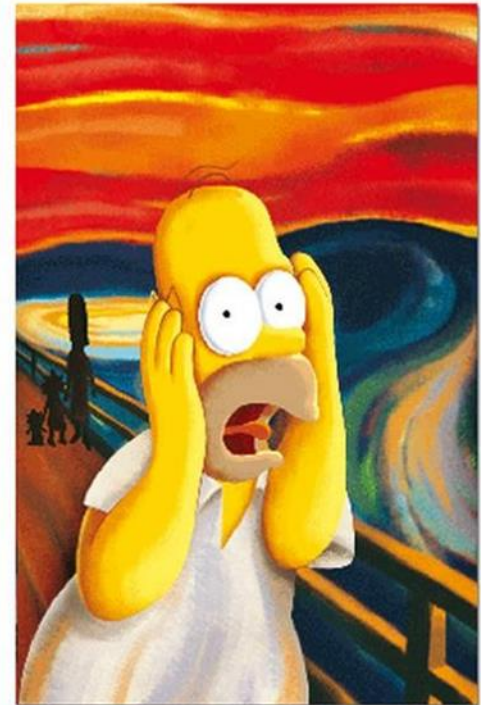


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Severe Mental Disorder. Severity and Disability Criteria

- **Clinical Severity**
- **High Disability**



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Severe Mental Disorder

The following problems are taken into account:

- **Social Problems** (social exclusion risk, high family burden supported)
- **Services usage level** (no contact with Mental Health or revolving door)



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Exclusion Criteria

- Patients with primary diagnosis of drug abuse, mental retardation, organic mental disorder and emotionally unstable or disocial personality disorders.
- Younger than 18 year old and older than 65 year old.



Principles



- Primary care place: **The community.**
- Standardized resource utilization.
- Maximum individualization (**Individualized treatment plan**)
- Assertiveness.
- To achieve maximum patient autonomy.
- Active involvement of the patient.
- Main factor: **the family.**



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Schedule

- **Schedule:** Monday through Friday, 8 to 15 hours
- Thank to our good coordination with the services that work 24 hours a day, our patients generate few emergencies, and admissions can be avoided for most of them until the ACT Team can re-engage.



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Human Resources

- psychiatrist,
- nurse,
- nurse's aide
- social worker
- Other professionals: psychologists, occupational therapists, etc



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Internal Organization



- Operating Model: **Assertive Community Treatment Aviles Model.**
- Patients are fully assumed by the team, which provides in a global manner all the Mental Health care.
- If the patient is referred to other devices, the ACT Team remains central point of responsibility.



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Internal Organization

- Emphasis on shared responsibility and teamwork and a high degree of autonomy.
- **MEETINGS:** A weekly meeting to review cases and a daily half-hour meeting.



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Home Visits

- The team spend 70 % of their time performing community work.
- We always go to the homes of patients as a couple
- A well-functioning team must be able to visit the most problematic patients daily for several weeks.



Internal Organization

- Patients assumed by the ACT Team are assigned to one of the two following programs:
 - *High Intensity Program*. Frequent home visits (from several a week to 1 a month)
 - *Intermediate Intensity Program*. Transition to discharge . Outpatient monitoring, and home visits only in specific situations.
- Similar to the Dutch FACT



Internal Organization



High Intensity Program.:

- Mentoring is assumed by the nursing team, and each case is assigned a principal supervisor and a second charge. Each tutor assumes a maximum of 15-20 patients.
- The intervention takes place mainly at the community level and the most common interventions are home visits and / or community support.
- Main objective is to increase treatment adherence and ensure treatment



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Intervention phases



- **I) Derivation:** Most teams only accept referrals from the public mental health services.
- **II) Host interviews, engage and evaluation :** It end with a report of acceptance or rejection.
- **III) Tutoring**
Assignment of a **mentor**.
Signature of therapeutic contract. Imperative. No involuntary treatment.



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Intervention phases

IV) Individualized treatment plan:

- **Evaluation of needs and interests** (2-4 months)
- **Preparation of reports:** Psychiatric, Nursing, and Social Work.
- **Preparation of ITP:** By consensus of all members of de ACT Team.



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Intervention phases



- **V) Final phase.** Patients will be at least 5 years in the ACT Team: after those first 5 years, if stabilized, begins one year follow up in the middle intensity program with a single outpatient visit per month. If no relapse at the time, would return to the Mental Health Center reference.
- A significant percentage of patients will require the services of ACT Team indefinitely.
- If a patient does not benefit from ACT Team, it can raise their return to Mental Health Center after 6-12 months follow up.



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The Spanish Model of ACT: Results



Reduction of Admission in 4 ACTs

- ACT team of Avilés
- ACT team of Gran Canaria
- ACT team of Aguilás - Lorca and
- ACT team of Ferrol



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Patient Characteristics

- More than half, diagnosed with paranoid schizophrenia. Less than a 5%, diagnosed with a personality disorder cluster B.
- Ages range from 18 to 77.
- About 30% live alone and another 50% with the family of origin.



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Reduction of admission

Town	Years	Nº patients	Hospital stay (in days) pre/post	Nº admission pre/post	% reduction hospital stay (in days)	% reduction admission
AVILÉS	5	65	2628 / 771	160 / 42	70.66%	73.75%
FERROL	8 años	53	4270/725	103/32	83%	69%
AGUILAS LORCA	4 años	45	4332/859	129/46	79,17%	64,34%
GRAN CANARIA	7 años	74	5471/1008	174/64	81,57%	63,21%



Results

- A very important reduction in the **hospital stay** (in days): **83 – 70%**
- A reduction in **admission: 63 - 73%**
- Low incomes and generally of short duration.



RESULTS ACT

Ferrol

(First 10 years)



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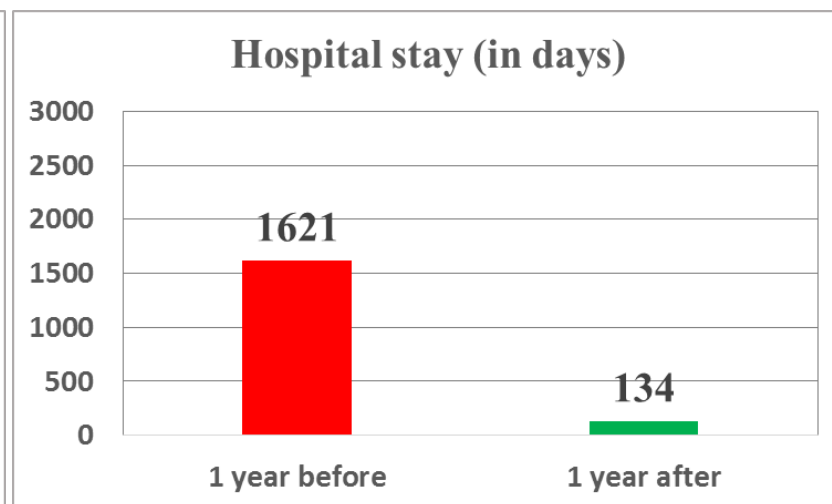
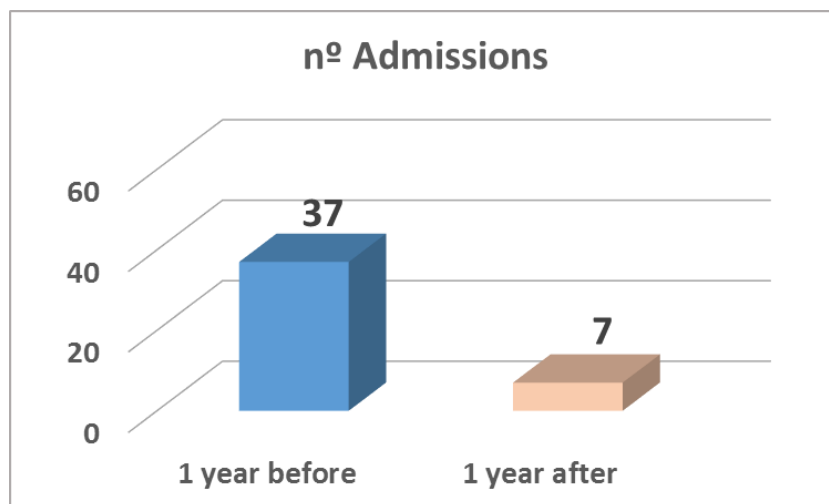
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Study



- Retrospective observational study of 40 patients: pre-post designs (“mirrow – image”).
- Two parameters: 1) Number of admissions in Acute Psychiatric Hospital Unit, and 2) Number of Inpatient days in the Unit.
- We compare these parameters 1, 2 and 3 years before and after their incorporation in the ACT team programme.
- 18 patients were excluded from the sample for being less than 3 years with the Ferrol’s ACT team.
- Statistical analysis we used a non parametric test, the Wilcoxon signed-rank test.

Results 1 year pre - post



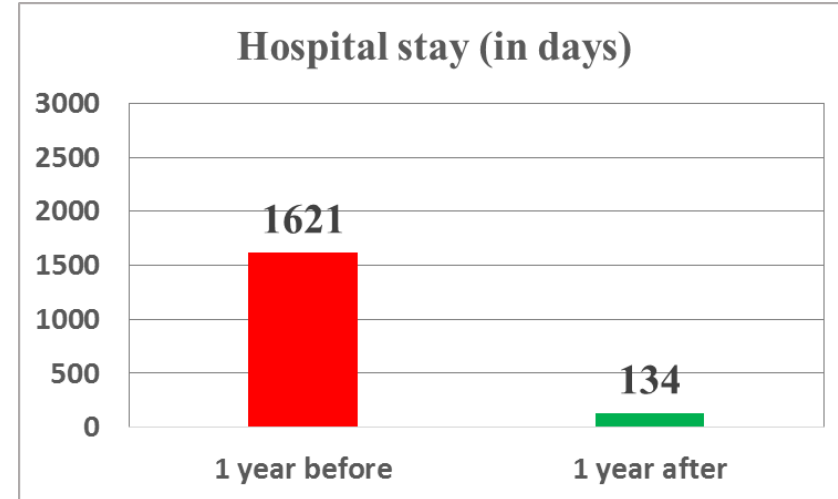
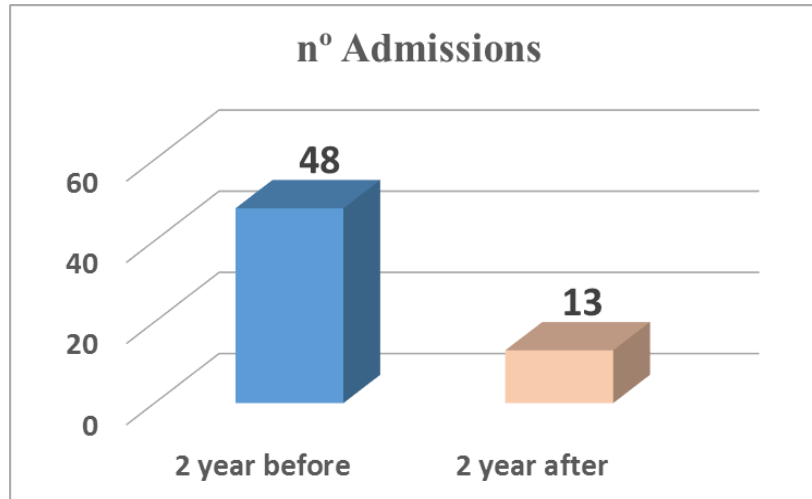
	1 year before	1 year after	p
Means admissions	0,88 (+/- 0,91)	0,18 (+/- 0,39)	0,000
Means days admissions	40,52 (+/- 46,45)	3,35 (+/- 8,97)	0,000



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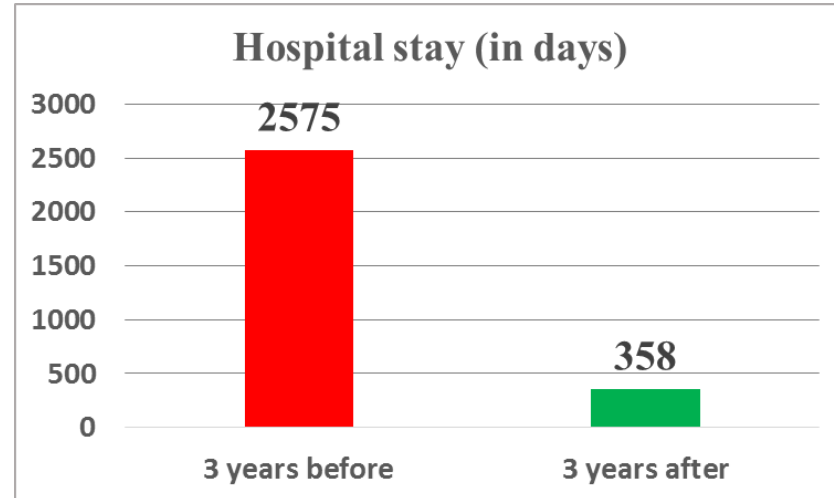
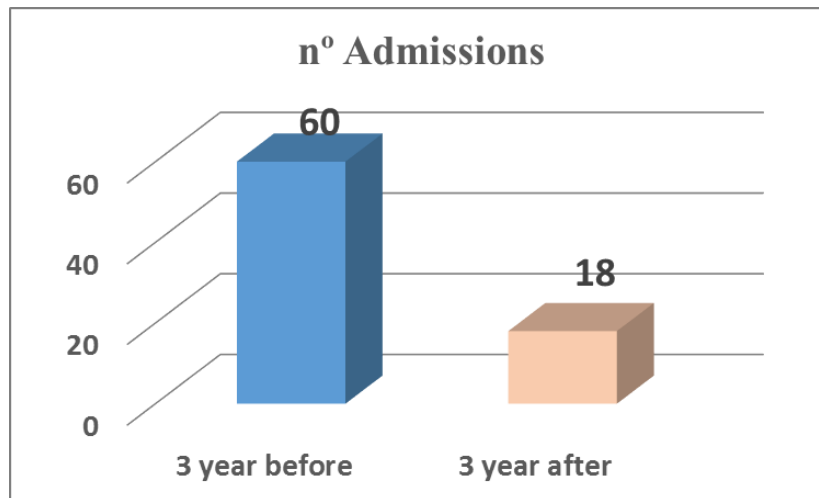
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Results 2 year pre - post



	1 year before	1 year after	p
Means admissions	0,88 (+/- 0,91)	0,18 (+/- 0,39)	0,000
Means days admissions	40,52 (+/- 46,45)	3,35 (+/- 8,97)	0,000

Results 3 year pre - post



	3 year before	3 year after	p
Means admissions	1,50 (+/- 1,38)	0,45 (+/- 0,82)	0,000
Means days admissions	64,38 (+/- 57,00)	8,95 (+/- 16,87)	0,000

Results



- **Reduction in hospital admissions** of patients after being followed up by the ACT Team, 81%, 73% and 70% respectively.
- **Reduction in hospital stay (days)** of 92%, 88% and 86% depending on the period studied.
- They all show a significant difference (**$P=0,000$**).



HoNOS Scale

HoNOS
is a shorter form of
Health of the Nation Outcome
Scale
by allacronyms.com



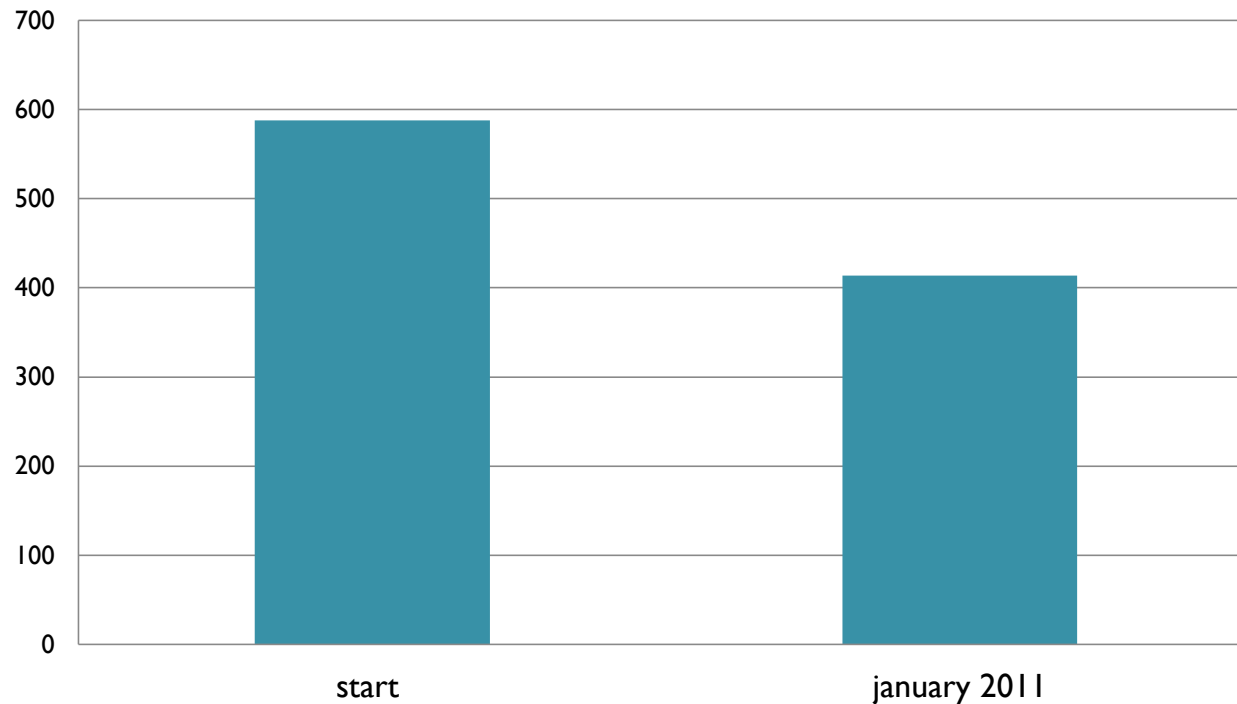
- **Nation Health of the Outcome Scale**
- **HoNOS scale** consists of 12 items or subscales, grouped into 4 sections. Are scored from 0 (no problem) to 4 (extremely serious problem).
- **Behavioral problems** (aggressiveness, self-injurious behavior, and substance use), **impairment** (cognitive dysfunction and physical problems), **clinical problems** (depressive symptoms, psychotic symptoms, other psychiatric symptoms) and **social problems** (social relationships, general functioning, housing problems and occupational problems).

HoNOS Scale

- **Observational and descriptive study.**
- We compared the scores on the HoNOS scale for patients to complete treatment program at the time of referral and in January 2011.
- In 2 ACT teams:
 - ACT team of Avilés (95 patients)
 - ACT team of Ferrol (34 patients)

HoNOS Results Ferrol

Total Score HoNOS

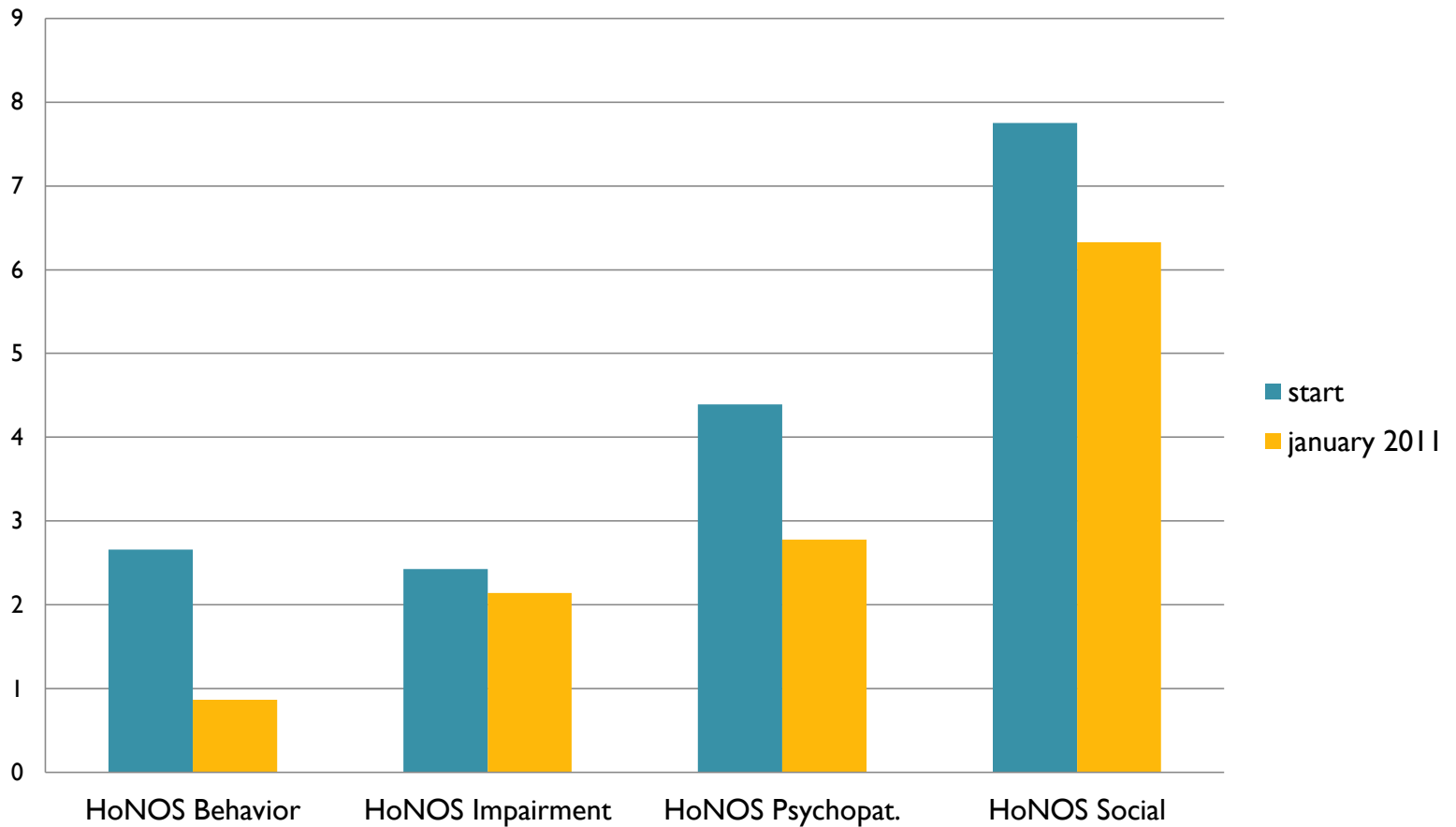


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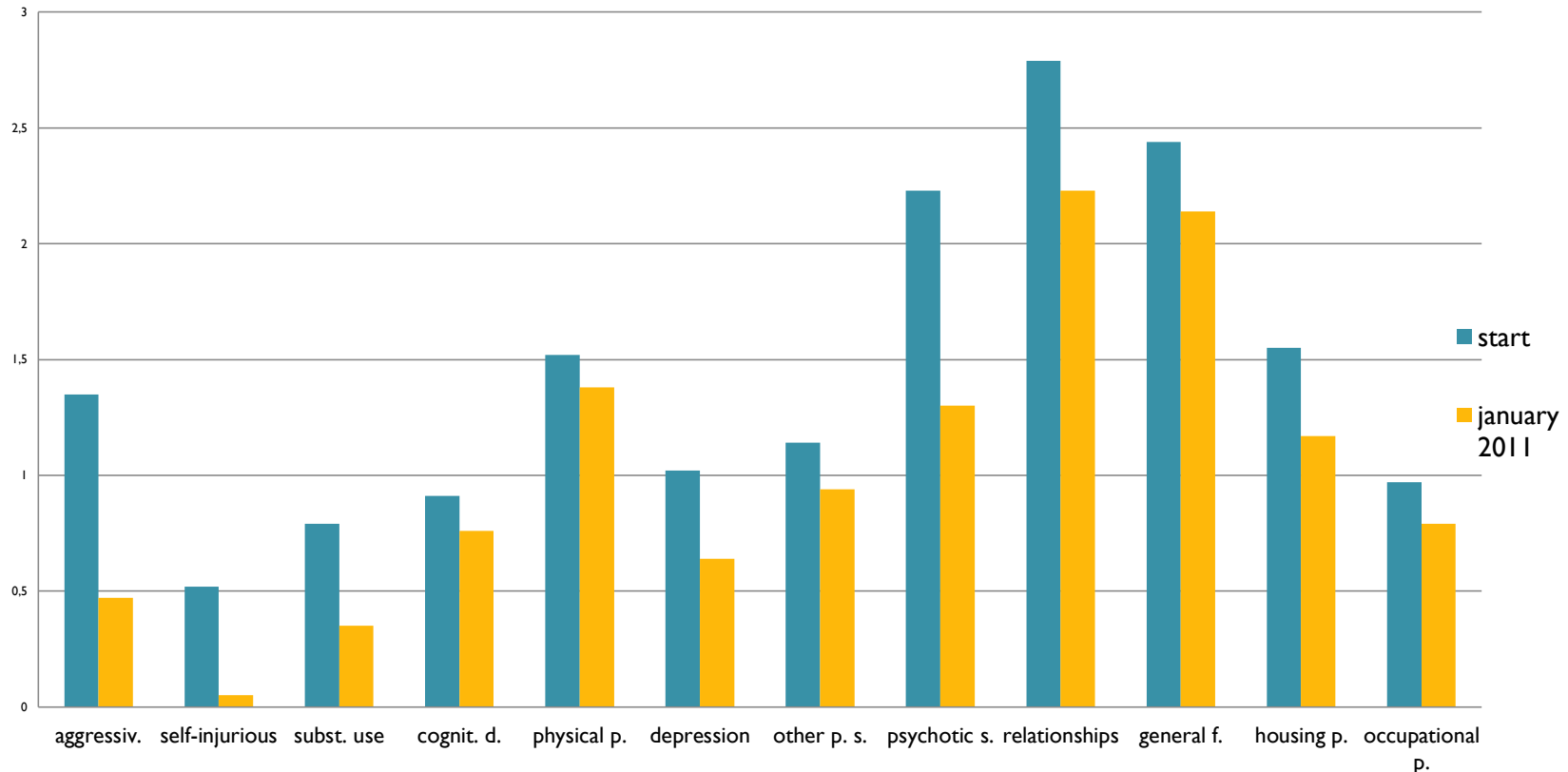
HoNOS Result Ferrol

Average Score Sections HoNOS



HoNOS Results Ferrol

Average Score Subscales HoNOS

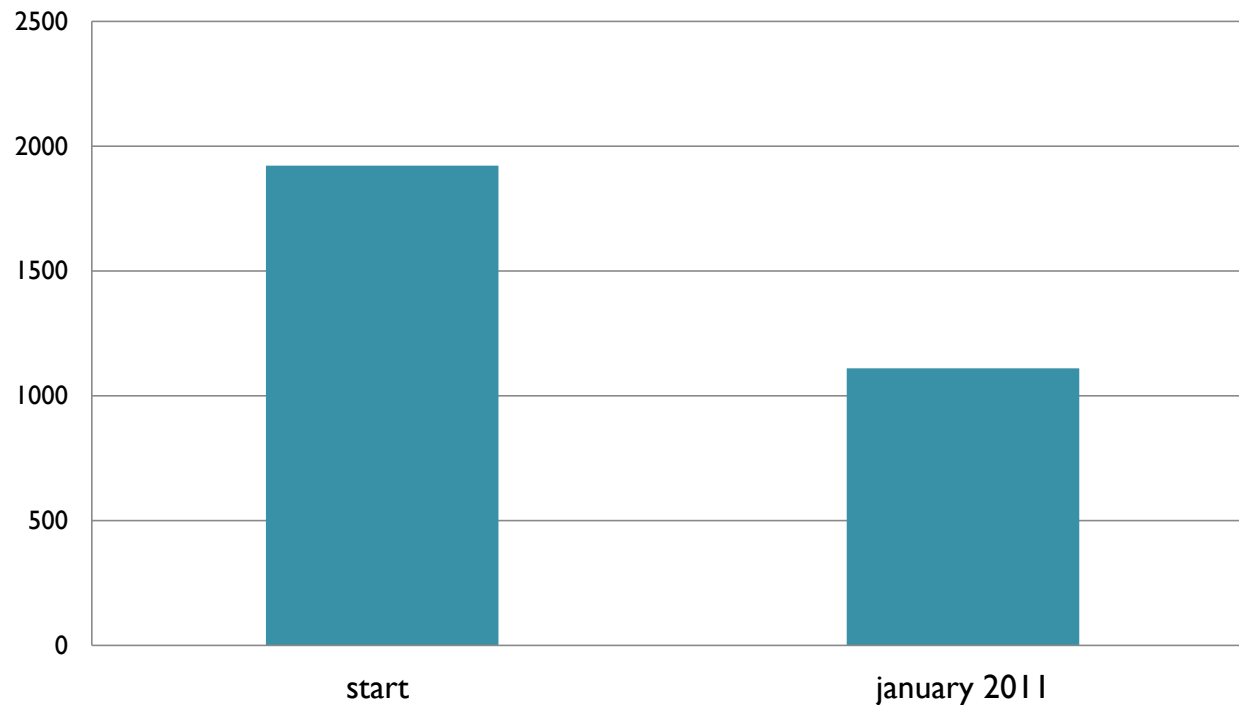


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HoNOS Results Avilés

Total Score HoNOS

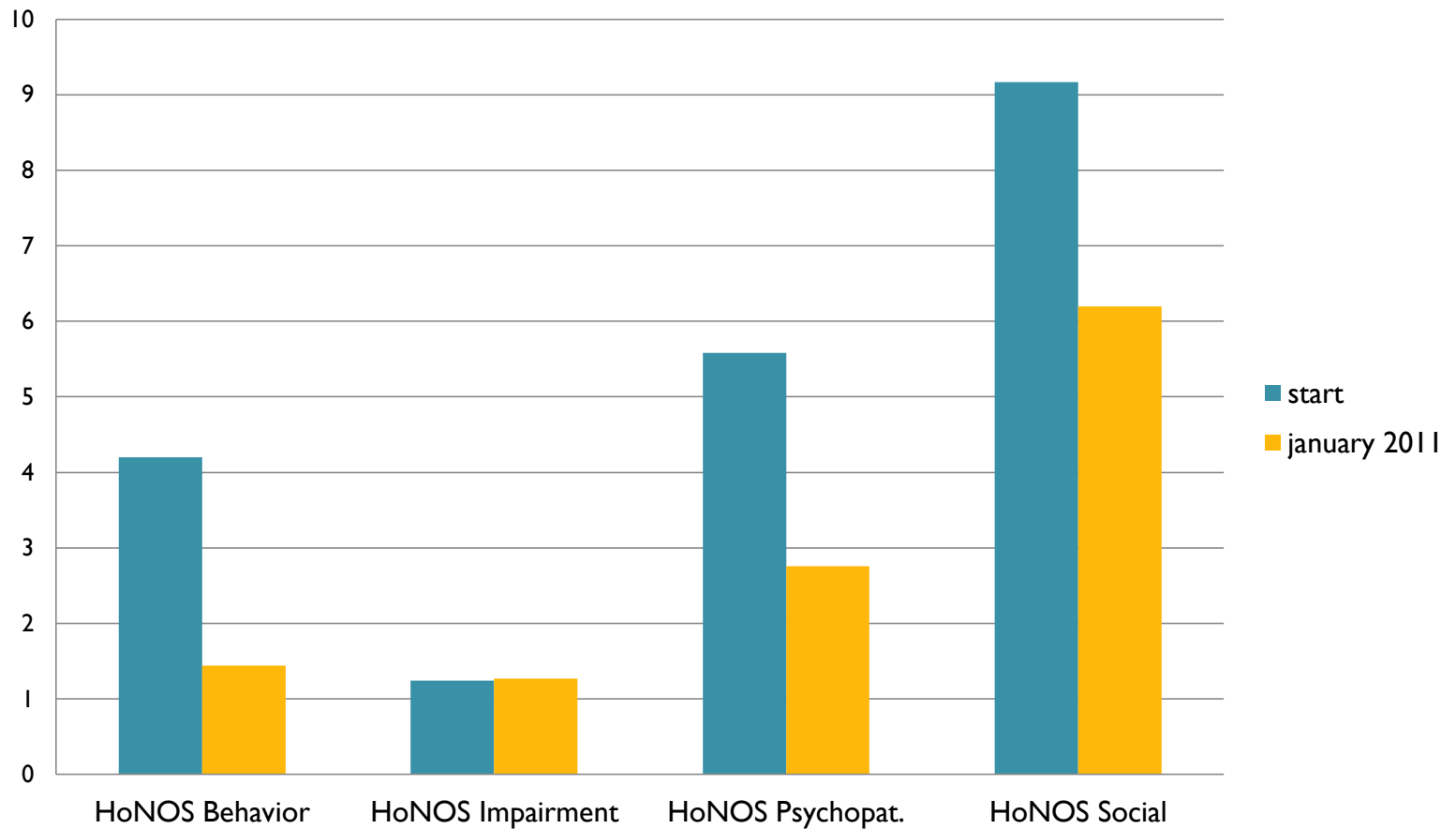


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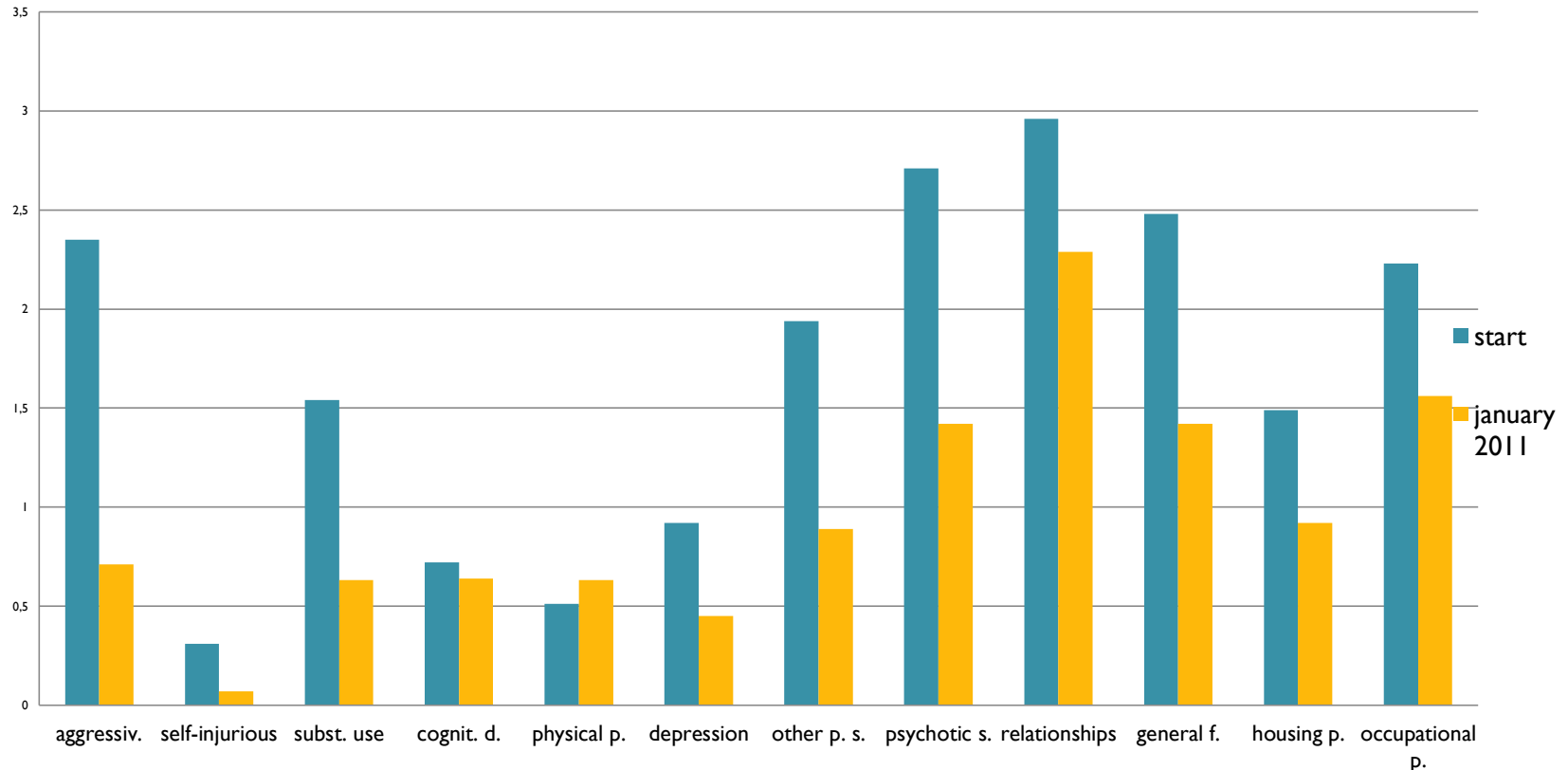
HoNOS Result Avilés

Average Score Sections HoNOS



HoNOS Results Avilés

Average Score Subscales HoNOS



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HoNOS Results

	AGRESSIV.	SELF- INJURIOUS	SUBST. USE	COGNITIVE D.	PHYSICAL P.
Ferrol	- 65,21%	- 88,8%	- 55,5%	- 16,4%	- 9,2%
Avilés	-69,6 %	- 76,6%	- 57,8%	- 11,5%	+22%



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HoNOS Results

	DEPRESS.	OTHER S. P.	PSYCHO.S.	RELATION SHIPS	GENER. FUNCT.	HOUSING PROBL.	OCCUPAT. PROBL.
Ferrol	- 37,1%	- 17,5%	- 46%	- 20,8%	- 12,2%	- 24,5%	- 18,5%
Avilés	-51,1 %	- 54%	- 47,6%	- 22,6%	- 42,7%	- 38%	- 29,7%



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HoNOS Results

- The **average score** of the HoNOS scale is reduced by 30% (Ferrol) – 42% (Avilés)
- The most important reductions in scores are observed in the following **subscales**:
aggressiveness (65% - 69%), self-harm (88% - 76%), drugs (55% - 57%), positive symptoms (46% - 47%), depressive symptoms (37% - 51%), and other symptoms (17% - 54%).



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HoNOS Results



- **Social problems**, although significantly reduced, remain the main **problem** of our patients in the two teams.
- Results are very similar in the two teams.



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Conclusions



- Our data support the replicability of the **Avilés Model** and its effectiveness in reducing hospital admissions for people with severe mental disorders.



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Conclusión

- ACT Avilés model reduces the productive psychotic symptoms and control behavioral disorders. They also improve the social problems.
- Studies are needed to support our subjective impression of improvement in the quality of life of patients and reduction of family burden supported.

Conclusión



- Spanish model is a **simple and effective** model.
- ACT Avilés Model shows us that modest resources with a correct organization can obtain important changes in the evolution of patients with Severe Mental Illness.

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