Learning from Accountable Health Models in Spain
The Converging Narratives of Integrated Care, Chronic Care Management and Promoting the Culture of Health
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The Converging Narratives of Integrated Care, Chronic Care Management and Promoting the Culture of Health
Project Team

Principal Investigators
Dr. Richard Scheffler, PhD
Dr. Stephen Shortell, PhD

Project Staff
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Roberto Nuño, MSc, Basque Region Lead
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Project Period
May 1, 2016 – April 30, 2018

Sponsor
Robert Wood Johnson Foundation
In the World Health Report 2000, which measured and compared health systems performance based on eight dimensions of attainment and performance (including health expenditure per capita), Spain ranked 7th out of 191 countries in the world.

Spanish citizens rate the quality of the healthcare that they receive as “good quality”; this is 6 points higher than the EU average.

According to WHO’s world health statistics, in 2015 life expectancy at birth in Spain was 82.8, the third highest in the world. The top causes of death in Spain are disease of the circulatory system (30.1% of total deaths) and cancers (28.4%). Spain is among the 4 EU countries with the lowest death rate from ischemic heart disease and cerebrovascular disease.
The Spanish state is made up of the central state and 17 decentralized autonomous communities, responsible for payment with public funds as well as healthcare budgeting, and organization of the delivery of services. The right to health protection for all citizens, the right of universal access to healthcare, and a strong primary care are common elements in all the regions.
In Spain, the more advanced Regions have been pursuing integration, chronic care management, and promoting an overall culture of health for their population – but with different strategies and a different package of policies, tools, and innovations in each region.

Payers and providers in the U.S. are facing many of the same issues that Spain has been dealing with for the last decade. These include:

• the accountability for the health of specific populations,
• the roles of leadership and policy in driving change,
• motivating care coordination,
• payment methodologies,
• structured evaluation of best practices and
• the dissemination of learnings.

The project will highlight lessons for the U.S. and give influential U.S. health leaders first-hand knowledge of these lessons.
OBJECTIVES

Objectives:

➢ To explore, identify, describe and analyze the main innovative integrated care initiatives implemented in the three regions that could be translated to the United States.

➢ To develop several case studies about integrated care initiatives with tangible results.
METHOD

- A first exploratory visit was made by the research team to the three regions. In this visit the elements that were reviewed were: overview of the health system, population and culture of health, elderly and end of life health, data systems, mental health, innovations.

- Comparative data of Cost and Population Health between the three regions and the US were also shared. A final report of this first visit was obtained.

- A second visit was maintenance a year later with the assistance of relevant leaders from the US health organizations. Selected innovative initiatives and the final case studies were shared, and a final report was obtained.

- With the information of the two visits and the case studies prioritized a final working visit was hold in US with relevant leaders and the research team.

- A final report was finally written.
METHOD

First Visit to Madrid in June 2016. Dr. Richard Scheffler, PhD
Dr. Stephen Shortell, PhD. Meg Kellogg, Project Manager
METHOD

US Health Leaders Advisory Committee

Paul Wallace, M.D. (Senior Scholar at AcademyHealth)

Jerry Penso, M.D., M.B.A. (Chief Medical and Quality Officer for AMGA)

Parinda Khatri, Ph.D (Chief Clinical Officer at Cherokee Health Systems)

Jeffery Burnich, M.D. (Senior Vice President of Medical and Market Networks at Sutter Health Network)

Toyin Ajayi, MD, MPhil (co-founder and Chief Health Officer of Sidewalk Labs’ Care Lab).

June 2017 visit to San Sebastian
The Berkeley team, Spanish team, and U.S. health leaders convened in Washington DC in April 2018 to further the exchange of ideas, with an emphasis on how these innovations can be adapted and implemented for the U.S.

Hosted by the American Medical Groups Association.
RESULTS

Initiatives from Basque Country:

Innovation relative to Chronic patients, Social and Healthcare Integration, Mental health integration, Budget integration, Local Area coordination across sectors.

Integrated Care as a Large Scale Transformation Strategy in the Basque Health System
LARGE SCALE TRANSFORMATION IN THE BASQUE HEALTHCARE SYSTEM

The CONTEXT (2009-2010)

- High pressure on demand: ageing and chronic diseases challenge.
- Deep economic and financial crisis: austerity and budget constraints.
- Political opposition and trade unions resistance to change.
- Some top policymakers and managers “not on board”.
- Not clear support from general population and patient associations.
- Limited number of clinical leaders

RESULTS: BASQUE COUNTRY
NARRATIVE OF CHANGE:
Health system transformation based on integrated care to improve care of patients with chronic conditions and contribute to sustainability of the system.

Based on key Frameworks, Evidence and International Best Practices
Implementation approach

TOP-DOWN

Standard interventions
- STRATIFICATION
- MULTICHANNEL CALL CENTER
- ELECTRONIC HEALTH RECORD AND PERSONAL HEALTH FOLDER
- FINANCING AND JOINT COMMISSIONNING
- ELECTRONIC PRESCRIPTION

BOTTOM-UP

Local innovations
- NURSE CASE MANAGERS
- PATIENT EMPOWERMENT
- HEALTH AND SOCIAL CARE COORDINATION
- BOTTOM-UP INNOVATION PROJECTS (150+, 2010-2015)
Two “waves” of integration

1st wave 2009-2012: focus on clinical integration 150+ bottom-up action research projects

2nd wave 2011-2016: focus on organizational integration (full integration in IHOs in 2016)
Main achievements

A new integrated care model is emerging as a result of learnings from bottom-up integration initiatives (150+ projects) and the benefits of IHO structure.

New care model for complex chronic patients (internist physician of reference).

Deployment of nurse case managers.

100% of population of the Basque Country risk stratified, with the information included in the Electronic Health Record (EHR)
Main achievements (2)

Prevention and health education programs: Osasun Eskola, Prescribe a Healthy Life, Ttipi Ttapa...

Improved collaboration between clinicians of different care levels (measured by D’Amour survey)

Clear progress on integrated care for chronic conditions (measured by IEMAC assessments)

Many IT innovations (integrated EHR, personal health folder, E-prescription, telehealth and telecare projects, BetiON)
RESULTS

*Initiatives from Catalonia:*

Integration of Electronic Health Record, Stratification of population, personalized care plans, integration of the emergency medical services, social and healthcare integration, cross sectorial meetings
THE CATALAN HEALTHCARE SYSTEM

- NHS funded by **taxes**
- **Decentralized** to regions
- **Universal coverage**
- **Free Access** but with a pharmaceutical **copayment**
- **Very wide range of publicly covered services**
- The Catalan system provides healthcare **to 7.6 million citizens**

- **Separation of provision and financing** functions (in the hands of CatSalut, the public insurer),
- **Public and private providers**: Around 80% of primary care centers and 20% of hospital beds are public.

- 369 Primary health centers; 69 acute hospitals (at most 50km away from home); 96 long-term care centers; 41 mental care centers
- Every Catalan citizen is assigned a primary care doctor (GP), who acts as gatekeeper
Catalan health care plan 2011-2015

Three Core Structural Sections and nine lines of action

- Health programmes: more health and for everyone and better life quality
- Transformation of assistance model: better quality, accessibility and security in the sanitary interventions
- Modernization of the organization model: a stronger and more sustainable sanitary model

Nine lines of action

1. Objectives and health programmes
2. More oriented system to chronic patients
3. More resolute action from levels
4. A system with more quality in high specialization
5. Greater focusing to patients and relatives
6. New model of contracting of sanitary attention
7. Introduction of professional and clinic knowledge
8. Improvement of management and participation in the system
9. Promotion of the information, transparency and evaluation

For every line of action a series of strategic projects is developed, with a total of 32 strategic projects of the Health Plan

Program of Prevention and Attention to Chronicity (PPAC)

Integrated Health and Social Plan (PIAISS)
Stratification of the population

- **Identify and label** the patients with complex chronic conditions (CCP) and palliative needs (ACD)
- Once identified, the **label** can be seen by all providers involved in all digital platforms
- **Proactive** identification, with clear targets. Initial target of the Plan: 25,000 CCPs identified by 2015. There were 150,000 CCPs identified by May 2015!
- Unique experience **combining objective (algorithm) risk adjustment models and clinical judgement**.
- It includes **clinical** as well as **social criteria**
**Shared Intervention Plan**

### Health problems
- Advance health-care directives
- Multidimensional valuation
- Primary-care team data

### Current medication
- Telecare assistance?
- Home care?

### Drug allergies
- Case management?

### Directives in case of crisis
- Lives in a residence?
- Lives alone?
- Person in charge
- Who can make decisions?
- Update date
- Additional information

### NEW SHARED INTERVENTION PLAN (PIIC)
- **Diagnostics**
- **Medication Plan**
- **Allergies**
  - Recommendations in case of **CRISIS or acute exacerbations**: dyspnea, pain, fever, behavior change
- **Advanced Care Planning**: preferences, values, therapeutic adequacy
- **Multidimensional Assessment**: functional, cognitive and social risk
- **Social Services utilization**: Home care, Home help, telecare, case management
- **Emergency admissions** and A&E visits in last 12 months
- **Living alone?**
- **Carer information**
Shared clinical records
### Local Agreements

- **Local focus** and collaboration as the key to implement best practices
- Development of Integrated care pathways (ICP)
- Local **written and formal agreements** between local leaders
- Establishes criteria and methods for interprofessional communications
- Guarantee a continuum of care (24/7) also during crisis
- Evaluation criteria

### Integrated Care Pathways and local agreements

- An ICP is a way to **organize all people** involved in the care process
- The strongest feature of the ICP is its **flexibility to adapt to the different characteristics of the territory**

### Elaboration process

- A group of experts at the national level set the conditions to target
- A second group of experts in a local level use this core key elements and then add ad hoc
- The final pathway is transmitted to CatSalut
RESULTS(I)

Avoidable hospitalization rate: Osona vs. synthetic control

Source: Mas & Maslorens (2018) “Impact on Health Outcomes from Integrating Health and Social Care”
Main take-aways of the program

• For an integration program to succeed it must **tackle many pieces at the same time**

• **4 Key enablers of success**
  – 1. stratification of the population and identification of complex chronic patients (CCP) and palliative needs -Advanced Chronic Disease (ACD)- patients
  – 2. Shared individual intervention plan (SIIP).
  – 3. Shared electronic medical record
  – 4. Local agreements for the design of local integrated care pathways (ICP)

• **Results on health improvement: on hospital readmissions and avoidable hospitalizations**
Initiatives from Madrid:

- The implementation of the Strategy of care for patients with Chronic Conditions.
- The Palliative Care.
- Case Studies: The evaluation of the implementation process and the impact in a territory
Strategy of care for patients with Chronic Conditions: The implementation

Nivel 1: 3,009,219
Nivel 2: 559,129
Nivel 3: 180,347

Total población crónica 3,748,695 (55,54 %)
ARTICULO ESPECIAL
Los grupos de morbilidad ajustados: nuevo agrupador de morbilidad poblacional de utilidad en el ámbito de la atención primaria
David Monterde, Emili Vela, Montse Clèries by grupo colaborativo GMA

ORIGINAL
Concordancia y utilidad de un sistema de estratificación para la toma de decisiones clínicas
Ana Isabel González González, Ana María Miquel Gomez
Strategic care for patients with Chronic Conditions: The implementation

Adaptation of protocols to the level of intervention

- hipertensión arterial.
- diabetes mellitus.
- hipercolesterolemia.
- obesidad. (children/adults)
- cardiopatía isquémica.
- Insuficiencia cardiaca.
- asma. (children/adults)
- EPOC.
- mayor, con fragilidad, o deterioro funcional
- demencia.
- cuidados paliativos.

PATHWAY COMPLEX PATIENTS

- SUBPROCESO 1: INCLUSIÓN, VALORACIÓN INTEGRAL Y PLAN DE ACCIÓN
- SUBPROCESO 2: SEGUIMIENTO EN LUGAR DE RESIDENCIA DEL PACIENTE CRÓNICO COMPLEJO
- SUBPROCESO 3: MANEJO DE LA DESCOMPENSAción

Marco Operativo:
Equipo director de los procesos asistenciales integrados

Marco Científico:
Evidencia científica disponible

PATHWAY COMPLEX PATIENTS

- hipertensión arterial.
- diabetes mellitus.
- hipercolesterolemia.
- obesidad. (children/adults)
- cardiopatía isquémica.
- Insuficiencia cardiaca.
- asma. (children/adults)
- EPOC.
- mayor, con fragilidad, o deterioro funcional
- demencia.
- cuidados paliativos.
Strategy of care for patients with Chronic Conditions: The implementation

**PERSONS WITH INDIVIDUAL PLANS ADAPTED TO NEEDS (PROTOCOLYZED): 1.391.810**

**COMPLEX PATIENTS WITH SPECIFIC PATHWAY: 17.939**

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<thead>
<tr>
<th>NIVELES DE RIESGO A 31-12-2017</th>
<th>3-ALTO</th>
<th>2-MEDIO</th>
<th>3-BAJO</th>
<th>0-PPS</th>
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<td>3-ALTO</td>
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<td>2-MEDIO</td>
<td>3.286</td>
<td>136.766</td>
<td>177.831</td>
<td>10.733</td>
<td>328.616</td>
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<td>1-BAJO</td>
<td>1.190</td>
<td>54.716</td>
<td>646.261</td>
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**NIVELES DE INTERVENCION A 28-2-2019**

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<th>3-BAJO</th>
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</table>
Strategy of care for patients with Chronic Conditions: The implementation

SCHOOL OF PATIENTS. SUPPORT TO CAREGIVERS

SHARED ELECTRONIC HEALTH RECORD. ACCESS TO PATIENTS
Palliative care in Madrid: Attention 7X24h

Family Nurse and physician

Home Support PC team

Mid-Stay PC Unit

SHARED CLINIC HISTORY: infoPAL

DUD

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HOSPITAL PHISICIAN

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PAL 24 (continuity)
In 2017:

- 9,000 adult patients with palliative needs were attended.
  - 7,500 were attended at home by palliative teams.
  - 3,170 were attended in hospital palliative units.
- 400 children and adolescents with palliative needs were attended.
THE CASE STUDIES

EVALUATION OF THE IMPLEMENTATION PROCESS OF AN INTEGRATED CARE PROGRAM IN MADRID REGION

ASSESSMENT OF THE IMPACT OF AN INTEGRATED CARE PROGRAM
Case Studies: The evaluation of the implementation process and the impact in a territory

20 Primary H C

PUBLIC PRIMARY CARE HEALTH SERVICES: 9 HEALTH CENTERS & 21 RURAL OFFICES

1 HOSPITAL

REY JUAN CARLOS HOSPITAL: A PUBLIC HOSPITAL MANAGED BY A PRIVATE COMPANY – THE "CONCESION"

45 Nursing Homes

45 NURSING HOMES: PUBLIC PRIVATE AND CONCESIONS

Territory advanced in the implementation of INTEGRATED pathways and tools.
Example "The integrated care story"
In the Territory

<table>
<thead>
<tr>
<th>Activities</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>Analysis/Design</td>
<td></td>
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<tr>
<td>Access to hospital record</td>
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<tr>
<td>Primary care and social-health website</td>
<td></td>
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<tr>
<td>Outpatient reports sent to PC</td>
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<tr>
<td>New Roles</td>
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<tr>
<td>Telemedicine</td>
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<tr>
<td>e-Consultation</td>
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<tr>
<td>Nursing homes Plan</td>
<td></td>
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<td></td>
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<tr>
<td>Complex Patient Pathway</td>
<td></td>
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</tr>
</tbody>
</table>

28 INTEGRATED CARE INCIATIVES:
- New Roles
- New services
- New tools
- Coordination structures
Example of IMPLEMENTATION PROCESS: The Use of New Tools

<table>
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<tr>
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<tbody>
<tr>
<td>Number of uses of the shared electronic health record by primary care professionals</td>
<td>7.226</td>
<td>122.807</td>
<td>275.791</td>
<td>334.971</td>
<td>406.819</td>
</tr>
<tr>
<td>Number of non face-to-face consultations (e-consultation)</td>
<td>0</td>
<td>0</td>
<td>22</td>
<td>1.291</td>
<td>2.974</td>
</tr>
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</table>

![Bar chart showing the increase in use of the shared electronic health record over years.](image-url)
Example of IMPLEMENTATION PROCESS: TRANSITIONAL CARE: PLANNED DISCHARGE, PHONE FOLLOW UP, NURSING HOMES HOSPITALIZATIONS

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<tbody>
<tr>
<td>Number of patients with a planned discharge and a report automatically sent to primary care.</td>
<td>6,031</td>
<td>12,647</td>
<td>14,825</td>
<td>17,941</td>
<td>19,843</td>
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<tr>
<td>Absolute numbers (% respecting the number of discharges).</td>
<td>(100)</td>
<td>(100)</td>
<td>(95.67)</td>
<td>(100)</td>
<td>(100)</td>
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<tr>
<td>Number of patients with telephone follow-up after hospital discharge (total)</td>
<td></td>
<td></td>
<td>808</td>
<td>1,547</td>
<td>1,669</td>
</tr>
<tr>
<td>Absolute numbers (% respecting the number of discharges).</td>
<td></td>
<td></td>
<td>(5.45)</td>
<td>(8.62)</td>
<td>(8.41)</td>
</tr>
<tr>
<td>Number of patients with telephone follow-up after hospital discharge to primary care.</td>
<td>0</td>
<td>0</td>
<td>426</td>
<td>532</td>
<td>958</td>
</tr>
<tr>
<td>Absolute numbers (% respecting the number of discharges).</td>
<td></td>
<td></td>
<td>(2.87)</td>
<td>(2.97)</td>
<td>(4.83)</td>
</tr>
<tr>
<td>Number of patients with telephone follow-up after hospital discharge to nursing home.</td>
<td>0</td>
<td>0</td>
<td>382</td>
<td>1015</td>
<td>611</td>
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<tr>
<td>Absolute numbers (% respecting the number of discharges).</td>
<td></td>
<td></td>
<td>(2.58)</td>
<td>(5.66)</td>
<td>(3.08)</td>
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<tr>
<td>Number of hospitalizations in the nursing homes.</td>
<td>0</td>
<td>0</td>
<td>112</td>
<td>353</td>
<td>369</td>
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</table>
Example of IMPLEMENTATION PROCESS: professional experience through the perception of participation, consensus, acceptance (Survey)

7. How do you consider the degree of acceptance by health professionals of the new roles, services and tools? 29 responses

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
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<tbody>
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<td>4</td>
<td>13</td>
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<tr>
<td>5</td>
<td>12</td>
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9. What is the usefulness of the new roles, services and tools?

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<td>4</td>
<td>10</td>
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<td>5</td>
<td>16</td>
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<td>na</td>
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FACTORS THAT INFLUENCE IN:
- FAVOR IMPLEMENTATION
- BARRIERS TO CHANGE
- PARTICIPATION
- CULTURAL TRANSFORMATION
- ACCEPTANCE BY PROFFESIONALS
- PERCEPTION OF UTILITY
Example of RESULTS: “The positive outcomes”

There is a statistically significant difference between 2012 and 2016 (Improvement) in Hypertensive control, Diabetes control, and patients with anticoagulated treatment controlled.
KEY LESSONS LEARNED: Key success elements

- A common strategic framework of integrated care as a priority
- The role of **managers leading the management change**.
- Dissemination and training activities that favor the cultural change: **“The Integration Care Story”**
- The implementation of new pathways and services
- Continuous communication through multiple ways.
- IT tools as support
- Evaluate the impact and share results
- Work in **implementation process**

- The Integrated care Map of Indicators
- The positive outcomes
CONCLUSIONS

The key success elements that could be Applicable to the US:

✓ Overall framework and learning for area-based integration continuum in Spain;
✓ Local area care pathways;
✓ Personalized care plans for complex, chronic patients;
✓ Territorial meetings and agreements/plans for integrated actions among healthcare, social care, schools;
✓ Palliative care program;
CONCLUSIONS

_The key success elements that could be Applicable to the US:_

✓ Public payment of private contractor such as Madrid from more than one source to create integration;
✓ The basic benefit package all Regional health systems must provide;
✓ Certain roles such as negotiating drug prices for all of Spain;
✓ The definition in Spain of educational requirements of professionals.
The key success elements that could be Applicable to the US:

“Leadership and aggressive Change Management are considered relevant factor for Integration Success”

1. Have a clear vision and be constant. Share the vision;
2. Share the “why,” “what for,” and the steps which will be included to develop the vision;
3. Facilitate as much consensus and participation as you can, especially from clinical leaders and interest groups
4. Evaluate outcomes honestly and share the outcomes, especially the early successes;
5. Work on cultural transformation using professional language with the professionals. Talk about evidence, people, and real cases;
6. Create an adequate structure, resources, and time for change;
7. Implement tools that facilitate changes.
Muchas gracias
ana.miquel@urjc.es