

Case Study Summary Catalonia (Spain)

Summary

The Spanish case study examined polypharmacy management in Catalonia. Two distinct models in different practice settings were identified: a government sponsored programme targeting complex chronic patients in primary care and an institutional network programme targeting older adults admitted to hospital, long-term care or nursing homes. The government sponsored model utilised a vertical approach to implementation, focusing primarily on patient safety and individual physician prescribing. The goal of this programme was to implement the programme in a standardized way throughout the entire primary care system. A major driver of this programme was the goals outlined in the Catalan Health Plan and the service contract between primary care centres and the government. In contrast, the institutional network model utilized a horizontal implementation strategy led by both clinicians and managers. The focus was on providing holistic patient-centred care via a multidisciplinary team, with polypharmacy management as one component. The goal was to create a scalable programme based on a small pilot. Key facilitators of this programme included a “culture of geriatrics” supporting the use of multidisciplinary teams and an institutional culture of innovation. These programmes illustrate how the challenges of polypharmacy can be addressed in different healthcare setting utilising different resources. Both programmes face challenges in effectively changing current practices to facilitate the full implementation and subsequent scale up.

Characteristics of the case study

Name of the programme

Government model: rational drug use

Medication management in the complex chronic patient: reconciliation, revision, de-prescribing and adherence

Institutional network model: patient-centred approach to optimizing medicines management

Locality/region and country

The case study took place in Catalonia, Spain and included two distinct regions: Barcelona Esquerra, an urban centre, and Vic, a semi-rural town in central Catalonia. Clusters of institutions in each location included a teaching hospital, long-term care and primary care centres.

Health care system overview

Health care in Spain is devolved to the autonomous communities, and each community is responsible for delivering care within the guidelines established by the central government. Spanish law outlines the basic healthcare services each citizen is entitled to, training requirements for health professionals and reimbursement schemes. Each autonomous community establishes its own delivery model and sets its own regional and local priorities. In Catalonia, health care priorities are established in the Catalan Health Plan, a strategic planning document updated every five years.

The Catalan healthcare system is divided into the public payer or insurer, CatSalut, and care providers that contract with CatSalut. Contracts are made with both primary care centres and

hospitals and the content of these contracts stems from the goals established in the Catalan Health Plan. To incentivise the uptake of new clinical practices or adherence to clinical guidelines, pay-for-performance measures are integrated into these contracts.

Each autonomous community in Spain is responsible for its own information sharing system. Catalonia has a strong network of electronic health information connecting primary care and hospitals, facilitating the sharing of patient information. Additionally, electronic prescribing is used almost universally, which allows for better tracking of medication histories.

Programme aims and objectives

The government sponsored programme targeted primary care providers in the public health system, specifically focusing on patients with complex chronic diseases. The objectives were to:

- 1) Improve patient safety and reduce drug related problems;
- 2) improve health outcomes and control of chronic disease;
- 3) improve adherence, and;
- 4) improve healthcare quality and patient quality of life.

The institutional network programme targeted older adults admitted to an acute geriatrics unit. The goal was to create a holistic patient-centred care plan including a medicines management plan that incorporated the patient's therapy goals, the evolution of the patient's condition and the patient's life expectancy with an ultimate goal of improving health outcomes and individual patient's quality of life.

Institutions included in case study

Administrative institutions

- Catalan Ministry of Health: Government body overseeing delivery and financing of health care services in Catalonia.
- CatSalut: The organisation that ensures the provision of publicly provided health services to the citizens of Catalonia.
- Catalan Institute of Health: Public provider of health services in Catalonia, providing healthcare to 83% of Catalan citizens. Services include both hospital and primary care.

Institutions in Barcelona Esquerra

- Hospital Clínic Barcelona: Tertiary teaching hospital serving as the main public provider within Barcelona Esquerra. Also participates in managing affiliated primary care centres.
- CAPSE: Primary Care Centres in Barcelona Esquerra affiliated to the Hospital Clínic.

Institution in Osona

- Vic University Hospital: Acute care hospital serving as the public provider in the rural community of Osona. Part of the Vic Hospital Consortium.
- Fundació Hospital Santa Creu (Vic, Long term care), Residencia Aura (Manlleu, Nursing Homes), Residencia Nadal (Vic, Nursing Homes). Fundació Hospital Santa Creu is affiliated to the Vic University Hospital.

Barcelona Esquerra and Osona institutions were selected because they share Pharmacy services including management and staff.

Managerial and policy highlights of the programme

Moving from importance to urgency

Although there was clear agreement that polypharmacy is an important issue to address in Catalonia, there was not a sense of urgency around the issue. Adherence received less attention with a definite lack of urgency, partially stemming from the complexity of the issue and the difficulty in measuring and monitoring adherence. Both population and institutional data sources monitoring overall pharmaceutical use, spending and the quality of prescribing were key to highlighting the importance of polypharmacy. Larger demographic issues, such as an ageing population and decrease in health spending, also spurred innovation in this area.

Creating teams and strategic vision

The vision of health in Catalonia is informed by the Catalan Health Plan, a strategic planning document updated every five years. The priorities and objectives in the Health Plan are established within the legal requirements of the central government but reflect the local health needs and resources. The Health Plan outlines targeted priorities for the rational use of medicines in primary care, with less specific recommendations for hospitals.

Within the government sponsored model, there was less evidence of guiding coalitions or teams used to implement the polypharmacy and adherence management programme. The development of the guidelines was a team-based process but implementation depended on individual practitioners who were primarily working alone.

In contrast, the institutional network model had multiples levels of guiding coalitions, including alliances between institutions, strong working relationships between heads of departments and a core group of clinician leaders working to jointly implement the programme.

Creating practice models

Both within the government sponsored model and the institutional network model, a strong information technology system, with shared patient medical records and electronic prescribing information was seen as essential to the management of polypharmacy and adherence. Re-allocation of resources was also seen as essential. This did not always mean adding new resources: in the institutional network model, resources and responsibilities were shifted within the pharmacy department, creating an opportunity to institutionalize the new practice model. In contrast, in the government sponsored model new resources were not added and the workflow was not modified to accommodate the new practice, limiting the full uptake of the policy. Culture was also cited as a major facilitating factor. In the institutional network model, a “culture of geriatrics” where clinicians were already pre-disposed to working in teams, and addressing the patient in a more holistic manner, made the introduction of multidisciplinary teams possible. Another major facilitator was the contract for primary care services. Primary care physicians were required by contract to review the medication plans of patients identified with complex chronic conditions and received a financial incentive if certain pre-set targets were met.

Building sustainability

Measuring the impact of a polypharmacy and adherence programme was cited as a challenge in both the government sponsored and the institutional network models, both at the individual patient and the population level. Although there was agreement that evaluation was important, it

was not clear that the right things were currently being measured to properly evaluate a polypharmacy and adherence programme. To date, there has been no economic evaluation of either programme.

Conclusions

Catalonia has two examples of well-developed polypharmacy and adherence programmes which provide lessons for other healthcare systems taking into account what has already happened in Catalonia and what needs to happen for the programmes to reach their full potential.

- The culture of an organization and of the particular medical specialty is important—starting in areas where a culture of multidisciplinary teamwork already exists will facilitate early success. An organizational culture of innovation also provides the foundations for a new programme.
- Any programme should be adapted to the resources at a given institution. The institutional network model was successful in part because there were highly trained clinical pharmacists already working in the hospital, so resources were shifted rather than added to start the initial pilot. The government sponsored model did not provide additional resources or re-purpose existing resources within the primary care setting.
- Catalonia has a very strong electronic health information system that is universally seen as a major facilitator to both programmes. The IT system facilitated monitoring of medicines use at the population and local level and created communication channels between individual practitioners.
- Official support of a programme, both from strategic planning documents and committees and in the form of contractual arrangements for services, lends credibility and facilitates the implementation of new programmes.
- Future evaluation efforts in Catalonia should assess the economic impact of these programmes, including harm avoided such as adverse drug events and hospitalizations. These data, which are currently lacking, are essential to the eventual scaling up of these programmes.
- Education of both clinicians and patients will also need to continue with further clarification of which clinicians are responsible for what tasks. Education needs to include both the technical aspects of conducting medication reviews as well as interpersonal skills to facilitate multidisciplinary teams and to encourage shared decision making with patients. The roles of additional providers, such as nurses and community pharmacists, should also be reviewed.