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GOOD PRACTICE BRIEF

MULTIPROFILE PRIMARY HEALTH CARE TEAMS IN CATALONIA, SPAIN: A population-based effective model of services delivery

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Motivation

Multiprofile teams provide primary health care services in Spain. This model of care was designed in the 1985 Primary Health Care Reform Act which was inspired by the principles of the WHO Declaration of Alma-Ata. Implemented and operationalized across the autonomous communities at different paces, the reform aimed to increase the responsive capacity of primary care services, ensure equal access and improve the efficiency of the entire health system by expanding the scope of services provided by new multidisciplinary teams.

In Catalonia, a new generation of family doctors – recently trained in the new medical specialty of family and community medicine established in 1978 – pioneered the reform process with the support of the Catalan Scientific Society of Family Medicine. Although the benefits of the new model outweighed its costs, completing the reform process took 22 years.

Since 1985, new primary care models have emerged capitalizing on the role of nurses and information systems, as well as improving integration with community hospitals and other health services providers.

Key components of multiprofile primary care teams

Population orientation

Primary care teams serve a basic health area, a new geographical distribution based on natural aggregates of people. These catchment areas helped to deploy the primary care reform emphasizing community orientation and holding primary care accountable to designated populations. An average basic health area covers around 20 000 people. Each citizen is automatically assigned to a primary care team with a family doctor and nurse as referent professionals. Citizen choice has evolved over time allowing patients to change their doctor and nurse at least once a year.

Multidisciplinary teams

Primary care teams consist of family doctors, paediatricians, dentists, primary care nurses, nurse aides, social workers and health administrative staff to serve collaboratively a basic health area (Box 1). Teamwork is fostered by sharing

Key Messages

- Implementing an ambitious primary health care reform took time.
- Solid scientific background and engagement in academic societies strengthened and advanced the scope of primary care.
- The social reputation of primary care services and professionals improved through continuous investment in physical and information infrastructures and campaigns.
- The multidisciplinary nature of primary care teams led to improved responsiveness and health outcomes.
- Innovations in information technologies in primary care services are the cornerstones of both clinical practice and effective governance.
- Linking contracts and pay-for-performance mechanisms to quality improvement allowed health planners and managers to directly support health policy goals.
- Community orientation and public health integration was explicitly fostered.

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care between doctors and nurses and by reserving one hour a day for team activities such as clinical, training or coordination sessions.

Box 1. A primary care team comprises:

a family doctor and nurse (1 : 2000 adults);
a paediatrician and paediatric nurse (1 : 1500 children under 14);
a dentist (1 : 15000 people);
a social worker (1 per team); and
nurse aides and health administrative staff.

Team members share roles and responsibilities, where nurses have a key role in disease prevention, health promotion and health education. In these pioneering teams, nurses are the first point of care for emergencies resolving over 70% of acute cases and are expanding the capacity provided by the new specialty in family and community nursing (1).

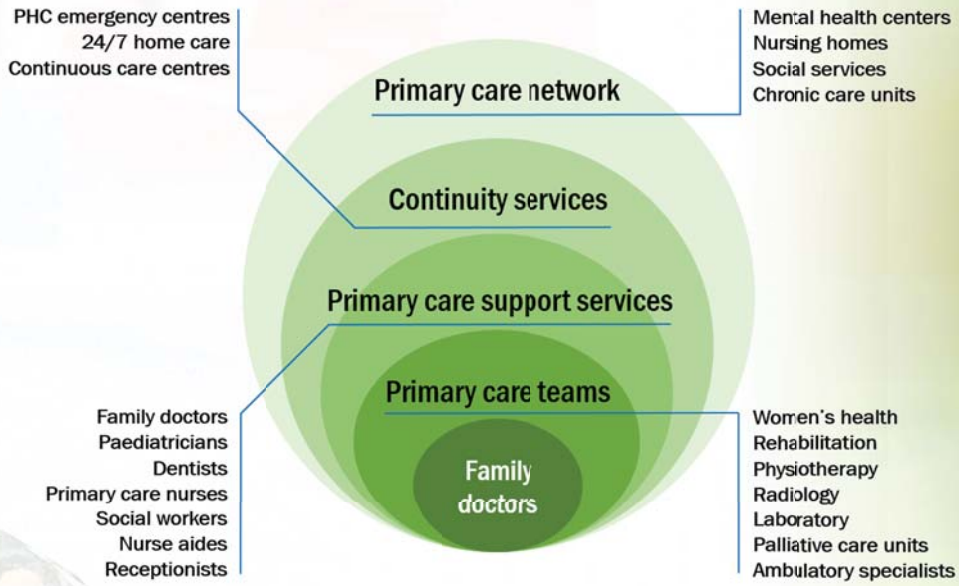
Services package

The new family medicine specialty and the role of nurses helped to expand the scope of services towards a preventative approach. Comprehensiveness and responsive capacity have significantly increased in the last decades with the adoption of techniques and technologies which once were performed only at hospital level. Services like anticoagulant treatment, echography, spirometry or skin-prick tests are now offered closer to home in primary care centres (Fig. 1).

Working conditions

Accessibility was a key driver for changing the effectiveness of primary care services delivery. With the reform, family doctors and nurses increased their hours to work full-time (36 hours a week). This adjustment allowed them to serve communities from 08:00 to 20:00 in two working shifts. A strategic shift overlap of one hour a day – from 14:00 to 15:00 – secures time to schedule team activities such as clinical, training and organizational sessions that bring team building and group cohesion. In parallel, doctors' compensation shifted from a capita-based salary to a basic salary with complements to acknowledge population characteristics like rurality or socioeconomic level. In 2003, pay for performance (P4P) based on annual goals and a four-level professional development programme were introduced in doctors' payment schemes and expanded in 2006 to the other team members. Although the P4P has recently lost incentive power (from 15% to 7.5% of annual salary), it remains a practical tool for health care managers to align clinical behaviours to the targets of regional or national health policies.

Fig. 1. Evolution of primary care services



Health services contracting

CatSalut (Catalan Health Service Commissioner) is responsible for contracting of health services and primary care teams based on per capita, which has evolved, adjusting from demographic, socioeconomic and geographic variables to a morbidity and equity index aiming to redistribute resources, reduce health inequalities and acknowledge care complexity measured with a health risk stratification tool which weighs 30% of the total per capita funding.

Health information systems

At the time of the reform, nobody was able to foresee the transformative power health information systems would bring. Since 1999, the primary care information system (ECAP) equips primary care teams to ensure the principles of

primary care: accessibility, continuity, longitudinality, quality and efficiency. ECAP allows family doctors and nurses to maintain patient records, prescribe diagnostic tests and medicines, follow clinical guidelines and communicate with patients in a secure e-consultation system. A bespoke risk stratification system (GMA) classifies patients according to risk and makes this information available to health care providers to facilitate proactive care of chronic patients (2). A business intelligence system (SISAP) built upon ECAP provides doctors and managers with information to track quality of care indicators and benchmark with peers and other territories. A Catalan e-health infrastructure complements ECAP and SISAP with an e-prescription service, a shared electronic health record (HC3) to access records from hospitals and other health care providers, and a personal health record (La Meva Salut) which allows patients to have access to their own health data and use services like e-consultation.

Evidence-based practice and quality improvement

Collaborative work between medical scientific societies and the Department of Health has contributed to develop an evidence-based clinical practice and quality improvement system based on the adoption of clinical guidelines and quality monitoring tools deployed by clinical decision support systems accessible through ECAP such as clinical recommendation reminders (3). Additionally, the Agency for Healthcare Quality and Evaluation of Catalonia (AQuAS) has developed the essential programme to improve clinical practice and reduce overdiagnosis and overtreatment, and address de-prescription. Using several quality benchmarking tools (SISAP, MSIQ, Results Central) and measures (Care and Prescription Quality Standards), which allow health managers to monitor quality improvement and incentivize individual and team performance, also promote transparency and competition based on quality and health outcomes. With the advent of chronic diseases, this structure has allowed primary care teams to identify and improve care of complex chronic patients, and deploy preventative campaigns for most prevalent conditions (diabetes, blood pressure, heart failure or asthma) and risk factors (smoking, alcohol, physical activity).

Impact of primary care multidisciplinary teams

The development of primary care multiprofile teams has progressively improved the satisfaction, quality and efficiency of primary care services in Catalonia. From 2003 to 2015, global satisfaction and fidelity scores have steadily increased with outstanding marks, respectively 7.94 out of 10 and 88.9%. However, improvements in telephone access, punctuality of visits and waiting time for diagnostic tests are needed (4). Both patients and doctors positively perceive the continuity and care coordination between primary and secondary care in terms of information transfer, consistency and accessibility to secondary care following a referral (5).

Preventive activities and an appropriate management of chronic patients foster quality of care when primary care professionals work effectively in teams. The performance of primary care services assessed by the pattern of potentially preventable admissions shows a significant decline in chronic obstructive pulmonary disease (from 24.5 to 15.5 per 10 000 person-years) and remarkable scores in diabetes mellitus as part of a continuous quality improvement programme (6,7).

In terms of efficiency, primary health care costs have remained stable accounting for approximately 15% of the total health expenditure while process and outcome indicators have improved due to quality monitoring tools and payment-by-results. In the last 10 years, this linkage has also contributed to control prescription costs while the quality of prescription has not declined.

Next steps

In 2017, the National Strategy for Primary Health Care and Community Health (ENAPISC) was launched driving primary care towards higher community orientation, person-centredness and care integration, and aligning efforts with other health and social policies (emergencies, chronic care and social services). To achieve the strategy goals, the main levers are the configuration of a new local governance structure responsible for clinical commissioning, a reformulation of the contracting model, the establishment of primary care networks and the expansion of multidisciplinary teams with better links to social services. Enlarging the service basket, improving care processes with quality assurance, scaling-up e-health services (e-consultation and personal health record) and empowering patients with shared decision-making aids will strengthen primary health care services.

Lessons learned

- **Implementing an ambitious primary health care reform can be a long and arduous process.** Completing the implementation of the reform in Catalonia took 22 years of continuous effort, requiring sustained social and political consensus.
- **A solid scientific background developed in the family and community medicine specialty** and the supportive role of scientific societies have fostered family doctors' practices and have advanced the scope of primary care. The new family and community nursing specialty and its respective scientific society are expected to have a similar effect in the coming years.
- **The social reputation of primary care services, family doctors and nurses** have positively evolved thanks to a continuous investment in physical and information infrastructures, as well as health campaigns based on primary care.
- **The multidisciplinary nature of primary care teams has led to improved responsiveness and health outcomes.** Family doctors have benefited from the contribution of primary care nurses to increase the accessibility, comprehensiveness, continuity and coordination of services. An increased focus on other team members like social workers is meant to improve care to patients with chronic conditions and social needs.
- **Innovations in information technologies in primary care services are the cornerstone for both clinical practices and health services governance.** ECAP, the Primary Care Electronic Health Record, has become the information backbone to population health management, continuity and coordination of care, as well as the source of a colossal health database for primary care research. New e-health services such as e-consultation and personal health records are expected to transform the model of care and substantially increase accessibility and patient empowerment.
- **Linking contracts and pay for performance schemes to quality improvement allow health planners and managers to effectively implement health policy goals.** Behaviours of organizations, teams and individuals are aligned towards common goals which are easy to measure, monitor and act upon through existing information systems. An emphasis on quality rather than activity or savings have boosted health professional involvement.
- A region-wide community health initiative (ComSalut) and an intersectoral public health plan (PINSAP), which actively involve primary care teams jointly with ENAPISC, have renewed the **focus on community orientation and public health integration.**

References

1. Brugués AB, Grao AP, Rodríguez FP, Viladomat EM, Ferret JG, Mateo GF (2016). Evaluation of Nurse Demand Management in Primary Care. Aten Primaria. 48(3):159–65.
2. Monterde D, Vela E, Clèries M (2016). Adjusted morbidity groups: A new multiple morbidity measurement of use in Primary Care. Aten Primaria. 48(10):674–82.
3. Boo LM, Coma E, Medina M, Hermosilla E, Iglesias M, Olmos C et al. (2016). Effectiveness of computerized point-of-care reminders on adherence with multiple clinical recommendations by primary health care providers: protocol for a cluster-randomized controlled trial. Springerplus. 5(1):1505.
4. Waibel S, Vargas I, Aller MB, Coderch J, Farré J, Vázquez ML. (2016). Continuity of clinical management and information across care levels: perceptions of users of different healthcare areas in the Catalan national health system. BMC Health Serv Res. 16(1):466.
5. Aller MB, Vargas I, Coderch J, Calero S, Cots F, Abizanda M Vázquez-Navarrete M et al. (2017). Doctors' opinions on clinical coordination between primary and secondary care in the Catalan healthcare system. Gac Sanit. pii:S0213-9111(17)30167-X [Epub ahead of print].
6. Librero J, Ibañez-Beroiz B, Peiró S, Ridao-López M, Rodríguez-Bernal CL, Gómez-Romero FJ, Bernal-Delgado, E. (2016). Trends and area variations in potentially preventable admissions for COPD in Spain (2002–2013): a significant decline and convergence between areas. BMC Health Serv Res. 16(1):367.
7. Mata-Cases M, Roura-Olmeda P, Berengué-Iglesias M, Birulés-Pons M, Mundet-Tuduri X, Franch-Nadal JA et al. (2012). Fifteen years of continuous improvement of quality care of type 2 diabetes mellitus in primary care in Catalonia, Spain. Int J Clin Pract. 66(3):289–98.

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