Chapter 2

Primary and community care in Italy

The Italian health care system delivers high quality of primary care services as demonstrated by rates of avoidable hospitalisation that are amongst the lowest in the OECD. Italy faces, however, a growing ageing population and a rising burden of chronic conditions, which are likely to result in higher health care costs and place further pressures on the primary care sector.

Whilst the management of chronic conditions requires a co-ordinated patient-centered response from a wide range of health professionals, the Italian health care system has traditionally been characterised by a high level of fragmentation and a lack of care co-ordination. Italy has made considerable efforts to experiment with new models of community care services that aim at achieving greater co-ordination and integration of care. Although the expansion of community care services is an appropriate policy response to meet the growing demand for health care, they are still unevenly distributed across Italian regions and autonomous provinces. Greater guidance and support from national authorities is needed to ensure a more consistent approach.

At the same time, there are other shortcomings in Italy's primary care sector that require attention to guarantee high-quality primary care. Efforts are needed to increase transparency, develop performance measurement and strengthen accountability in the sector. The development of a set of standards around the processes and outcomes of primary care, the setting-up of smarter payment systems and an increase in the involvement of primary care physicians in preventive activities are options that Italy should consider pursuing if it is to meet the challenge of an increasing burden of long-term conditions.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

2.1. Introduction

Italy, similarly to many other OECD countries, faces a demographic shift with a growing ageing population. The share of the population aged over 65 years in 2011 was the third highest among the OECD countries and it is expected to rise almost two-fold by 2050. The ageing population inevitably implies an increased prevalence of chronic illnesses and long-term conditions. Italy reports, for example, one of the highest dementia prevalence rates among the population aged 60 and over. Indicators of healthy life years and daily activities limitation at age 65 are also worst in Italy than OECD averages (OECD, 2013a). These, combined with a growing prevalence of obesity among children, is likely to increase health care costs and place pressures on the primary care sector to deliver complex care outside the hospital in order to improve the efficiency of care.

Whilst the management of chronic conditions requires a co-ordinated patient-centered and community-based response from a wide range of health professionals, the Italian health care system has traditionally been characterised by a high level of fragmentation and lack of care co-ordination. Over the past decade, Italy has begun reorganising its primary care sector by experimenting with new models of service delivery that aim to create more comprehensive, safe and effective pathways of care. Primary care services and specialised health services have linked together to create integrated networks of community care. A lack of guidance and the absence of a national leadership however, have resulted in low and uneven diffusion of such initiatives across the country.

At the same time, the Italian authorities should consider enhancing quality initiatives in the primary care sector that are still lacking to nurture a quality improvement culture. Tools to increase transparency, performance measurement and accountability of primary care providers are all needed, as well as setting-up smarter payment system and to increase the involvement of primary care physicians in secondary prevention and care co-ordination.

This chapter examines the provision of primary care in Italy. It starts with an overview of the Italian primary care system and then points to its performance in examining some indicators of primary care quality across OECD countries. Section 2.4 discusses the challenges the Italian primary care service needs to tackle and how it can be further developed to guarantee high quality of primary care services. The chapter concludes with some key suggestions to secure high quality of primary care services and guarantee the effective management of chronic diseases.

2.2. The provision of primary care in Italy

The Italian primary care system represents the first point of contact between citizens, families and communities and local health services. Primary care physicians (PCPs) are asked to provide first-contact care to a range of population health needs that are increasingly characterised by multiple chronic diseases, disabilities and risk behaviours. Following the rapid economic, social and cultural changes occurred over recent decades, primary care has taken on an increasingly important role within the Italian health care system. It is seen as a central specialty that offers holistic, integrated care centered on the patient and the process of care, rather than on the disease. In order to harmonise the approach to primary care across the country, and maximise its potential to manage demand for specialist health care, recent reforms have sought to encourage group practice and develop local networks across primary and secondary care.

Health districts are responsible for primary care, and primary care physicians are paid according to a mix of capitation and fee-for-services

Regional governments, through the regional health departments, are responsible for ensuring the delivery of a benefits package through a network of population-based health management organisations (Local Health Authorities – ASLs). As further described in Chapter 1, ASLs provide care directly through their own facilities or through services supplied by independent hospital trusts, research hospitals and accredited private providers (acute and rehabilitation hospitals, diagnostic laboratories, nursing homes, outpatient specialists). For patients, primary care is provided free of charge by general practitioners (GPs) and paediatricians, self-employed and independent physicians working under a government contract.

Health districts are geographical subunits of ASLs responsible for co-ordinating and providing primary care, non-hospital based specialist medicine and residential or semi-residential care to their assigned populations. As defined, health districts represent the ideal setting for the integration between health services and between health and social services (Accordi Collettivi Nazionali, 2009). The district network has become the organisational solution for the management of chronic diseases and disabilities. According to the recent investigation conducted by AGENAS, there were 711 districts in 2009, although the number of districts in each ASL depends on its size and on other geographical and demographic characteristics. GPs and paediatricians play a central role in this organisational framework. Through integrated care, GPs and paediatricians determine new models of primary care that will allow responding to the citizens' needs 24 hours a day, 7 days a week.

Primary care physicians are involved in delivering various primary care services including preventive care activities, diagnosis and treatment, community health care services (such as nursing, rehabilitation and day care), follow-up of chronic conditions and may also provide home care assistance (Ministry of Health, 2011; Lo Scalzo et al., 2009). As part of the primary care sector, there are also emergency GPs (*Guardia Medica*) operating during out-of-hour, who can make in home examination. Patients can self-refer to emergency GPs in case of an urgent health need. This service is free of charge for users.

PCPs work under a government contract as independent professionals. A collective agreement is signed every three years by consultation between the central government and the GP's trade unions to specify the duties, responsibilities and payment levels of PCPs. The number of patients primary care physicians can have on their list is also determined by the collective agreement. The collective agreement might be integrated by regional agreements accordingly to local policy for improving specifically primary health care targets. Currently, full-time GPs and paediatricians can register up to 1 500 and 800 patients on their list respectively. These numbers are reduced to 500 and 400 patients for part-time GPs and paediatricians. In 2009, each GP had on average 1 134 patients and each paediatrician 857 patients on their list (Moscarola, 2013). Evidence shows that the average number of patients between 2001 and 2009 has increased by 3.4% and 9.4% for GPs and paediatricians respectively, reflecting higher medical needs and a growing demand for primary care services (Moscarola, 2013).

Primary care physicians are paid through a mixed system comprising both capitation and fee-for-services sums (Lo Scalzo et al., 2009). Both components are negotiated during the collective agreement and are applied uniformly across the country. In 2009, the per capita sums for GPs was fixed to EUR 40.05 (Moscarola, 2013), this amount being then adjusted according to the age of patients, the number of patients on PCPs' patient list and on years elapsed since graduation. The fixed payment is further dependent to the condition of working in group practices and from the hiring of nurses and the use of additional administrative and IT staff. PCPs might receive additional allowances from the Local Health Authorities if the latters are engaged in the delivery of planned care for patients with chronic conditions receiving care at home. The capitation payment is further adjusted if PCPs are working exclusively in the NHS and for those working in group practices. Specific medical interventions or treatments aimed at cost-containment or more efficient use of health resources such as minor surgery, preventive activities, therapies and post-surgery follow-up are covered in fee-for-services sums (Bruni et al., 2009).

Primary care physicians act as gatekeepers to secondary care

GPs and paediatricians should act as "gatekeepers" and co-ordinators for the Italian SSN. They are expected to assess patients' needs and to deliver primary care services including the prescription of pharmaceuticals, ordering medical procedures and referring patients to specialist or hospitals if medically necessary (Lo Scalzo et al., 2009). PCPs are the first line provider of care and only patients who had a referral from a PCP can receive specialist, outpatient or inpatient hospital care. Self-referrals are only allowed for specialist psychiatric services, services for dental care and gynaecological services. This gatekeeping and co-ordination system means that PCPs manage the interface with the most expensive levels of health-care and they connect and create the needed interaction with them.

Citizens residing in each health district must by law enrol with a named GP or a paediatrician. There is no constraint for residents, they can choose any physician they prefer supposing that PCPs have not closed their list in reaching the maximum number of patients allowed. Once a resident chooses a PCP, he is allowed to change at any time if the former is not satisfied. Registered patients have free access to their PCPs, as well as access to other specialist services in ambulatory care or in hospital departments after approval by their GPs through the central booking point (*Centro Unico di prenotazione* – CUP) or directly in the public/authorised place where the patient intends to receive specialist service. Specialist service generally implies co-payment on diagnostic, therapeutic procedure and specialist care but for the exemptions for pathology and income.

In 2012, there were around 0.76 GPs per 100 000 inhabitants and 0.91 paediatricians per 100 000 children aged between 0 and 14 years old (OECD, 2013a). At the same time, the number of GPs or paediatricians per 100 000 residents did not vary significantly across Italian R&AP, although figures for PCPs are higher in the South of Italy and the Islands. In the South for example, there is 0.80 GPs per 100 000 inhabitants while in the north of the countries there are 0.72 GPs per 100 000 inhabitants. The density of GPs is even higher in the central regions with 0.83 GPs per 100 000 inhabitants (ISTAT, 2012).

According to the 2010 CENSIS survey conducted on the general population, patient satisfaction with Italian GPs is high (CENSIS, 2010). Users place great confidence on the GPs, who are considered as the cornerstone of the Italian health care system to ensure continuity of care.

General practitioners follow a formalised training programme

To become a GP requires to first completing a degree of five years in Medicine and Surgery in a public or private medical university. A three-month practical training must be undergone during the programme including a one month training in a medical department at hospital, a surgical department at hospital and in a general practitioner's office. This means that all Italian medical students are exposed to general practice as part of their training. As further explained in Chapters 1 and 3, a public examination must be completed to be registered as physician and to be allowed to practice. A final degree of three years is required to achieve the speciality of general practice.

In Italy, there is an imbalance in the physician workforce between generalists and specialists. GPs only made up 23% of all physicians which is below the OECD average of 30%. Discussion with key stakeholders in Italy and recent studies (Moscarola, 2013; Carelli, 2010; Greene, 2012) point to major challenges related to the GP workforce. There are concerns about the number of GPs approaching retirement, which will make difficult for Italian authorities to maintain overall levels of primary care provision.

Whilst the demand for GP services is expected to increase given the ageing population and the rising burden of chronic conditions; it is likely that there will be more GPs leaving the profession than new inflows of GPs. According to current projections, there will be a potential lack of primary care physicians by 2020 of between 5 402 and 10 338 GPs and this gap is expected to even increase by 2025 (Moscarola, 2013). At the same time, it seems that GP training is becoming less attractive than other medical specialities (Greene, 2012). One possible explanation is that following GP education programme, newly qualified doctors might work during more than ten years as a locum, or as a substitute doctor before achieving a fixed post (Greene, 2012).

2.3. Recent initiatives to strengthen primary and community care

Over the past decade, Italy has begun reorganising its primary care sector by experimenting with new models of service delivery that aim to create more comprehensive, safe and effective pathways of care. The Balduzzi Law (No. 189/2012) has sought to encourage group practice and to develop community care services to improve co-ordinated and integrated care at community level.

Recent reform has sought to encourage group practice

Italian R&AP regulate the organisation of health districts to ensure that primary care setting implies care co-ordination and to achieve greater integration between health and social care. To this end, the Italian government has recently introduced different associative forms of primary care practitioners. The Law 189/2012 has been an important step to foster continuity and integration of care, as well as to further develop chronic disease management programmes in Italian R&AP.

National Collective Agreements regulate relationships with GPs and pediatricians, identifying the modality of work. At present, associative forms are a key instrument to reach targets of health protection, quality improvement and appropriateness of care. Collective agreements (Accordi Collettivi Nazionali, 2009) specify an "additional compensation" for the "voluntary adhesion" to a range of associative forms and the adoption of technological equipment such as a network connection. Associative forms outlined by the National Collective Agreement include: the "*Medicina in associazione*", the "*Medicina in rete*", and the "*Medicina di gruppo*".

- *Medicina in associazione* is an organisational structure gathering between three and ten PCPs who are working from their own office. Although associates do not operate in the same office, they share clinical experience, participate on common project, and work jointly to develop guidelines. An additional EUR 2.58 is allocated to PCPs for each patient registered on their list.

- *Medicina in rete* has the same structure of *Medicina in associazione*, but PCPs further need to share a *common* patient electronic health record. An additional EUR 4.7 is allocated to GPs for each patient registered on their list.

- *Medicina di gruppo* is the most extensive organisational structure for PCPs. It consists of between three and eight PCPs sharing the same office and a common patient electronic health record. Associate can deliver care to patient entitled in their associate's list. PCPs working in this type of group practice *receive* an additional EUR 7.0 for each patient registered on their list. At the same time, economic incentives are given to these PCPs to encourage them employing support or medical staffs such as secretary, physician's assistant or nurse. In this case, they can receive additional sums ranging from EUR 3.50 to 4.00 per patient registered in their list. Finally, the use of advanced IT services or computer systems implemented by the region entitles PCPs to receive an additional payment of EUR 77.47 per month.

Although supply side incentives encourage PCPs to work in group practice, there is no pay-for-performance component in the current payment structure that is negotiated centrally. Quality discussion did not appear to be a significant part of trade-unions negotiations over the GP contracts at national level. R&AP have a large degree of autonomy in defining additional payment for PCPs. Each region may introduce economic incentives to complement the national current payment structure. These economic incentives can relate to performance, appropriateness of care or the adoption of patient referral.

Recent years have also seen the development of community care networks and of community hospitals

As in many other OECD countries, a key priority in Italy is to achieve better co-ordination of services across the continuum of care to improve quality and curb health care costs. This is critical given the ageing population and the growing burden of chronic diseases which require a patient-centered response from a wide range of health professionals (Naylor et al., 2013; Hofmarcher et al., 2007). In Italy, there have been concerns about the lack of co-ordination, continuity of care, and about fragmentation of health care services (Lattanzio et al., 2010). As a result, the past few years have seen efforts to reorganise its primary care sector and experiment new models of community care services in order to create more comprehensive pathway of care and meet the needs of patients having complex chronic conditions.

The recent health planning legislation (Balduzzi Law No. 189/2012 and the *Patto per la Salute 2014-2016*) provides instruments for the organisation of community care services according to operational forms that include single profession organisation, also known as *Aggregazioni Funzionali Territoriali* (AFT) and *Unità Complesse di Cure Primarie* (UCCP). While the former is defined as a group of PCPs which are functionally integrated in a homogeneous territory to share health objectives, UCCP is identified as the community health care facility set-up within the AFT and made of PCPs, nurses, specialists, administrators and other social workers. The Balduzzi Law No. 189/2012 settled the contents of PCPs' Collective Agreement for the establishment of AFTs and UCCPs.

The overarching aim of the reform is to identify organisational models based on professional integration that involves direct participation of patients and families. The reform modifies the role of hospitals – now more specialised and technologically equipped for acute care – while strengthening the role of primary and community care as an interface between the population and the health care system. Taking impulse from

national regulations, R&AP have implemented targeted plans for restructuring the primary care sector through the setting-up of organisational models capable of providing integrated care.

Specifically, the legislation involves the establishment of community care networks open 24 hours a day, that are able to operate in a co-ordinated way with a direct connection with hospitals. The development of community care services is expected to reduce unnecessary hospital admission and to prevent inappropriate visit to emergency services, to promote healthy behaviour and improve patient's quality of life, in particular for those affected by chronic conditions.

The reference model for such a new concept of health care provision is the Chronic Care Model (CCM). CCM is considered as the key instrument to efficiently manage chronic diseases, while improving the value of primary prevention. Proactive medicine known as *Sanità di Iniziativa* is what is developing in Italy, an organisational approach focusing on health needs prior to the occurrence of the disease, using targeted planning to organise a concerted response to the provision of care, to manage and slow the progression of the disease in a proactive medical approach. Within this framework, PCPs are required to meet the needs of local communities, to promote health and prevent disease.

Multi-professional community care networks which are implemented across the country include:

- *Casa della Salute* (CdS) constitutes an organisational and structural solution aimed at fostering unified and integrated *social* and health care services. CdS might act as a reference point for citizens through a concerted response to health needs.
- *Unità Territoriali di Assistenza Primaria* (UTAP) represents community care structures at high multidisciplinary and inter-professional integration.
- *Unità Complesse di Cure Primarie* (UCCP) is a community care network aims at efficiently manage chronic conditions through multidisciplinary care teams, personalised care plans or *chronic* care models.

These regional models of community care networks imply effective communication between professionals, decreasing hospital use and health expenditure (Shaw and Meads, 2012). Compared to traditional model of primary care, community care networks are better involved in care co-ordination, they entail more effective prevention and suppose a lower use of technical resources (Calvaruso and Frisance, 2012; Carbone et al., 2012; Compagni et al., 2010). Another critical feature of community care

networks is that they are developed alongside the other parts of the health care system, with a high level of integration between different levels of care (see Box 2.1 for Toscana and Emilia Romagna).

Box 2.1. Example of community care networks

The Nuclei of Primary Care and Casa della Salute in Emilia Romagna

Emilia Romagna had a long tradition of redefining its primary care services since the process started as part of the 1999-2001 Regional Health Plan. In 2011, there were 38 Health Districts and 2 146 Nuclei of Primary Care (NCP) consisting of an organisational model of primary care operating in geographical areas with homogeneous characteristics. NCPs are the core of *Casa della Salute* (CdS), the frontline access to regional health care services and they are responsible for the public health planning and the management of the community care facilities. From 2011, there were 124 CdS forecasts, of which 50 CdS functioning and providing care at the community level, delivering minor emergency care, managing chronic diseases and offering diagnostic services (Calvaruso and Frisance, 2012; Donati, 2013; Servicio Sanitario Regionale Emilia-Romagna, 2011; Maio et al., 2012; Carbone et al., 2012).

The CdS is an integrated network of health care services in the same geographical location which bring into relation PCPs, specialist, nurses, hospitals and other social workers. It is based on vertical integration from primary care to secondary care and constitutes a point of reference for citizens to be steered through the health care system. CdS provides a single point of access to citizens, ensures continuity of care 24 hours a day, co-ordinates health services and develops prevention programmes. GPs participation is made mandatory since the 2011 Regional Agreement. The 2011 Agreement also states that a care co-ordinator must be established in each NCP to play a critical role in the clinical governance of care pathways.

Most importantly, *Percorso Diagnostico Terapeutico Assistenziali* (PDTA) has been developed in the Emilia Romagna region. PDTA are Path Diagnostic Therapeutic Care for the management of the most common chronic diseases such as diabetes, COPD, congestive and chronic renal failure. PDTA consists of new models of care that imply sharing guidelines for the management of chronic conditions, the development of educational programme and the establishment of programmes for active monitoring of chronic conditions such as follow-up telephone, outpatient counselling, teleconsultation and service of integrated home care. The care co-ordinator is a GP, and a nurse can be defined as a care-manager to guarantee continuity of care. Care co-ordinator has to share with local professionals and hospitals all relevant clinical information through the SOLE health network (*Sanità On Line*). In 2011, nearly 98% of PCPs are connected to other health and social professionals through the SOLE network, which enable to share patient electronic health records across different health care settings (Servizio Sanitario Regionale Emilia-Romagna, 2011).

As demonstrated by Shaw and Meads (2012), the setting up of CdS in the region of Emilia Romagna have resulted in a decrease in specialised health care cost and thereby provides tangible results to shift health resource away from hospital care.

Box 2.1. Example of community care networks *(cont.)*

Casa della Salute in Toscana

The region of Toscana experimented CdS following the 2002-2004 Regional Health Plan and the 2002-2004 Integrated Health Plan (Calvaruso and Frisance, 2012). The region had turned away resources from the hospital network to invest in the establishment of CdS. It is important to note that Toscana received EUR 43 million from the central government to develop these 16 community care networks (Calvaruso and Frisance, 2012; AGENAS, 2013; Carbone et al., 2012).

CdS in Toscana constitutes the single point of access to visit health care services. Care co-ordination and integration are achieved through the application of care protocols for different chronic diseases, and due to the use of clinical guidelines that are established at the regional level. The collaborative work between GPs, nurses and others health or social workers is facilitated by the use of electronic medical records to share information about patients' chronic diseases, to plan health interventions and organise therapeutic patient programme. A great emphasis is given to home care, primary and secondary prevention programmes and to patient participation.

To guarantee care co-ordination and to ensure the continuity of care across clinical settings, Chronic Care Models (CCM) have been implemented since 2008 to increase proactive health care intervention for patient with complex chronic health problems. A clinical team is defined within the CCM with 5 to 15 GPs, one nurse, and one health worker. Although GPs participation to CCM is voluntary in Toscana, they have a central role in acting as a care co-ordinator and as a supervisor. GPs are responsible for co-ordinating health interventions and have a determinant role in clinical governance by providing guidance to the clinical team towards desired objectives, by carrying out evaluation and audits and by ensuring that all GPs undertake mandatory training programme. Nurses play an important role in being responsible for counselling, self-management support and performing clinical measurement or diagnostic tests.

The development of CPCCs in Toscana has been a great success. In Empoli for example, its establishment has resulted in a reduction of hospitals referrals and inpatient admissions. The shift from secondary care to primary care accounted for cost savings of 6% and 22% in 2008 and 2009 respectively (Shaw and Meads, 2012).

Furthermore, "Ospedale di Comunità" and "Ospedale di Distretto" are community or country hospitals developed to provide intermediate care for patients discharged earlier from hospital or at risk of being admitted and frequently readmitted to hospital because of chronic conditions. These community hospitals imply nursing management and the involvement of self-employed physicians and GPs. Given the current efforts to shift care from the hospital sector and towards primary care settings, these intermediate care facilities provide a range of services for bridging acute, primary and social care (see Box 2.2 for Campania, Lombardy, Pugliaand Veneto).

Overall, the objectives are to reduce the length of hospital stays, prevent hospital admissions and readmissions, improve transitions from

hospital to community and primary care settings, and to retain patient's independence as long as possible (Plochg, 2005).

The setting-up of community care networks and community hospitals constitutes an adequate response to anticipate the rising burden of long term conditions and of chronic morbidities. Given that a core focus of the *Patto per la Salute 2014-2016* is shifting care away from hospitals and into primary and community care, the Italian Government should consider playing a more prescriptive role to strengthen and expand these community care services throughout the country (see Section 2.5).

Box 2.2. Description of community hospitals and intermediate care facilities

Community or county hospitals ("*Ospedale di Comunità"* or "*Ospedale di Distretto"*), as well as intermediate care facilities (such as "*Strutture di ricovero intermedie"*) have been developed in several R&AP including for example – Campania, Lombardia, Puglia and Veneto. These structures provide integrated care for patients with intermediate needs for institutionalised care. Patients discharged earlier from hospitals or at risk of being admitted and frequently readmitted to hospital are potential users of these alternatives sites of care. The intention of establishing community hospitals or intermediate care facilities is to improve patient's experience of care and to promote a more efficient use of acute care by shortening or avoiding inappropriate hospital stays. Such community hospitals preserve the independence of patient and keep them closer to their homes. Nurses play a role of case-manager and multi-disciplinary interventions are implemented.

In Campania, "*Ospedale di Comunità*" and "*Ospedale di Distretto*" have been established as part of the Regional Health Plan for 2011-13. These community hospitals provide intermediate care between home care services and acute hospital services. "*Ospedale di Comunità*" and "*Ospedale di Distretto*" are specifically set-up for elderly patients with complex chronic conditions or patients discharged from hospital in need for rehabilitative care and clinical surveillance. Lengths of stays are expected to be rather short, between 15 and 30 days.

In Lombardia, community facilities set-up to provide intermediate care range from "*La rete dei servizi socio sanitari e territoriali*", "*La integrazione tra ospedale e territorio*", or "*Le structure di degenza sub-acute/post-acuta*". These interventions have been shown to improve care continuity between different levels of care and to provide more efficient management of chronic disease.

Similar facilities such as "*l'Ospedale di Comunità*", "*la Strutture Sanitarie Territoriali*", "*la Strutura Complessa Cure Primarie e Intermedie*" or "*la Strutture sanitarie territoriali*" are also present in the region of Puglia. These facilities or community care networks have been set-up close to or on same premises as hospitals. The objective is to create more comprehensive, safe and effective pathways of care for frail patients having long-term conditions. It fosters continuity and integration of care between health and social care.

In Veneto, "*Strutture di ricovero intermedie*" and "*l'Ospedale di comunità*" are specifically developed to provide rehabilitative care for patients for whom it is hoped hospitalisation could be avoided but who are too sick to remain in their homes.

Source: Information provided by the Italian authorities.

The Italian Society for General Medicine aims to promote quality in primary care

The scientific society for primary care (*Società Italiana di Medicina Generale* – SIMG) was founded in 1982 as a research unit. The Scientific society has set up an extensive number of initiatives to underpin continuous quality improvement in the primary care sector. However, participation in this professional organisation is voluntary, and covers only 15% of Italian GPs.

The overarching aim of the scientific society is to promote the role of GPs within the Italian NHS. To this end, the society organises conferences, develops vocational and undergraduate training. The Society is also involved in national researches on drug safety and drug utilisation including for example improvement in antibiotics prescription. A research centre, called Health Search Network, has been specially set up to organise training, share clinical and organisational standards. The Centre has also developed a database where GPs might collect patients' information. This constitutes a key outcome measurement system to monitor and provide feedback for health providers. At the same time, SIMG publishes a regular journal (*Medicina Generale*) and further disseminates clinical guidelines and patient pathway by looking at international literature across several area of practice including for example long-term conditions, multi-chronic pathology and new or specific drugs. It works in collaboration with national research centres, central government and with international universities.

Although SIMG conducts impressive initiatives to steer improvement in quality of care in general practice, it appears difficult to move towards a quality-based approach at system-level since 85% of GPs are not currently involved in the professional organisation. A wider participation to the professional organisation should be considered by PCPs and Italian authorities might also look upon existing initiatives for nurturing a quality improvement culture in the primary and community care setting.

2.4. Outcomes associated with primary care in Italy

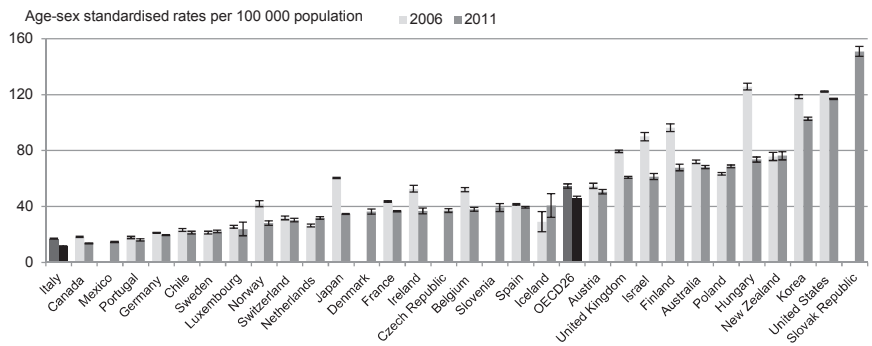
Some indirect measures, such as avoidable hospitalisation for chronic conditions, suggest good quality primary care in Italy. There are however large variations across R&AP and data from prescribing and screening in the primary care sector are a cause of concern. This suggests that primary and community care networks may not be ready to cope with the increasing demand for health care that will arise from the ageing population and the growing burden of chronic conditions.

Avoidable hospitalisations for chronic conditions indicate good quality primary care, but there are large variations across Italian regions

In line with the good overall health status of the Italian population outlined in Chapter 1, Italy performs well on some Health Care Quality Indicators submitted for the OECD project. Hospitalisations for chronic conditions, also known as avoidable hospitalisations, are used as an indirect indicator of the overall effectiveness of primary health care. There is growing evidence that proactive management of some chronic conditions may prevent or reduce the need for acute hospital admissions (Purdy et al., 2009). Effective treatment for asthma, chronic obstructive pulmonary disease (COPD) and diabetes should be increasingly managed in primary care settings to avoid acute deterioration and also to prevent their admission to hospital. A high performing primary care sector not only is cost-saving but also preferable to the patient in avoiding hospital admission.

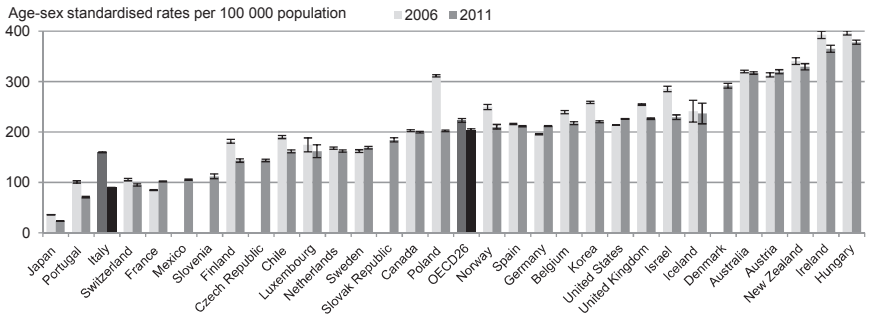
As shown by Figure 2.1, Italy reports one of the third lowest rates for COPD hospital admission rates, behind the Japan and Portugal standardised rates. In 2011, the Italian COPD hospital admission rates at 90 per 100 000 population are well below the OECD average of 203 (OECD, 2013a). In a similar vein, Italy reports the lowest rates for both asthma and diabetes hospital admission among the OECD countries (see Figures 2.2 and 2.3). Most importantly, for each of the three conditions Italy reports a reduction in avoidable admission over recent year, representing either improvement in the quality of the Italian primary care sector or a variation in the prevalence of chronic conditions over time.

Figure 2.1. COPD hospital admission in adults, 2006 and 2011 (or nearest year)



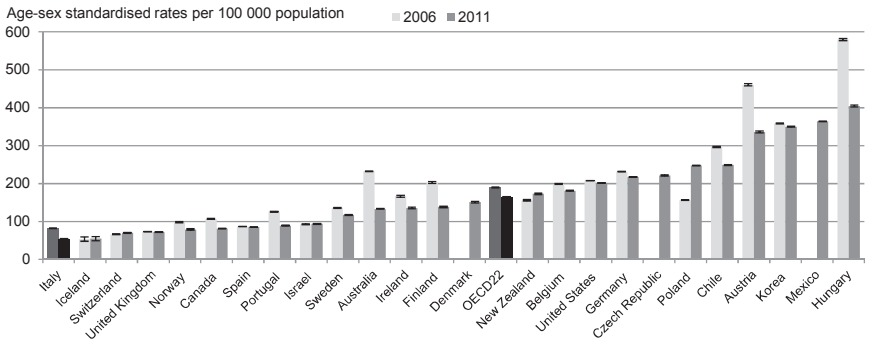
Source: *OECD Health Statistics 2013*, http://dx.doi.org/10.1787/health-data-en.

Figure 2.2. Asthma hospital admission in adults, 2006 and 2011 (or nearest year)



Source: *OECD Health Statistics 2013*, http://dx.doi.org/10.1787/health-data-en.

Figure 2.3. Diabetes hospital admission in adults, 2006 and 2011 (or nearest year)



Source: *OECD Health Statistics 2013*, http://dx.doi.org/10.1787/health-data-en.

Whilst the primary care sector in Italy performs well on average, there are significant differences across R&AP. Empirical evidence suggests, after adjustment for demographic factors, a North-South gradient where Southern regions show higher hospitalisation rates for chronic conditions[1] (see Figure 2.4) (Rosano et al., 2013; Rosano et al. 2011). The higher risk of avoidable hospitalisation for chronic diseases in Southern regions compared to Northern regions might be explained by several factors including health-care resources (such as the availability of health professionals and hospital beds), individuals' socio-economic conditions and the epidemiology of the diseases. Regarding the latter, one should note that southern regions are found to have the highest prevalence of some chronic conditions such as diabetes and hypertension (Istituto Superiore di Sanità, 2012).

Figure 2.4. Average hospitalisation rates for chronic conditions among adult population along the years, 2001-08 (rates per 100 000 persons)

Source: Rosano, A. et al. (2013), "Preventable Hospitalization and the Role of Primary Care: A Comparison Between Italy and Germany", *Journal of Public Health*, Vol. 21, pp 445-454.

Other quality indicators show a mixed picture while further challenges place pressure on primary and community care in Italy

Beyond avoidable hospitalisation for chronic conditions, information on prescribing in primary care sector is a further indicator enabling to get a more comprehensive picture of quality in the primary care sector. The data collected by OECD regarding the volumes of antibiotics prescribed in primary care show that Italy reports one of the highest volumes, around 1.5 times the OECD average. This high volume of prescribed antibiotics might be related to the general lack of guidelines and incentives that primary care providers are exposed to (Akkerman et al., 2005; Koller et al., 2013).

In a similar vein, screening rates which are a core primary care activity in order to prevent and early diagnosed disease also need improvement in

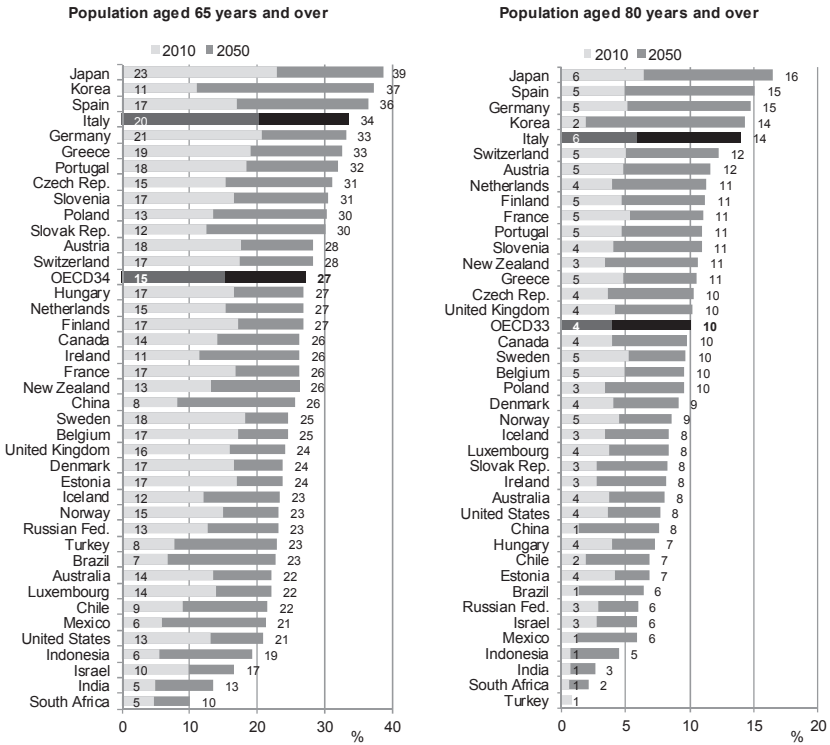
Italy. For example, on mammography and cervical cancer screenings, Italy is below the OECD average (OECD, 2013a). As outlined previously, there are also large variations of screening rates across Italian R&AP. The Valle d'Aosta (87%) and the province of Emilia Romagna (89%) present the highest rates of cervical screening, while the lowest rates are reported in Calabria (56%) and Campania (60%) (Istituto Superiore di Sanità, 2012). A similar North-South gradient is observed regarding mammography and colorectal screening rates (Istituto Superiore di Sanità, 2012).

A cause of additional concern, the share of the population aged over 65 years in 2011 was the fourth highest among the OECD countries. As demonstrated in Figure 2.5, the share of the population aged over 65 reached 20% in 2011 and it is expected to rise by 1.7 times by 2050 (Figure 2.5, left panel). The rise of the population share aged 80 years will be even faster since it is expected to grow from 6% to 14% over the next four decades (Figure 2.5, right panel). The rapidly ageing population in Italy goes hand in hand with an increased prevalence of chronic illnesses and long-term conditions. This is demonstrated by indicators of dementia prevalence, healthy life years and daily activities limitation at age 65 that are all worse than OECD averages (OECD, 2013a). At the same time, obesity rates among Italian aged 15 and over are the second highest among OECD country, which means higher risk of cardiovascular diseases or diabetes during adult age putting further pressure on the primary care sector (Lobstein, 2010; Currie et al., 2012).

Taken together, these international comparisons call for developing initiatives to strengthen primary care services. The contribution of the primary care sector needs to be enhanced to meet the challenge of an increasing burden of long-term. As the following section examines, this might involve actions in the following directions:

- Increase initiatives aimed at guaranteeing high quality of primary care services. These initiatives range from the process of strengthening the information system, developing quality standards and setting-up smarter payment system, to mechanisms aimed at enhancing preventives activities into the primary care sector.
- Consolidate the development of community care networks or community hospitals to encourage co-ordination and integration of care, specifically for patients having chronic and long-term conditions.

Figure 2.5. Share of the population aged over 65 and 80 years, 2010 and 2050



Source: *OECD Historical Population Data and Projections Database, 2013*, http://dx.doi.org/10.1787/888932919194.

2.5. Areas for quality improvement in Italy's primary care sector

Although the Italian primary care sector performs well on some health care quality indicators, there are shortcomings in Italy's primary care sector which require attention to guarantee high quality of primary care services. As the development of community care networks and community hospitals moves forward, it makes sense for Italy to evolve towards a more broaden and consistent quality approach. In particular, Italy needs to focus on the collection of a more comprehensive set of primary care indicators, the development of quality standards or the enhancement of preventive activities. At the same time, the setting-up of smarter payment systems to better reward quality initiatives and to be linked to desired activities is likely to be a useful driver of quality improvement. The central government should further consider providing more guidance and support to Italian R&AP to

uniformly strengthen and expand model of community care services throughout the country.

The information system underpinning primary care needs further development

Several initiatives have been implemented to monitor the quality of care in the Italian primary care sector. This is demonstrated by a relatively important number of information systems around clinical practice. As presented in Chapter 1, a defined set of 31 indicators (the *Griglia Lea*) is collected at national level to monitor the provision of the essentials levels of care (*livelli essenziali di assistenza*). The *Griglia Lea* comprises indicators around primary prevention (such as vaccination coverage and screening rates), indirect quality measure of primary care (through avoidable hospitalisations) and also gathers some indicators around community care (such as coverage and number of places in residential facility for example). Beyond the *Griglia Lea*, the National Outcomes Measurement Programme (*Programma Nazionale Esiti*) which was set up by AGENAS to promote quality improvement in the delivery of health care services, includes 17 clinical quality indicators but most of them relate to hospitals utilisation. Much less information on the activities and outcomes achieved within primary and community care is available in Italy, although experimental projects are ongoing with some R&AP and AGENAS (the Valore Project, Matrice Project and the PIC and Luna Project monitoring the elderly disability process of care). This means that it is not possible for stakeholders and users to build a full and detailed picture of the effectiveness, safety and patient centeredness of primary care.

At local and regional level, there are a range of interesting initiatives to measure and monitor the quality of primary and community care. The Italian Society of General Medicine and Primary Care (SIMG) (see Section 2.3) has for example developed a database in general practice to collect information around clinical practice for a volunteers network of GPs. This information system aims at supporting GPs to improve the quality of their practice, enabling to analyse epidemiological trends, prescription of primary care physicians and to identify patient with high health risk. Beyond clinical practice, SIMG database comprises data recorded by each GP covering areas such as patient's previous history, patient's demographic characteristics, prescriptions and prevention information. Although the SIMG database is an excellent system to track pathways of care and measure performance among GPs, it only covers 15% of the GPs in Italy which moderates substantially it impacts in monitoring quality of care.

To support quality development, the existing information systems should be strengthened by considering the following challenges:

- To date, the routinely published national indicators do not provide a comprehensive picture of the effectiveness and safety of the primary care sector. While Italian authorities seek to modernise the primary care sector through the development of community care networks and community hospitals, there is a need to ensure that the ongoing reforms do not adversely affect outcome of care. Italy should thereby consider giving greater attention to the outcome of care and performance measurement. The limited set of collected indicators should be extended around preventive activity and elderly care for example. Collecting indicators around the management of chronic conditions (such as COPD, diabetes or heart failures), the co-ordination between levels of care or the patient's experience with new community care services will be critical for the success of the Balduzzi Law and the *Patto per la Salute 2014-2016*. This will ensure that PCPs and community networks or hospitals are meeting community health care needs. To this end, Italian authorities should have the ambition to develop data collection as it is performed in Israel or Denmark (see Box 2.3). In these countries, the information system is sophisticated with a large number of quality indicators around both process and outcome of primary and community care. In Israel for example, the Quality Indicators in Community Healthcare (QICH) programme covers six areas of primary care activity such as asthma, cancer screening, immunisation for older adult, child and adolescent health, cardiovascular health and diabetes. Italy could be better using some existing dataset, such as the Griglia Lea, the PNE programme, as well as the New Health Information System to introduce primary and community care quality indicators. This would increase performance measurement, transparency and accountability of primary care provider.

- As already mentioned in Chapter 1, the Italian health information system is not fully standardised and linkage of personal health data across different health care settings is highly difficult in Italy. This means that it is not possible to measure and compare performance across Italian primary care physicians and that pathway of care cannot be followed to evaluate the quality and effectiveness of health care treatment. Because ASLs and R&AP process personal health data for their own area, it makes difficult to share data and information across R&AP. At the same time, evidence shows that the share of electronic patient records between PCPs and other health care providers appears particularly low. As evidenced by Tamburini et al. (2010), only 3% of Italian GPs exchange administrative data with other health care providers. In this respect, Italian authorities should have the ambition

to develop compatible electronic patient records across regional health system that would be portable through different health care settings. This would support the sharing of information among physicians, laboratories, diagnostic centres and patients. Last, there is a need to explore the possibilities for linking data from clinical and administrative databases to health and social care. AGENAS is carrying out promising initiatives in this direction with the Matrice project (see Box 2.3), which aims at integrating datasets on hospitals, diagnostics, specialist visits and GPs services in order to track pathways of care of highly complex patients.

Box 2.3. The MATRICE Project

The MATRICE Project is aimed at developing tools to exploit Italian administrative databases to produce information on the prevalence of chronic diseases and on standards of care across the country. In the Italian system, R&AP are required to collect patient-centered administrative information on health care activities according to a national common data model (IAD) and to transmit this information to the Ministry of Health and to the Ministry of Finances. Data cover demographic information, disease-specific exemptions from co-payment, outpatient drug prescriptions, inpatient diagnosis and procedures and a simple description of outpatient activity. When data are sent to the central government, due to confidentiality rules the personal identifier is discarded, making data integration at the national level impossible.

The MATRICE Project developed a solid methodological approach to measure prevalence and relevant indicators of quality of care for diabetes, hypertension, ischemic heart disease, heart failure and dementia, in order to assess the process of care provided in a comparable manner throughout Italy.

The results of the Project can now be used to test the possibility of using already existing data on complex and chronic illnesses, so as to measure the equity of PHC, and to evaluate clinical and organisational appropriateness of the care provided at different levels of governance. The Matrice standardised reports can constitute a useful governance tool allowing Italian authorities and key stakeholders to monitor pathway of care and to identify areas that may require improvement.

Source: www.agenas.it/images/agenas/In%20primo%20piano/Matrice/Monitor35__Matrice.pdf.

- Once new indicators would have been established around outcomes of primary and community care, health data should be made accessible to both PCPs and patients. This would help patients to make better informed choices and facilitate peer-to-peer benchmarking, which both foster competition and steer improvement in quality of care. The Tuscan Performance System has for example led to an improvement in quality of care for 50% of indicators between 2006 and 2010. In a similar vein, the experience from other OECD countries such as Denmark or Israel could guide Italy in such a process (see Box 2.4). The collected indicators within

the Danish Quality Unit of General Practice are made available to GPs, allowing them to benchmark their practice and improving quality of care for diabetics' patients.

Box 2.4. Measuring quality and performance in primary and community care: Learning from Israel and Denmark

The Quality Indicators in Community Healthcare in Israel

The Quality Indicators in Community Healthcare (QICH) programme in Israel is an innovative quality monitoring system focused on community care. The indicators in QICH cover six areas of primary care activity (asthma, Cancer screening, Immunisation for older adult, Child and adolescent health, Cardiovascular health and Diabetes). It aims to inform all stakeholders on the quality of primary and community care across the country. Most of the indicators examine clinical outcomes based on national and international guidelines, and also have a strong focus on prevention.

The programme enables a continuous feedback of comparative data around clinical performance for both practitioner and patients, which has certainly facilitate the work toward quality improvement. Although the programme is voluntary and do not rely on financial incentives, it has resulted in noticeable improvement regarding for example the quality of care for diabetics patient (OECD, 2012). One of Israel's health funds, Maccabi, reports that amongst diabetic patients between 2004 and 2009, poor HbA1c control fell by 29% and adequate cholesterol control increased by 96.2%.

Its success is thought to be due to its robust scientific basis, consensual development of the indicator set involving GP and health insurance companies early on, clear patient-oriented objectives and, crucially, systematic and continuous feedback of comparative data to both professionals and the public (OECD, 2012).

The Danish Quality Unit of General Practice in Denmark

The Danish Quality Unit of General Practice in Denmark (DAK-E) has developed a system of automatic data capture from primary care records to monitor the quality of care. Over 30 indicators are captured including diagnoses, procedures, prescribed drugs and laboratory results regarding for example management of chronic conditions.

It also provides a platform through which GPs have access to quality reports from their own practice and it allows them to benchmark their practice against others practitioners at regional or national level. Patients can also monitor their own clinical data. Analyses using the data collected have reported significant improvements in the proportion of diabetics on appropriate anti-diabetic, antihypertensive and lipid-lowering medications. (OECD, 2013b).

Smarter design of payment systems needs to be a priority

At present, Italian PCPs are paid through a mixed system comprising both capitation and fee-for-services sums which are both negotiated during the Collective Agreement. The fee-for-service component includes financial incentives to encourage PCPs working in group practice. These supply-side incentives pertain to structure indicators such as the use of computer system or the recruitment of support or other medical staff. The FFS element of PCPs payment does not contain quality-related measure. This means that quality discussion does not appear to be a significant part of trade-unions negotiations over the PCPs contracts at national level. Although R&AP are allowed to define additional payment for PCPs, there is scope in Italy to introduce financial incentives to better reward high quality of primary care or to achieve specific targets set-up in the *Patto per la Salute* or the National Prevention Plan.

Smarter payment system could be developed into the Collective National Agreement through the FFS component. A possible policy option would be to ensure that future FFS negotiations make explicit links to national priorities and standards of care. Italian authorities for example should consider linking the FFS to the national priorities around preventive interventions or care co-ordination. Compliance with specific clinical guidelines should also be considered in the FFS component to give priority to preventive activities and to the management of chronic conditions. There are key examples for learning from other OECD countries, such as the United Kingdom where the primary care sector has achieved improvements in a range of indicators around secondary prevention and the management of chronic conditions through the use of financial incentives (Doran et al., 2006). As the development of community care networks and community hospitals occurs, Italian authorities could also adapt the FFS schedule to reward a greater set of activities undertaken by nurses. As mentioned in Box 2.1, nurses play en expanding role in community care networks in being for example responsible for counselling, self-management support and performing clinical measurement. Given that nurse led-care is associated with greater patient satisfaction, higher health outcomes and more effective chronic disease management (Keleher et al., 2009), adapting the FFS component to encourage the hiring of nurse-led preventive health checks, long-term conditions monitoring or care co-ordination activities would be a useful step.

Requirements around the continuing professional development of primary care physicians could be strengthened

In Italy, CME is compulsory for all clinicians and health professionals since 1998. Primary care physicians are required to gain 50 credits per year or 150 credits every three years. These credits are assigned to PCPs depending on the number of hours of training, the types and characteristics of the programme. CME providers are accredited by the National Commission for Continuous Education (with administrative supports from AGENAS) and the 21 CME committees at regional level. Although mandatory, the current requirement toward continuing medical education appears weak in Italy. The existing system is mostly based on a self-regulatory approach, with no peer evaluation requirement or re-certification requirement. Further, there is no consequence for non-compliance with the CME national requirements, making difficult to apply the law (Murgatroyd, 2011). At present, it is unclear whether and how many PCPs have achieved the required number of credits each year. As a result, the current system for CME does not guarantee high standard of competencies for primary care physicians and does not ensure their fitness to practice.

Further attention needs to be paid to secure compliance of PCPs towards CME requirements. The setting up of economic incentives or sanctions in case of non-compliance might facilitate such a process. The experience of the United Kingdom or Australia could guide Italian authorities in their effort of building a strong quality assurance model for primary care physicians. In the United-Kingdom and Australia, CME is linked to re-certification. Primary care physicians need to demonstrate that they have regularly participated in CME activities and there is a peer evaluation regarding professional skills. To be successfully re-certificated, primary care physicians need to achieve at least 50 CME credits per year. In Norway, specialists GPs are able to charge higher fees for each consultation than regular GPs if they have followed a number of CME courses (Murgatroyd, 2011). These initiatives might constitute notable incentives for PCPs to comply with national requirement, improving health care performance and quality of health care services.

The general lack of standards and effective use of guidelines for primary care is a stumbling block for quality improvement

Whilst developing standards for primary care would provide specific recommendations for clinicians and managers to deliver care of high quality and to monitor undesirable outcomes, there is at present no agreed national standard for primary care in Italy. Given the growing burden of long term conditions, this is especially needed because of the increased expectations to

shift care out of acute hospitals and into the new community care services. There are only fragmented approaches toward quality standards of primary care services across Italian R&AP. While national standards on accreditation are rather generic, many different accreditation approaches have been developed in the R&AP but they mostly relate to hospital sector and have not yet reached the primary and community care settings. The ongoing national attempt towards the standardisation of accreditation programme (the so-called TRAC) needs to be implemented in the primary care sector to assess performance of primary care providers and identify areas that may require improvement. This would be especially important to increase PCPs and managers' knowledge around what levels of quality are required for delivering primary and community care services.

The Central authority might consider developing a sophisticated set of standards focussing on both processes and outcomes of primary and community care as implemented in other decentralised countries such as Australia or Canada (O'Beirne et al., 2012). Although voluntary, primary health care accreditation in Australia covers 75% of GPs. It is organised through the Australian General Practice Accreditation Limited (AGPAL) and offers financial incentives to support activities that encourage continuing improvements in quality of care (Buetow and Wellingham, 2003). A set of 15 nationally recognised Standards must be achieved by primary care services to be accredited by AGPAL. Further, the Australian Authorities have recently developed national standards for community and home care to develop guidance about the way community and home care should be delivered.

At the same time, clinical guidelines are weakly followed by Italian PCPs while they are defined to help health care professionals in meeting defined standards and reducing unwarranted variation in care. In Italy, they are developed by AGENAS, the National Institute of Health (*Istituto Superiore di Sanità*, INIH), Local Health Units or the SIMG professional organisation. Although the Italian National Guideline System (SNLG) has been developed in 2006 to make clinical guidelines easily accessible for PCPs, their implementation is not mandatory and is the responsibility of each of the 21 Italian R&AP (see Chapter 1).

As a result of these arrangements, evidence shows a low degree of adherence to disease-specific guidelines in the primary care sector. A recent study demonstrates that adherence to the international COPD Guidelines by Italian GPs is not consistent because characterised by a low usage of spirometry and a small proportion of patients receiving respiratory therapy (Bertella, Zadra and Vitacca, 2013; Cazzola et al., 2009; 2011). Results are similar for other chronic conditions such as asthma (Cazzola et al., 2011). Taken together, these findings prove that there might be major barriers to

guidelines adherence for Italian PCPs. In the region of Emilia Romagna for example, PCPs reported the least favourable attitudes toward clinical guidelines, considering them as useless for they daily practice (Formoso et al, 2001).

Further efforts are thus required to encourage information strategies for improving professional understanding and adherence to disease-specific guidelines. Setting formal educational programmes including learning sessions on disease knowledge and treatment, and practical session to prove the utility of the guidelines are specific avenues for consideration. In addition, there is no economic incentive to enhance adherence to clinical guidelines in Italy. The Quality and Outcome Framework (QOF) introduced in 2004 in the United Kingdom could be used as a role model for Italy. Financial incentives had favourable effects on primary care physician's compliance to practice guidelines and it resulted in substantial improvements in quality of care (Doran et al., 2011). At the same time, given the challenge brought by the ageing population and the rising burden of chronic health conditions, it seems advisable to produce guidelines that take into account broader clinical pathways, multiple morbidities and the management of chronic conditions.

Primary care's contribution to primary and secondary prevention needs to be enhanced

National initiatives to improve preventive care are included in the National Prevention Plan (NPP). The 2010-12 NPP, which is part of the *Patto per la Salute*, is structured into four areas of intervention: i) predictive medicine; ii) universal prevention; iii) prevention in high risk groups; and iv) prevention of complications and recurrences of chronic diseases (Ministry of Health, 2011). The agreement between national and regional government establishes that Italian region adopts and develops its own Regional Prevention Plan (RPP) for implementing interventions. The Ministry of Health, through the NPP, provides general guidance in order to support the regional prevention projects. This governance models might however have led to a mixed prevention approach across the R&AP.

The Italian R&AP have not implemented projects homogeneously and as a result, some of the desired targets set up within the *Griglia LEA* have not been achieved uniformly. In 2012, regional projects focussing on primary and secondary prevention (such as predictive medicine, prevention of complications and recurrences of chronic diseases) account respectively for only 4.4% and 4.9% of the total number of projects (Boccia et al., 2013). These figures clearly suggest that there is room for improvement in both primary and secondary preventions.

At the same time, there is a North-South gradient in screening rates where Southern region shows lower rates of mammography, colorectal or cervical cancer screening rates (Istituto Superiore di Sanità, 2012). Given that screening programme enables to prevent and early diagnosed cancer to improve patient outcomes and further reduce health care costs, there is a need to enhance primary care physician's contribution to primary prevention. To date, intervention to promote healthy habits including health education or promotion of physical activity may not be effective as proved by the growing share of obesity among children aged 15 and over. In Italy, more than one in three children are overweight, representing one of the highest rates among the OECD countries (OECD, 2013). As mentioned by The Royal College of Physician (2010), the signs or symptoms of obesity are often ignored by health professionals and health care interventions are implemented once medical complications and morbidity become apparent. Because it will be sooner or later associated with higher diabetes or heart disease prevalence and incidence, actions must be taken by PCPs to halt the "obesity epidemic" among Italian children.

Beyond primary prevention, data regarding cardiovascular diseases show that only 31% of patients with hypercholesterolemia have received drug treatment, which suggests inappropriate provision of secondary prevention (Istituto Superiore di Sanità, 2012). Other studies (Filipi et al., 2003; Sturkenboom et al., 2008) find that among hypertensive patients with multiple cardiovascular risk factors, a very low proportion (less than 18%) was being treated with concomitant antihypertensive and lipid-lowering therapies. Systolic blood pressure also appeared particularly low and not in line with recognised guidelines. The reported under provision of drug treatment for some major chronic diseases calls for actions to strengthen secondary prevention into the Italian primary care sector.

A capacity building process should be implemented at national level to better plan prevention activities and to guarantee uniform projects across Italian region. To enhance the place of primary and secondary preventions into the primary care sector, the Italian authorities should put more emphasis on the pivotal role that nurses and GPs could play. To this end, educational programmes in prevention or detection must be instituted – through for example CME programmes – in order to identify existing prevention strategies, demonstrate their effectiveness and to help professionals with care plan. Authorities should also consider investing more in the community nursing workforce to manage the prevention and the treatment of disease in order to guarantee safe and patient-centered care, while reducing the use of the acute sector.

Care co-ordination and integration between health and social care need better support and a leadership at national level

Although policy attention in recent years has been focused in encouraging community care networks and community hospitals, the implementation of these health care services is unevenly distributed across Italian R&AP. Among the 20 Casa della Salute reported in 2011 by the Ministry of Health, for example, 16 were found in Toscana, one in Molise, one in Marche and two in Umbria (Ministry of Health, 2011). At the same time, a detailed analysis of volume activity suggests that health spending differences between Italy and other European countries arise from differences in the delivery of non-acute services (Sassi, 2013). While differences in the volume of hospital services appeared limited, the analysis strongly points to the fact that community, long term care and preventive services are key areas of concern in Italy. Those services are not adequately developed compared with other European countries.

At the same time, there is evidence suggesting large heterogeneity in financial resources devoted to primary and community care services in Italy (Longo et al., 2012). Across the 13 ASLs considered in the study, health spending appears to be more directed toward traditional types of primary care services such as single practice GP, while few resources are allocated to services for frail patients or those with chronic conditions. Given the increasing health and social relevance of community care networks and hospitals, local authorities should consider whether the share of spending allocated to these services is in line with the demographic ageing and the epidemiological shift towards chronic diseases.

Beyond this, the establishment of community care networks or community hospitals is currently not used to exchange good experiences across R&AP. There is no report of the existing models enabling to compare the setting and performance of these facilities. There is scope to learn from others and it would be worthwhile for Italian authorities to invest in a best practice diffusion model. The government might consider supporting the evaluation of different models of practice, disseminating information and learning from top-performing R&AP or facilities. As demonstrated in Box 2.5, some converging factors are needed to support the establishment of community care networks, ranging from educational programme for professionals, the use of information technology or the financial support from national authorities, to the share of clinical guidelines around the effective management of chronic conditions (Calvaruso and Frisance, 2012). The role of GPs is central in co-ordinating clinical practice, alongside the progressive involvement of nurses who act as care managers for patients having chronic health conditions.

Box 2.5. Converging factors enabling the set up of community care networks

The establishment of community care networks in the regions of Emilia Romagna and Toscana have been facilitated by converging factors. The active support from the local and national authorities to set-up such facilities is perhaps one of the most important. The Ministry of Health has provided large financial support – nearly EUR 43 million – to develop the 14 community care networks in Toscana. In Emilia-Romagna, specific guidelines have been provided by the regional government for setting-up and running the facility. These guidelines covered for example the size, the geographical distribution and the standardisation of primary care facility to create uniform environment throughout the region. At the same time, health care professionals had received specific training programme to improve knowledge and skills regarding for example proactive care, use of information technology and electronic medical records. It is fair to note that the tradition of GP working in group practice has facilitated the process of setting-up community care networks. In these regions, GPs had already a high propensity to work in partnership and were already aware of the importance of care co-ordination to provide high quality of community care. The use of ICT and the shared electronic medical records accessible to all health providers working in the facility has made possible the integration of health and social care services. It also ensures the achievements of common health projects and care plans. It can lastly be stated that community care networks have been mostly set-up using local hospital premises and users have been adequately informed about service delivery.

Source: Calvaruso and Frisance (2012).

To meet the challenges brought by long term and chronic conditions, the Italian authorities shall have the ambition to strengthen and expand community care networks and community hospitals throughout the country. This could require action in different directions involving providing support to regional government – whether through financial resources or central guidance to set up these networks, as well as fostering mutual learning and encouraging data collection. Furthermore, the experience from Emilia Romagna or Toscana strongly calls for a greater leadership from the central level to play a more prescriptive role in addressing the following:

- developing guidelines for the setting up of community care networks and establishing training programme for health professionals to cope with higher and different workload
- supporting a wider use of ICT to facilitate communication and care co-ordination between levels of care
- expanding the use of chronic care models or individual care plans
- encouraging the progressive involvement of GPs and nurses acting as care co-ordinator and care managers for patients with chronic disease.

Italy has already been taking important steps in this direction with the adoption of the *Patto per la Salute 2014-2016*. The new *Patto per la Salute* provides guidance to support R&AP in the process of setting-up community care networks and community hospitals. Another core focus of the *Patto per la Salute* is to enhance the use of chronic care model and to better use ICT to monitor the appropriateness, quality and efficiency of community care networks and community hospitals.

Finally, it would be critical to collect indicators around processes and outcomes of care in order to assess the impact of community care services on outcome of care. A move in this direction has already occurred with the so-called Valore project, specifically launched to measure the impact of primary and community care organisations on the quality of care for chronic conditions (see Box 2.6).

Box 2.6. The Valore project

The Valore project was launched in 2010 by AGENAS to assess the quality of care for some chronic diseases including diabetes, heart failure, ischaemic heart disease and COPD (Gini et al., 2013). Six Italian regions took part in the project: Lombardy, Veneto, Emilia Romagna, Toscana, Marche and Sicilia. The overarching aim of the project is to assess the impact of General medicine management of chronic disease in terms of appropriateness of process, intermediate outcome and also consumption of care. To this end, electronic records regarding hospitals discharge, drug dispensing, disease-specific exemptions from co-payment to health care and the Inhabitant Registry containing demographic information as well as GP's identifier have been used in the six regions. Record linkage is made possible in each region using a unique coded personal identifier.

Available evidence from the Valore project (Visca et al., 2013) demonstrates the increasing need for GPs to work in cooperation with other health professionals such as nurses, specialists, and social workers. Multi-professionals teams engaged in proactive and patient-centered care and a greater involvement of nurses to provide continuity of care are key components to achieve efficient management of chronic disease.

2.6. Conclusions

The Italian health care system has traditionally delivered high quality of primary care services as demonstrated by rates of avoidable hospitalisation that are amongst the lowest in the OECD. The well performing primary care sector has resulted in good health outcomes and high patient satisfaction levels. The Italian primary care sector is committed to achieve better co-ordination and integration of services across the continuum of care to improve health outcomes and curb health care costs. This is critical given the demographic shift and the epidemiologic transition towards more

chronic conditions. To this end, Italy has made considerable efforts to reorganise its primary care sector by experimenting with community care services aim at improving co-ordinated and integrated care.

Community care networks and community hospitals are made up of doctors, nurses, specialists, administrators and other social workers who are engaged in proactive care to meet the needs of patients with complex chronic conditions. Evidence shows that community care models efficiently manage chronic conditions through multidisciplinary care teams, chronic care models or personalised care plans and effective communication between professionals. The role of GPs is critical in co-ordinating clinical practice, alongside the progressive involvement of nurses who act as care managers for patients with chronic health problems. The establishment of community care services constitutes an effective response to anticipate the rising burden of long term conditions and of chronic morbidities. Yet, community care services are unevenly distributed across Italian R&AP and not adequately developed in Italy compared with other European countries.

There is a need for greater involvement from national authorities to play a more prescriptive role to strengthen and expand community care networks throughout the country. Evidence suggests a need for more financial support and central guidance to regional governments, through for example the development of guidelines for the setting-up of facilities, of training programme for health professionals, the spread of ICT and the expansion of chronic care models. These organisational supports are necessary to help primary care physicians acting as care co-ordinators, to meet the challenge of higher workload and to achieve greater co-ordination between health professionals. The government should also consider exchanging experiences across R&AP to learn from the top-performing R&AP or facilities.

At the same time, Italy is characterised by a number of intrinsic shortcomings that need to be addressed to guarantee high quality of primary and community care services. There is a need of a more co-ordinated national approach toward quality in the primary care sector, and the Italian authorities should consider strengthening quality initiatives that appear still rather limited. Strengthening the information system to improve transparency, performance measurement and enhance accountability of primary care providers, and the development of a set of standards on process and outcomes of primary care are specific avenues for consideration. Available evidence also points to the urgent need for enhancing the contribution of primary care to primary and secondary prevention to improve both patient experience and outcome of care. Developing formal educational programmes in prevention or early detection through continuing professional development and introducing financial incentives through the fee-for-service component would certainly facilitate such a process. The

setting-up of payment system to better reward quality initiatives and to be linked to outcome of primary care ought to be a priority to steer quality improvement.

Note

1. Chronic conditions include diabetes, amputation of lower limbs in patients with diabetes, hypertension, angina pectoris, heart failure, asthma, and COPD.

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