The Italian National Plan for Health Information

The role of the Italian New National Health Information System

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EUBIROD
EUROPEAN BEST INFORMATION THROUGH REGIONAL OUTCOMES IN DIABETES

SPECIAL BIRO ACADEMY MEETING
“Coordinated Information Delivery from Diabetes Registers to improve Quality and Outcomes in Europe”

Rome, 4-5 June 2010
Agenda

- Demographic trends and changes in health demand
- Evolution of the health care system through the use of eHealth
- The EU Strategic Vision
- NHS Overview: Role of the Ministry
- The New National Health Information System (NSIS)
- eHealth initiatives and priorities at National level
  - Italian National Plan for Health Information: Approach and Roadmap for eHealth
  - FSE: The Electronic Health Record
  - CUP: eBooking systems
  - Telemedicine services: Rationale and goals
  - eCertificates: online transmission of Sickness Certificates
- The NSIS as an instrument supporting the realisation of pathologies registries
- Final remarks and conclusions
The demographic dynamics and a progressive increase of the incidence of elderly people over total population represent a challenge all European health care systems are struggling with, in terms of affordability, sustainability and efficiency. Such trends call for innovation actions to cope with the challenges of serving a growing demand while improving quality, access and efficiency at all levels, and simultaneously shifting from a hospital-centric to a community-centric healthcare system to better handle the increase of chronic pathologies.

**DIMENSIONING COEXISTING 5 GENERATIONS**

**1950**

- Trisavoli
- Bisnonni
- Nonni
- Genitori
- Figli

**2000**

- Trisavoli
- Bisnonni
- Nonni
- Genitori
- Figli

**2050**

- Trisavoli
- Bisnonni
- Nonni
- Genitori
- Figli

**Note:** (1) Values in thousands (2) to ease the comprehension of phenomena, only some age classes are shown by the Author

The adoption eHealth through the use of new information technologies may significantly contribute to the necessary health network reengineering, supporting to shift the focus of health care from hospital to community services...

...in favour of better continuity of care, more effective integration of social and healthcare aspects, through innovative assistance models centred on patient real health needs, allowing for better quality of life and easier and safer access to care within the National territory.
As also recognised within the sixth European Conference, the gradual deployment of eHealth aims at making the health sector more safe and efficient as well as providing better and more effective health services.

It is crucial that benefits are further enhanced and properly distributed among all the relevant stakeholders, from individuals to Society and all sectors of the Economy.

**EHEALTH FOR INDIVIDUALS** (PATIENTS AND HEALTHCARE PROFESSIONALS ALIKE): for individuals, eHealth brings new possibilities in terms of increasing quality and effectiveness of services. eHealth provides completely new methods in treatment of chronic diseases. Within the European context, it can facilitate implementation of cross-border healthcare and contribute to the continuity of care.

**EHEALTH FOR SOCIETY**: for society, eHealth represents a challenge for interoperability, e-literacy, and accessibility of new technologies. It also presents great opportunities for research and development. The Lead Market Initiative earmarked eHealth sector as one of the strategic areas with high growth and innovation potential.

**EHEALTH FOR ECONOMY**: eHealth offers solutions that can bring enormous savings. If properly deployed, eHealth could contribute to the transformation of the health sector and change substantially business models of healthcare facilities. These issues are gaining in importance in current economic climate putting increased pressure for delivery and cost efficiency in all sectors of the economy, the health sector being no exception.
Italy shows a well-articulated healthcare system aimed at ensuring citizens with Fundamental Level of Assistance (LEA), in terms of quality and access to care.
..and therefore partnership with main stakeholders is considered strategic in order to enact, within a common strategic framework, an integrated system of policy measures, finalised at making the use of ICTs in health care efficient …

... while developing at the same time the health services supply and making it closer to the needs of citizens including aiding vulnerable people living their social life.
In coherence with European Union directives, with the aim of enhancing citizens’ quality of life, making easier the access to socio-health services across the country, promoting continuity of care, the Italian Ministry of Health has realised the New National Health Information System.

The NSIS’ mission is to make available, at both National and Regional levels, a share information heritage of citizen-centred health individual data and methodologies to measure healthcare quality, efficiency, appropriateness and costs, with the ultimate goal to support governing the NHS and monitoring the provision of essential care.
The NSIS represents the centerpiece of National eHealth initiatives, beside which consistently stand a series of initiatives, which are consistent with the overall strategy of assigning a central role to the citizen...

and finalised at achieving on the one hand the harmonization of eHealth solutions, a prerequisite for generating Essential Levels of Information (LEI), crucial in governing the healthcare system and, on the other, the dematerialization of health documents, with significant benefits for organizational processes.
To ramp up eHealth and ensure a coherent uptake, for each of the aforementioned priority areas, the implementation strategies have been rolled out according to a common work approach and integrated roadmap…

allowing to achieve significant elements to shape actions finalised at ensuring a better and patient oriented integrated care
To improve the quality of care provided to each citizen, it is crucial to count on health individual data, which allow to track the health demand and diagnostic and therapeutic pathways.

The Electronic Health Record (FSE) aims at gathering all individual health information and clinical data related to each citizen health services, making access to relevant information easier and safer, in compliance with existing privacy National regulations, also to authorized professionals.
To achieve a National reference model of FSE system, and identify the necessary regulatory framework, the Ministry has promoted the creation of an Inter-institutional group for Electronic Health Record...

Inter-institutional group for Electronic Health Record

**GOALS**
- Definition of a common regulatory framework
- Identification of EHR functional features
- Definition of patient summary
- Definition of an implementation regulatory scheme

**RESULTS ACHIEVED AT PRESENT**
- National Survey of Regional initiatives and experiences
- Preparation of a preliminary advice on the Guidelines on Electronic Health Record, issued by the Privacy and Data Protection Authority
- Definition of a common regulatory scheme on EHR use

...composed by representatives from Italian Regions (Lombardy, Emilia Romagna and Tuscany), designated by the Health Commission of the Regions Conference, the Ministry for Public Administration and Innovation (former DIT and CNIPA)

The group is also participated by a Privacy & Data Protection Authority representative
eBooking Services Centre (CUP) system are crucial in enhancing citizens’ accessibility to health care services across the Nation in an integrated and continuous way...

Information System for booking health services, which allows to:

- **Handle the whole health supply** (NHS/ conventions/independent/intramoenia regimes) efficiently and in an integrated way
- **Structure the activities organisation** of the health providers as health services provision is concerned
- **Interface with different management processes** related to access and provision and associated information data
- **Support** defining health supply and communication plans towards citizens aimed at **reducing waiting times**

....and at the same time, contribute in reducing waiting times, which represent a critical variable for a timely and effective provision of health services, in coherence with the needs of ensuring Fundamental Levels of Assistance (LEA) and goals set by the National Plan to bear down Waiting Times in health care (PNCTA)
Consistently with the above mentioned goals, National Guidelines for realising eBooking Services systems have been jointly produced by the Ministry together with the Italian Regions and are being issued.

Such guidelines aim at allowing for harmonisation of the eBooking Services systems, within the National territory, through the integrated management of the whole booking process, as well as the simplification of the health services access channels available to citizens.

(*) Partecipated by representatives of the Ministry, Regions sector experts
Telemedicine services play a central part in the development of eHealth, enabling innovative forms of assistance, also through the reengineering of the national healthcare system network of health facilities, contributing to implement new assistance models to strengthen the continuity of care, particularly for citizens affected by chronic diseases, elderly people not self-sufficient, hospital discharged after intensive care.
With that aim in mind, the Ministry has undertaken several actions to support Telemedicine development, sustaining several projects across the country, ensuring the effective buying-in of main stakeholders, with the ultimate goal of promoting the adoption of innovative methods into the clinical practice and ramp up towards the priorities set by the European Commission communication [COM(2008)689]

In particular, together with National Observatory for evaluating and monitoring eCare is working in defining and applying analysis model to measure telemedicine projects as well as drafting Guidelines to identify best practices on adopting telemedicine application into clinical practice, for a better use and acceptance.
The realisation of eHealth initiatives implies the capability to dematerialize health documents, which brings significant benefits for organizational and management processes and allows the transfer of information data instead of the patient through the online transmission of health data.

In particular, as regards Sickness certificates, the Decree 26 February 2010, recently established by the Ministry of Health, together with other main stakeholders, established rules and modes for online transmission, by General Practitioners of Sickness certificates to INPS and then to private and public employers.
Demographic trends and changes in health demand
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The New National Health Information System (NSIS)
eHealth initiatives and priorities at National level

The NSIS as an instrument supporting the realisation of pathologies registries
- The main strategic goals of NSIS
- Information data gathered by the NSIS
- Different perspectives and analyses of data gathered
- Data gathered to better understand the Diabetes phenomenon

Final remarks and conclusions
The NSIS is finalized at realizing, through a multiple stage approach, eight main strategic objectives functional interconnected according to the need of from the Local and Regional levels. In particular, among the strategic objectives, the Individual Health Information Integrated System aimed at gathering all health information data related to health services provided to citizens by the NHS facilities' network.
In particular, according to the overall strategy of increasing the information heritage, the NSIS gathers many new regulated individual data flows, from the Local and Regional levels, related to several health settings, spanning from hospital to a wide range of territorial community services.

The increased availability of information data allows it to be instrumental at better analyses supporting monitoring the provision of Fundamental Levels of Assistance and assessing appropriateness of care and health programming and policy decision making.
Integrating individual health information data related to health services provided by the NHS supply network’s poles permits reading health phenomena through several dimensions of analysis.

Applying different perspectives to information data related to care provided to each patient within several health settings, spanning from hospital to a wide range of territorial community services, is crucial to analyze and monitor health pathologies such as diabetes.

Different perspectives and analyses of data gathered

Different perspectives and analyses of data gathered
The NSIS is progressively activating many new regulated individual data flows, from the Local and Regional levels, related to several health settings, spanning from hospital to a wide range of territorial community services, with the ultimate goal to gather the health services provided to each citizen by the health system. Some of these individual information data flows are particularly relevant to diabetes monitoring purposes.

<table>
<thead>
<tr>
<th>INFORMATION DATA FLOW</th>
<th>DATA GATHERED TO BETTER UNDERSTAND THE DIABETES PHENOMENON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Setting</td>
<td>Activation Status</td>
</tr>
<tr>
<td>Hospital</td>
<td>DM 25/07/1993 (Official)</td>
</tr>
<tr>
<td>118 System</td>
<td>DM 17.12.2008 (Official)</td>
</tr>
<tr>
<td>First Aid</td>
<td>DM 17.12.2008 (Official)</td>
</tr>
<tr>
<td>Outpatient Care</td>
<td>Art.50 L.326/2003 (Official)</td>
</tr>
<tr>
<td>Pharmaceutical Assistance</td>
<td>Art.50 L.326/2003 (Official)</td>
</tr>
<tr>
<td>Drug Distribution</td>
<td>DM 31.07.2007 (Official)</td>
</tr>
<tr>
<td>Home Care</td>
<td>DM 17.12.2008 (Pilot scheme, a regime by July 2010)</td>
</tr>
</tbody>
</table>
As depicted using eHealth as a catalyst can bring significant improvement potential in healthcare.

It is, therefore, important to keep on increasing the information data heritage of the NSIS with the aim of supporting integrated analyses of health phenomena along several perspectives, including the pathology one. Such information data base will also support the realisation of National pathologies registries, including Diabetes.

The realisation of such registries needs a regulatory framework to be defined in order to identify gathering mechanisms, authorized users, minimum data sets, safety and privacy measures.

It is also crucial to accompany the introduction of the pathologies registries with cultural and organisation change initiatives supporting their proper use and adoption into clinical practice.
THANKS FOR YOUR KIND ATTENTION

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