An Interoperability Model for the Development of Occupational Health Professionals Practice

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The development of national and international networks, has generated the need for interoperability in all directions, not limited to the organizational hierarchy, but expanding to the community of professionals, which would be oriented towards sustainable development of occupational health.

The interoperability means the capacity of the systems and processes to exchange and use together the data and information.

For the occupational medicine professionals and its partners for occupational health maintenance and promoting, the interoperability is the support for strategic, organizational, semantic integrative choices inside the systems and networks.
Occupational Health Services

- an essential actor in creating better working conditions and supporting employees’ health. These services are considered both an important work-related welfare benefit for the workers and a cost-effective investment for companies.

- an evolving concept and benefit for workers, but the European trends of OH services reflect contextual changes, such as the impact of internal market, competition, and commercialization on OH services. The variation of the services is concerned with the approaches of OH professional organizations and roles of the OH professionals despite the individual working life, the development and trends and the OH competency profiles.

- the national context for OH services organization is created by national regulations (safety and health legal requirements linked with health reforms legal framework), existing pressure and expectations of stakeholders and conditions in the health market where OH services organizations are competing for clients and customers.
The Occupational Health/medicine providers are:

* 41 county directorates of Public Health – Occupational Health offices/professionals
* 7 clinics of occupational medicine financed by National Fund for occupational accidents and diseases under the Pension House
* certificated private occupational health providers financed by employers under the market mechanism.

These Occupational Health/medicine services providers are the main sanitary units which can be the source of data for building the workers’ health national profile.
The Authorities

The Ministry of Labor uses the framework for Occupational Safety and Health at Work based on prevention principles and the networks of Labor Inspectorates and external services for protection and safety-private business.

- The Ministry of Health is the coordinator and financier of the Public Health Programs. Within the Public Health Program, the Occupational Health subprogram (managing the evaluation of the workers’ health status and risk factors) includes objectives and activities as regards to occupational health.
According to the Romanian legislation that fully transposed European directives concerning safety and health, the employers have to organize an appropriate occupational health/medicine services access for their healthy or disabled employees, in equal bases approach.

As a result of the recent turbulences, among them – globalization of the markets, commerce and financial flows, deregulation and trade liberalization, rapid technological changes, the shift from an industrial to a knowledge-and information-based economy- the enterprises should be ready for new challenges and address them in ways to maximize the economic benefits and minimize social costs. In consequence, the enterprises have expectations from the state policies makers, manly focused on legal and macroeconomic role, creation of support institutions, communication to the employers and employees. For these, there is a greater need for date, information, indicators to guide the policies makers both from the Ministry of Labor and Ministry of Health.
Interoperability has two dimensions: one technical and one business.

From the technical perspective, the four pillars of interoperability are:

- products
- communities
- access
- standards

- Our experimental product is a software “application for information transfer"
  a pilot project developed at Bucharest that meets the medical and IT standards,
  providing access to all occupational medicine professionals, with the aim of facilitating electronic transfer of data between institutions responsible for occupational health
It assures the pass from “health event” (illness caused by working conditions) that it manages by occupational health professionals (medical, therapeutic, informational and preventive point of view) to the complex phenomenon of “occupational health”, a phenomenon that involves all professionals in health and safety at work and is widely described by indicators.
The program ensures the creation of a database by entering information shared, according to regulations, by all partners: employer, occupational physicians, safety specialists, insurers, labor inspectors.

- The system only works with "elements" characterized by identifiers, such as:
  - Personal identification numbers (for individuals),
  - The National Economic Activity Code (for businesses),
  - The Romanian Occupations Code (professions),
  - The Accreditated OH Doctors code
  - International Classification Diseases by WHO-classification codes 999 and extended classification
  - The standardized medical documents
  - The occupational diseases european list
  - The chemical substances european list
  - The biological agents european list
  - The cancerigens and mutagens agents international lists
  - The dust and fibers list
  - so.
An example-
The operational menu for medical user
1. The logistics/statistics of the occupational diseases - from the diagnosis phase till the registration by the insures body
2. The logistics of absenteeism (occupational vs. general)
3. The statistics of the risk agents (chemical, biological, noise, cancers so.)
4. The reports/statistics of the occupational health per employer, economic branch, workers’ health
5. The statistics of risks for the pregnant women based on the assessment of workplace risk factors

6. The financial issues such as compensations and treatment and rehabilitation

7. The archives of the standardized documents under the research of every occupational diseases case
Database processing

Employers
Safety providers
Medical OH providers
Authorities
**Phases**

- **Data collection**
  - Documents’ management (check, validation and store in the archive)
  - Processing the data under the research procedure of occupational diseases case
  - Built the data base following the IT requirements
  - Provide the access and the support for every occupational medicine provider and institution with responsibilities in occupational health
  - Building the statistics and the national Registry
Products

- Medical documents for every patient with occupational disease
- Research for an appropriate treatment in clinics and compensation by insurers
- National Registry for occupational health for the Ministry of Health
Products

- Indicators for Occupational Health Profile under the National Programmes
- Archives
- Support for medical practice of Occupational Health providers
- Information for labor inspection and safety providers
The Romanian Flag colors