INTRODUCTION

In Italy, as in much of the industrialized world, the health sector is facing a double challenge. On the one hand, the economic crisis and the urgent need to control spending and on the other there is the awareness that health care can not be separated from high quality standards.

The model health future will be more and more "patient-centered" with a strong integration of services and consequently you will find more resources for such development.

It seems clear that to manage such complexity respecting a certain equilibrium, we must respect the sharing of values and methodologies among different professionals. In addition it must ensure that the understandable pressure placed on operators on cost control will not reflect negatively on the performance of the patient.

It seems clear that to restore the system not just to cut costs, but you need to use all available tools and methodologies to facilitate effectiveness and clinical appropriateness.

And necessary to focus the process of planning and management of health services to the needs of the community, enhancing the role and responsibilities of physicians and health care by promoting the culture of quality.

In this regard, it seems clear that the processes of care should be studied and re-engineered with the aim to optimize spending, while maintaining as a "gold standard" the high quality of care.

The aim of this study was to analyze in this context, the activities of the Unit of Hand Surgery with particular emphasis to the Department of Rehabilitation of the principals of the group Multimedica and so, check its viability, producing a model, possibly duplicated and exportable to other similar initiatives.

MATERIALS AND METHODS

The unit Surgery of the Hand Group Multimedica, is a complex multidisciplinary team, unique in Italy.

And formed by surgeons, administrators, nurses and physical therapists dedicated entirely to the specialized branch of surgery and hand rehabilitation.

The pathologies of our expertise can be divided into elective and emergency, the big difference is the unpredictability and potential complexity of the second group.

Clinical activity is divided into eight main areas of work:
- Malformation
- Traumatology
- Microsurgery
- Pathology of the wrist
- Pathology of the peripheral nervous system
- Functional surgery in spasticity surgery of the brachial plexus
- Hand therapy the care pathways are complex and cross to other units of the company.

Another peculiarity of the setting of the department is the precocity of rehabilitation, every patient in fact accessed within 24 hours post-surgery, the rehabilitation service, in order to start with the protocol mobilization.

Each protocol is valid from the department and is based on international scientific evidence.

The service takes place on five days per week for a time H 12. Each rehabilitation is delivered in the ratio 1:1 with at least 30 'according to national guidelines.

The group is divided in four operating locations serving a catchment area of about 256,000 units (Fig. 1).

The rehabilitation service is made up of 19 physical therapists, 11 occupational therapists, psychomotor therapist 1 and 1 single coordinator.

The medical team is formed from 1 director, 5 aid, 3 assistants, 11 residents, one intern, 3 psychologists, 1 neurophysiologist.

The team is supported by 16 administrative and 9 registered nurses and 2 OSS.

Access to care pathway is through the emergency department (there are two top-level DEA present in 4 facilities), or through visits.

The route starts instead therapeutic rehabilitation after surgery or after diagnosis with indication for conservative treatment of the disease (Fig. 2).
As already mentioned earlier access to treatment occurs within 24-48 hours after the visit or intervention, service organization can guarantee the elimination of waiting times and what not least, the service is always guaranteed by staff format in hand rehabilitation.

All rehabilitative personnel is able to pack splints directly on the patient's hand, the splint can be static, dynamic, static-progressive, conservative or post-surgical.

**DATA ANALYSIS**

From July 2013 to June 2014 were analyzed data of productivity of the entire Unit of Surgery and Rehabilitation of the Hand, it was possible to quantify it in:

- 24880 specialist visits
- 7338 surgeries of which 1958 under the urgency
- 4560 splints
- 98,760 physiotherapy sessions (Fig. 3).

The next step was the identification of total costs and revenues, revenues are derived from both the services provided by the national health system to those under the solvency.
Revenues obtained showed that there are areas of intervention with greater economic returns.

<table>
<thead>
<tr>
<th>COSTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AVERAGE COST OF PERSONNEL ANNUAL RETAIL</td>
<td>0.293 E</td>
</tr>
<tr>
<td>TOTAL COST ANNUAL SUPPLIES</td>
<td>15,532 E</td>
</tr>
<tr>
<td>TOTAL COST ANNUAL PERFORMANCE NATIONAL HEALTH SERVICE COSTS INCLUDE GENERAL</td>
<td>74,225 E</td>
</tr>
<tr>
<td>TOTAL COST ANNUAL PERFORMANCE SOLVENTS</td>
<td>34,292 E</td>
</tr>
<tr>
<td>TOTAL COST ANNUAL PERFORMANCE AFTER SURGERY</td>
<td>4327 E</td>
</tr>
<tr>
<td>TOTAL COST OF SERVICE PACK SPLINT</td>
<td>67,814 E</td>
</tr>
<tr>
<td>TOTAL COSTS</td>
<td>180,648 E</td>
</tr>
</tbody>
</table>

The sustainability of the service is represented by a diverse and large case mix of patients accessing the department represented in the following graphs (Fig. 4).

The income statement for the service of rehabilitation showed a profit margin of NHS performance of 74.224 euro 83.078 euro against the regime of solvency.

The average margin of rehabilitation service as a separate unit was therefore 14.77%.

CONCLUSIONS

After analysis of the organization of the department and of its income statement, we can say that the conditions for a physiotherapy department specialist in substance are:

• The need to have a large "case mix" Surgical both in terms of quantity and type of diseases.
• The guarantee of access to care for ALL surgical patients and non-
• Careful resource planning.

Simplifying it could be argued that there are two full-time therapists for each surgeon or a therapist every 280 interventions. The agenda of the physiotherapist must provide spaces for treatment of serious diseases in the national health system and for minor illnesses in private regimen.

Thanks to the organization of the service of hand rehabilitation independent and autonomous from the general rehabilitation, you can offer patients direct access to care, avoiding passages through personal nonspecific hand.

It also ensures in this way the use of specific protocols EBM in dedicated environments and especially the completion of its treatment path without delay or interruption.