

# The pedagogic evolution in Surgery: the University at the centre of a training which becomes territorialized

## The model of the region Marche



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**The pedagogic evolution in Surgery: the University at the center of a training which becomes territorialized. The model of the region Marche.**

*AIM: We want to show a new organisational model of General Surgery training, in act in Università Politecnica delle Marche, which sees its strength in the territorial formative network.*

*MATERIAL OF STUDY: In our Athenaeum, this organization is not a recent realization, but the firsts to have benefited completely of this system are the four residents who have completed the General Surgery formation in March 2014, for this reason we report their experience.*

*RESULTS: The four residents benefited of the two years in the peripheral structures, two also performed a period in a foreign country, two chose to spend other 6 months in the peripheral structure to prepare the thesis of specialization; surgical activity has been, for each resident, of 400 interventions on average as first operator (237-476) distributed in great surgery 44 (13-80), middle 172 (129-268) and small 209 (70-378).*

*DISCUSSION: The Formative NETWORK becomes an essential strength at the service of the academic world, the network foresees a continuous update, it can be easily standardized for every resident and it doesn't raise barriers to the foreign countries experiences.*

*CONCLUSIONS: With the purpose to conform the model of specialistic formation in General Surgery, we propose a new tailored italian organizational model, tested the lasts 6 years, which seems to give good results and conform to the european standard of surgical training.*

**KEY WORDS:** Formative network, General Surgery, Resident, Training

The theme of formation in surgery is nowadays very discussed in disparate contests. This trend is a clear sign of the necessity of our country of guaranteeing high professional standards in time of crises but also of great

changes, due to the demand of the European Community of levelling the formative courses in all the member states.

The concept of Europe without borders is now a well-established reality for citizens (Essay of Schengen and following Community Directives), physicians (D.Lgs 368/99 of "Realization of the directive 93/16/CEE for free circulation of the physicians and mutual recognition of their diplomas, certified and other titles and of the directives 97/50/CE, 98/21/CE, 98/63/CE and 99/46/CE that they modify the directive 93/16/CEE"), and also for patients (Directive UE 24/2011 on the so-

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called cross-border Healthcare). Therefore, in the next years, the central theme will be represented by the competitiveness among the healthcare systems and models and among the medical professionals in the different UE countries.

The principal points of the reforms adopted for conforming our country with the rest of the EU concerns the time reduction and the introduction of a multidisciplinary training in the specialization. These reforms let us approach the pedagogic European model, but they do not valorise and fully benefit from the peculiarity of our sanitary system.

The main aspect that differentiates us is the high level healthcare of the territorial divisions of the hospitals, while abroad they play a more marginal role.

In the recent years, being aware of the peculiarity of our system and of the qualities of the services provided by the Departments of Surgery of the region Marche, the School of Specialization has launched a project that put the University Clinic in the centre of a specialized formation, which develops more in the territory. This makes the world of the hospital closer to the university one.

The first two years of the specialized course develop inevitably inside the university hospital, aiming to acquire methods and competences in the care of the patient before and after surgery and to take confidence with the various diagnostic, medical and surgical procedures.

We can gather the formative objectives chosen by the Council of Specialization in three great areas of interest:

#### *Management of the patient before the hospitalisation*

Relationship with patient at first visit, writing a clinic dossier and doing an examination, knowledge of laboratory and radiologic test necessary to diagnosis, how the previous medical history has an influence on surgical disease.

#### *Management of the patient during the hospitalisation*

Relationship with the patient and sanitary staff, choice of the best clinic and laboratory surveillance on the basis of disease or intervention, management of regular post-operative course, identification and treatment of the post-operative complication, especially the ones immediately dangerous for the life, right use of antibiotic, knowledge of the role of prophylaxis, making advanced dressings.

#### *Knowledge in operational area*

Knowledge of operative theatre and room, the concept of sterility, surgical instruments and sutures, basic open and laparoscopic surgical technique, ambulatory performance, small (1° year), intermediate (2° year) operations, general anaesthesiology principles and, more thoroughly, local anaesthesiology.

For the first two years the limits about the numbers of interventions performed aren't established, given that everyone has personal time to learn; the Council is more

interested by the knowledge of every objectives expressed for each resident. The adopted method of evaluation is organized through lectures held by the residents for their colleagues in presence of the tutor and the others members of the Council.

At the end of the first two years, the School offers the possibility to stay inside the University hospital (where there are high-specialized surgical departments), to continue the formation in one of the enrolled hospitals in the formative network (Periphery or foreign countries) or to collaborate with the organization of Emergency (only for the residents of the last two years of course).

This organizational model based on a tight collaboration between University and Territory is not a real revolution. In fact, the concept of "formative network" was already quoted in the state-regions decree, which is effective since many years but does not clarify the roles of the formative network, of the university and of the hospitals outside of the network. This gives the director of the school the hard task of making consideration and taking decisions on a case by case basis.

The reason of this article is to emphasize the qualities of this organizational model: it is an unbiased training model, because it is standard for all the residents; it contemplates a great and constant involvement of the formative network and of the foreign countries, widening an offer which suits more and more to the necessities of the young medical trainee, of the territory and of the academic environment.

A dynamic network that is continuously UPDATING allows to keep a high standard of training: every time a candidate applies for a new centre, the Council of the School of Specialization contacts the structure to make sure that he has the necessary requisites; in the same way, the centres are constantly checked by the director of the school, who receives a bimonthly report of the activities of each resident.

Schematically the Model contemplates:

- First 2 years obligatory in the university clinic;
- Maximum 2 years in periphery;
- Maximum 1 year in a foreign country (additionally to those in Periphery);
- Additional 6 months to develop the thesis (in a centre of the formative network);
- The frontal lectures and the exams must occur inside the University Centre.

This seems to be an obvious organization of a specialized formative procedure, but it is actually not applied in the daily practice.

The burning themes when speaking about Specialist Training and the Formation on the Territory are always the same: insurance, ethics and informed consent.

The residents of UNIVPM have always an insurance extended for the serious fault at hospital's expense, university or not, Italian or not.

The ethical and forensic aspect connected to performance of operations by residents aren't an obstacle for the

School of Specialization and the tutors given that during the informed consent, usually performed by the same resident, the presence of medical staff in surgical training, which takes part in diagnostic et therapeutic activities, is explained.

Moreover, the operations performed by residents imply the same gestures codified by the same surgical handbook, which are referred by every surgeon.

In our Athenaeum, this organization is not a recent realization, but the firsts to have benefited completely of this system are the residents who have completed the General Surgery formation in March 2014. For this reason we decided to report their experience, with the purpose to evaluate if this method can be reconfirmed, implemented or abandoned.

The four residents benefited of the two years in the peripheral structures, respectively in the centres of Jesi, Camerino and Macerata; two also performed a period in a foreign country, respectively of one year (in a centre of hepatobiliopancreatic surgery and transplantation in France) and six months (with the organization of Emergency in Sierra Leone); two chose to spend other 6 months in the peripheral structure to prepare the thesis of specialization; surgical activity has been, for each resident, of 400 interventions on average as first operator (237 -476) distributed in great surgery 44 (13 -80), middle 172 (129 -268) and small 209 (70 -378).

If we compare these data to the general standards of surgical training expected by the national statute (7 interventions of great surgery, 24 of average and 100 of smaller), it is possible to prove the quality of this new formative model, which has as strong points the equity of the guaranteed offer for all the internes; the Formative NETWORK, which becomes an essential strength at the service of the academic world; in the DEMOLITION of the geographical FRONTIERS, toward a globalized surgical formation; the great formative-professional EFFICIENCY. Especially the latter point, in an epoch in which the society worries about the generational change (especially in surgery) not guaranteeing employment to all the new surgeons, represents a basic requisite for young surgeon to find their own place in the world of work, inside and outside of our country.

## Riassunto

La formazione in Chirurgia è un tema di grande interesse in un'epoca di crisi, ma anche di grandi cambiamenti mossi dalla spinta della Comunità Europea di uniformare i Percorsi Formativi di tutti i suoi Stati Membri. I punti principali delle riforme attuate per uniformarci al contesto Comunitario, vertevano sulla riduzione dei tempi e sulla implementazione della multidisciplinarietà della formazione specialistica, con il rischio di adombrare quelli che sono i punti di forza del nostro Sistema Sanitario, tra cui l'alto livello assistenziale dei nostri ospedali territoriali.

La Scuola di Specializzazione di Chirurgia Generale dell'UNIVPM da alcuni anni punta su un progetto che vede la Clinica Universitaria al Centro di una Formazione Specialistica che si sviluppa sempre più sul territorio, avvicinando il mondo Ospedaliero a quello Universitario. Questo nuovo modello organizzativo prevede una prima fase all'interno della Clinica Universitaria ed una seconda nella Rete Formativa, nella quale rientrano Centri a differente impatto specialistico, all'interno di Strutture Ospedaliere Italiane ed Estere, e la possibilità di poter collaborare con l'Organizzazione di Emergency.

Per testare questa nuova organizzazione del Corso Specialistico, abbiamo preso in analisi l'attività chirurgica svolta dagli specializzandi del nostro Ateneo, che hanno terminato il loro percorso formativo in Chirurgia Generale a Marzo 2014, essendo loro i primi ad aver beneficiato di questo modello.

L'attività operatoria è stata, per ciascuno, mediamente di 400 interventi da primo operatore (237-476) distribuiti in chirurgia maggiore 44 (13-80), media 172 (129-268) e minore 209 (70-378), rapportando i loro risultati con gli standard complessivi di addestramento professionalizzante previsti dallo Statuto Nazionale si osserva il buon rendimento di questo sistema, che vede i suoi punti di forza nell'EQUITA dell'offerta, in quanto standardizzabile; nel concetto di RETE FORMATIVA; nell'abbattimento delle FRONTIERE della formazione chirurgica; nel RENDIMENTO formativo-professionale.