30th June 2014

EFIM EXCHANGE PROGRAMME FINAL REPORT

MAGGIORE HOSPITAL, INTERNAL MEDICINE UNIT (MEDICINA INTERNA A), AUSL di BOLOGNA- ITALY

INTRODUCTION

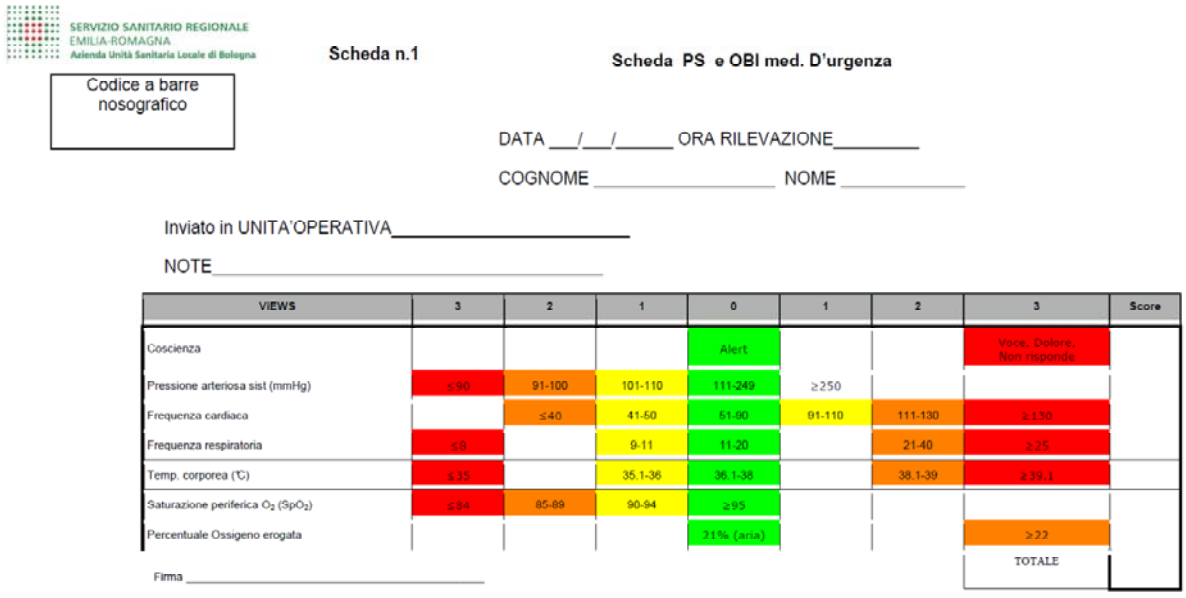
I treated my time in the Internal Medicine Unit A at Maggiore Hospital, AUSL di Bologna, between the dates 5th of May and 30th of May, 2014.

In Italy the Health care system provides three levels of Hospitals that is similar to what provides the health system in my country, Turkey. Maggiore Hospital is a 3rd level General Hospital with a number of 625 beds which has similar properties as well as a research and training hospital in my country. Inside Maggiore Hospital are allocated the following Deartments: Emergency (with Trauma Center and dedicated ICU), Internal Medicine (with Cardiology and ICU), Oncology, Surgery (with general surgery, ENTsurgery, Ophtalmology, Orthopedics, Obstetrics-gynecology-pediatrics, Urology, Vascular surgery and Maxillo-Facial Units), Hygiene and Organization, Services and Neurology (which belongs to the Istituto delle Scienze Neurologiche - IRCSS located in the Bellaria Hospital di Bologna) with neurosurgery and stroke unit.

During my one-month-exchange programme period in Maggiore Hospital, I attended to Medicine Interna A, one of the internal medicine units which serves as inpatient clinic and also to the Center for Internal, Vascular and Interventional Ultrasound. This Center is a simple operating unit attached to Internal Medicine A but it belongs to the Medical Department and serves as a 3rd level ultrasound service either for all Departments of the Maggiore Hospital and the other 7 Hospitals which are comprised in area of influence of the AUSL di Bologna.

During my stay I had the opportunity to spend some time in Emergency Room as well. In this Department patients are grouped according to the severity and urgency based on a code system in the Triage section, when they are first admitted. The codes which are organised by the nurses, include white, yellow, green and red code. The physicians prioritize the patients according to these codes, e.g. the red code indicates the patients have to be taken care of immediately, just at the same time with admission. The other groups- white, yellow and green- are divided into rooms respectively in order to be examined by the physicians. The physicians' decision about the patients' reference to the services is based upon the VIEW score (VitalPAC early warning score), as it has been shown that simultaneous presence of three critically abnormal vital signs can occur at any time during the hospital admission and is associated with very high mortality[1], that an Early Warning Score of at least six on admission is an independent predictor of 30-day mortality and length of stay in the

ICU[2]. The score is evaluated with regards to these criteria: heart rate, breathing rate, blood pressure, temperature, conscious level and oxygen saturation.



SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA
Azienda Unità Sanitaria Locale di Bologna

Scheda n.1

Scheda PS e OBI med. D'urgenza

Codice a barre nosografico

DATA ___/___/_____ ORA RILEVAZIONE_____

COGNOME _____ NOME _____

Inviato in UNITA'OPERATIVA_____

NOTE_____

VIEWS	3	2	1	0	1	2	3	Score
Coscienza				Alert			Voce, Dolore, Non risponde	
Pressione arteriosa sist (mmHg)	≤90	91-100	101-110	111-249	≥250			
Frequenza cardiaca		≤40	41-50	51-90	91-110	111-130	≥130	
Frequenza respiratoria	≤8		9-11	11-20		21-40	≥25	
Temp. corporea (°C)	≤35		35.1-36	36.1-38		38.1-39	≥39.1	
Saturazione periferica O_2 (SpO_2)	≤84	85-89	90-94	≥95				
Percentuale Ossigeno erogata				21% (aria)			≥22	
							TOTALE	

Firma _____

The patients with a score of 0-3, ≥4-6, 7-10 and >10 are referred to the blue area, red area, subintensive unit and intensive care unit respectively. Based on my observations, there were plenty of differences between the emergency departments in my hospital – Ankara University Medical Faculty- and Maggiore Hospital. The main difference is the code system. There is no code system in my hospital even though the physicians do the triage paying regard to the severity of the condition. In conjuction with this difference the triage is not done by the nurses in my hospital. That is an inspired working condition which provides the physicians a lot of time. Having patients to be taken care of by the specialists is another difference while the residents take care of the patients under responsibility of a consultant in my hospital.

1) Bleyer AJ, Vidya S, Russell GB, et al. Longitudinal analysis of onemillion vital signs in patients in an academic medical center. Resuscitation 2011;82:1387–92;

2) Reini K, et al. The prognostic value of the Modified Early Warning Score in critically ill patients: a prospective, observational study. Eur J Anaesthesiol. 2012 Mar;29(3):152-7.

INTERNAL MEDICINE A

Internal Medicine Unit A, which has 36 beds, is planned to be a service primarily for diagnosing and treating patients referred to Maggiore Hospital with acute internal medicine conditions, and it has a prevalent mission for those with gastro-oncologic, nephro-urologic, hematologic and angiologic diseases.

In the recent past 2 years the unit was organized with a 14 beds section called "*red area*" (for carses at medium-high intensity care needs) and a 22 beds section called "*blue area*" (for carses at medium intensity care needs). Today, after the new organization in the Maggiore Hospital which started in february 2014, all the beds are planned to pertain to the general *blue area* which comprise nearly 120 beds distributed on different floors of the Hospital. Moreover the *red area* section of the hospital with 36 beds is located to a single floor of the Hospital, nera the Emergency. The physicians and the nurses in the Emergency Department make decision together about the areas to where the patients are sent after the admission, and their decision is also based upon the VIEWs cards as mentioned above.

Figure 1. The entrance of the Internal Medicine A Unit (left) and the corridor with the doors of the rooms

When the patient is tranferred from the ED to Medicina Interna A, at the time he arrives a doctor-nurse team do a combined nurse assessment and medical examination in a dedicated room to define its diagnostic-therapeutic route during the stay in the Unit. There is also an availability of bedside ultrasound here.

Fig. 2 . One of the US instruments in the patient's examination room of the Internal Medicine A

After that exat examination the patients are definitely allocated in their hospital rooms.

Fig. 3. A view of the spacious room in the Medicine A Unit, where normally 2 patients are allocated.

In Italy, the Internal Medicine specialty school lasts for 5 years and the subspecialty education such as cardiology, gastroenterology, endocrinology, oncology, nephrology e.t.c, are separated educational schools from that of Internal Medicine, and each of them lasts for another 4 years. But nonetheless, in Turkey it is an obligation to complete the internal medicine education at first to start a subspecialty education except cardiology, infectious diseases and pulmonary diseases. Therefore, in my hospital a general internal medicine inpatient clinic does not exist; instead of this there are subspecialty department services separated from each other. Each department's inpatient clinic consists of a number of beds between 25-45 on average and there is approximately a total number of 300 internal medicine beds. But the most noticeable difference between the hospitals is that in my hospital there is no care area at different level of intensity, like the red area or subintensive care unit for the critically ill patients.

In my hospital, patients can be referred to the intensive care unit directly from the emergency room or also from all services as well, when the severity and intensity of the patients' condition occurs. It is obvious that the existence of only intensive care units without this kind of supporting care areas may cause inadequacy of health care offer, due to lack of beds needed, in case of high number of critically ill patients. Moreover, this type of organization - to divide the patients into groups of red area and subintensive unit alongside the intensive care unit - provides the physicians much more effective working time and reduces their workload.

During my exchange programme period I had the most inspiring time in the Ultrasound Centre and the most suprising observation here was that in the Maggiore Hospital the Ultrasound Centre belongs to the Internal Medicine Department and it functions affiliating the internal Medicine Unit A. By the contrary in my country the ultrasound centre depends upon the radiology department and ultrasonography is only performed by the radiologists.

Having chance to be an observer in a highly advanced ultrasound centre here in Maggiore Hospital and thus seeing the internal specialists as clinical ultrasound performers has been definitely a marvelous experiment for me. In fact I've come to a point that ultrasound to be performed by an internal medicine specialist is very important either for the patients, for the physicians, and for the hospital. As a matter of fact the clinician who perform US is able to inform the patients about their conditions in a more detailed way as he knows in depth all the history of the cases. This provides convenience for the follow-up and saves time and resources. Based on my observations, it is clear that the patients have a precedence of the fastest service as they are diagnosed, treated and followed by the same doctors. In addition to this, appointment of radiology needs are removed leaving only the heavy CT and RM exams, thus shortening the duration of hospital stay. It is explicit that this is a great contribution to the health care budget.

EFSUMB (European Federation of Societies for Ultrasound in Medicine and Biology) defines 3 levels of US competence: *basic*, *medium* and *advanced*. It is clear that to be able to perform at least the basic level of ultrasound and/or bedside ultrasound will be really important for all Internal medicine specialists in order to improve their clinical skills and daily practice. The Society of Italian Internal Medicine (SIMI) has now decided to introduce a specific educational programme on bedside ultrasound (or *echoscopy*) for the internal medicine specialists which eventually achieve a specific US certificate

In my opinion, in this context the Italian Society may be a precursor for what could be applied also in other European countries. I would like to have a similar programme in my country in the very near future.

In addition to all of these assessments, I have seen many complex and multispecialty cases and I learned a lot in the Ultrasound Centre, thanks to the clinical discussions that were daily conducted together with many specialists (surgeons, radiologists, oncologists) in the Center.

Fig. 4. The rooms of the Center for Internal, Vascular and Interventional Ultrasound

OTHER EXPERIENCES

During my studying programme in Maggiore Hospital, I had other facilities alongside my observation experience in the Internal Medicine and Emergency Department, as well as in the Ultrasound Center:

a) I had the opportunity to participate to a presentation meeting: "*A proposed neoadjuvant protocol to be applied in patients with gastric cancer*", which was organized by the Surgery Department and conducted by Dr. Antonio Maestri, Head of the Oncology Unit of the Imola Hospital, on the 14th of May 2014.

b) I participated to the SIMI (Society of Italian Internal Medicine) 10th Edition Ultrasound Clinic Summer School in the day dedicated to bedside and interventional ultrasound, on May 27th 2014 in Monterenzio (Bologna).

c) Finally I have also had chance to observe directly some endoscopic ultrasound examinations in patients with biliary and pancreatic diseases performed in the Gastroenterology Unit of the Maggiore Hospital.

CONCLUSIONS

I believe this one-month period has been quite enlightening and instructive for me. The period was satisying not only by means of being taught, but also due to staying in another hospital of a different country, observing the relevant differences in health care systems, but understanding the similar working condition of the staff speaking and discussing medical items with it.

I felt lucky to be in Maggiore Hospital since it's a big hospital, and the nurses as well all the staff was really very kind. Dr. Vincenzo Arienti -the director of the Internal Medicine A and the ultrasound centre - whom I appreciate had always been very nice for all the period that I was through. Above all, I have to thank my tutor Dr. Stefano Pretolani very much, he had been such a supportive teacher that the period was quite enriching for me. He really took very much care of me, he always made great effort to provide me a more valuable time.

In conclusion, I really would highly recommend to all the residents of my country the EFIM Exchange programme, and I hope there will be a chance to establish a connection between the Turkish Internal Medicine Society (TIHUD) and the Society of Italian Internal Medicine (SIMI) in order to organize ultrasound certification programme for the internal medicine residents and the specialists in Turkey, in the near future.

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