

EUROPEAN HOSPITAL

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The dark side of healthcare mobility

Professional mobility has always been high on the EU agenda. It is a hallmark of pan-European integration best understood as 'freedom per se' for the individual. In times of economic crisis professional mobility offers a real alternative against unemployment and decreasing salaries. But what are the impacts on the medical sector, if physicians and nurses leave their countries en masse? Daniela Zimmermann asked Günter Danner, Associate Director of the European Representation of the German Social Insurance in Brussels

The database on professional mobility in the healthcare sector is not sufficient; the EU appears not to know when to act. The economic crisis is obviously making matters worse. When do you think the EU will step into action?

GD: 'We actually do have some data: the Commission actively supported the comprehensive PromeTheus study. However, it does not fully cover the most recent events, for example the visible collapse of socially financed healthcare systems in countries suffering an overwhelming public debt. Legally speaking, the EU is not responsible for the actual functioning of national care systems.'

'I personally do not think that the EU, as such, is interested in matters beyond the scope of the implementation of the existing legislations. The day may not be too far away though, when the question of how to avoid a "Third-World reality" of access to healthcare in certain EU member states with signs of economic state-failure may arise.'

What are the driving factors for mobility? Which countries profit from it, which are led into potential disaster?

'There are several explanations for professional mobility. The traditional



one is the search for better remuneration and working conditions, for example from former Eastern Europe to Western Europe, which is still going on. A somewhat luxurious variation starts from a comparatively high level, e.g. Germany, to an even

better one, for example Switzerland or the United Kingdom.

'The weaker a system, the more it will lose, leaving local public structures stripped bare. The new migration from the West to the North, or to other continents, hits hard at such

structures, for example in Greece, Spain, Portugal, Cyprus and maybe even Italy. A young doctor wishing to gain scientific merits will leave an environment where this is no longer possible.

'The on-going Euro-crisis has added another element: many public structures can no longer pay their staff. Small wonder that doctors, still at work, are looking for alternatives. So, in a nutshell, where shrinking official payments are pending and perspectives are gloomy, there's hardly any reason to stay.'

What does that mean for healthcare systems in those countries?

'The effects are already showing devastating consequences, but have to be understood together with the growing lack of funds. In certain areas of the EU, hospitals that haven't paid their bills are denied the most elementary of materials for their everyday work, which is an added element of destructive potential for the future of a healthcare system. Politicians either don't look that way or have given up, since at a certain moment during the process of economic decline, even legally well-founded claims don't help you anymore.'

'However, you can't put the blame on those who leave. Research, sci-



Günter Danner MA PhD studied history, economics and international relations at universities in the United Kingdom, Germany, the USA and South Africa. Since 1982 he has worked for the Techniker Krankenkasse in Hamburg, first as a press officer, later as an analyst of political and socio-economic affairs in Germany and abroad and today as the personal advisor to the CEO and the Management Board. Since 1993, in addition to those tasks he has been engaged in the Liaison Bureau of German Social Security institutions in Brussels and, since 1997, has been the institution's Deputy Director. As an international expert on healthcare systems, their administration, performance and guiding political background he receives frequent assignments on EC projects in Central and East-European Countries (CEEC) undergoing social and economic transition, as well as in Russia and China.

ence and academic education are all suffering from brain drain. This is not restricted to healthcare. But what would you expect with an overall unemployment rate of people under the age of 25 reaching almost 60%?

Is professional migration or mobility similar between doctors and nurses?

'This is difficult to say with certainty, but most probably yes. Lay-offs normally start with nursing staff, for

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Spanish doctors and nurses emigrate for work

Report: Eduardo de la Sota MD

From January 2008 till the end of 2012 around 400,000 Spaniards decided to emigrate to find work. Since the first signs of what appeared to be an economic meltdown, between early 2008 and July this year, 357,418 Spanish people went abroad to work, according to the Electoral Census of Spanish Nationals Resident Abroad (CERA), which registers those over the age of 18 who wish to exercise their right to vote in Spain whilst

in other countries. In 2008, 1.2 million Spaniards were registered with CERA – that figure has now reached 1.56 million.

With the prospect of unemployment, which the Government admits will be over 24 percent in 2013 and 22 percent until at least 2016, this new exodus, which sociologists call 'selective emigration', is expected to rise. According to a recent study by researcher Adrian Zamoro 'Some would like to go to places like New York, Australia and even Africa, but

there is much more work available in central Europe. Germany has a high demand for industrial engineers; the Scandinavians for science and research; and in England, Ireland and France they require professionals for their health sectors.'

Spanish doctors emigration

Last year, 2,405 medical doctors applied for certification to work abroad, according to The Medical Spanish Association – a 75% increase compared with 2011. As non-EU

states do not require the certificate, the figure relates to EU migration. Médica Colegial, the body that represents Spain's medical associations, says that, in the first six months of 2013, it issued around 1,350 copies of medical licences required under EU law for doctors and nurses who want to work outside their own country. Last year it issued 2,349 such copies, and 1,835 in the previous year.

The most frequent specialties were anaesthesiology and general practitioners.

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Ikegami's Full HD video system



Ikegami has introduced a new full HD video system for medical applications, which consists of the MKC-210HD Full HD medical camera and the MLW-2150HD Full HD (3G) LED medical grade monitor.

With its 1/3" sensor and Full HD resolution (1920x1080 Pixel), the MKC-210 HD gives superb picture quality, especially when combined with MLW-2150HD, 21.5" Full HD 3G multi-format LED monitor, the manufacturer reports, adding that the 'remarkable picture quality produced by this equipment combination is available at a very competitive price'.

As an optional function, the MKC-210HD camera will also stream video over IP (H.264 compression), the company

adds, so it 'can be used for any kind of telemedicine application or for simple recording to PC'.

Another bonus is that, according to Ikegami, the system can be mounted easily on older microscope systems (C-Mount and VESA mount) and therefore is 'ideal for upgrading your SD microscope video system to Full HD resolution'.

Further details: www.ikegami.de or contact: medical@ikegami.com



Surgeon Jonathan Sackier MD has helped to introduce laparoscopic techniques and his studies have been widely published. He left the UK to work at the George Washington University, Washington, D.C. where he co-founded the Washington Institute of Surgical Endoscopy. There, in addition to research activities, students and residents, as well as physicians from all over the world, are taught laparoscopy techniques. Today, he is Professor of Surgery and Medicine, teaching at the Department of Surgery at the University of Virginia in Charlottesville.

Director, Magdeburg University Hospital for Reproductive Medicine and Gynaecological Endocrinology, agrees: 'We've been using the system from Fisher & Paykel and have seen very good results, for example a reduced number of adhesions. During the procedure, benefits include a smaller amount of narcotics is needed, because the stimulus targeting the peritoneum is reduced... We will not do laparoscopic procedures without this system from Fisher & Paykel Healthcare; I strongly recommend colleagues should embrace it.'

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Combating surgical infection risks

Shocking: Air quality checks are infrequent and insufficient in operating theatres. The good news: a new device can now measure pathogens circulating during surgical procedures, John Brosky reports

Surgical masks, special clothing and sterile packages – precautions taken to create a squeaky clean operating room are impressive, giving the surgical team confidence. Yet, this is exactly the space where the patient faces the highest risk of acquiring a deadly infection, with body opened, exposed to gloves, instruments and perhaps most importantly, to air.

Despite all the efforts made to prevent contamination, the Department of Health and Human Services recently estimated two out of every 100 surgical procedures in the USA result in surgical site infections (SSIs) and that healthcare-associated infections (HAIs) account for 1.7 million infections and 99,000 associated deaths each year.

The causes of infection remain a mystery despite prevention practices and advanced operating theatre technologies, such as horizontal flow ventilation or ultraviolet germicidal irradiation of upper room air.

Professor Daniel Talon MD believes you cannot prevent what you cannot measure. Head of Hygiene Services at the University Hospital Centre Jean Minjoz (Besançon, France), Prof. Talon developed the first device to measure pathogens circulating in the operating room during a surgery. Presented at the MEDTEC France exposition in May, ScreenAir was recognised as the top innovation in medical technologies at the event.

Currently, he said, standard practice in a hospital is to measure air quality in an operating theatre when no one is in the space. These air quality checks are performed every few months.

'This completely ignores the fact that any contamination in the operating room is created *in situ* by the surgical team,' he said, by their clothing, particles of skin that circulate, by their movements and even the number of time the door to the operating room is opened.

The ScreenAir device pulls the ambient air through a filter, pro-

grammed to sample the air at regular intervals during a surgical procedure. Each filter is indexed for the time of sampling to better identify when any contamination took place, thanks to a camera linking an image to the sample period. Each filter is then sent to the hospital lab for analysis using standard techniques to cultivate colonies of pathogens.

Early identification of a pathogen potentially hazardous to the patient enables the surgeon to consider administering a therapy of antibiotics before the infection can take hold. 'What we need is an ability to trace and quantify sources of infection,' Prof. Talon stressed. 'Checking the air every two months, or six months doesn't tell you much.'

The ScreenAir device is designed to be used for what Talon called clean surgery, procedures that do not involve the respiratory, gastrointestinal or genitourinary tracts, such as orthopaedic implantations, interventional cardiology, or laparoscopic procedures.

A professor at the University of Franche-Comté in Besançon, Dr Talon is a recognised authority on hospital hygiene and infections. He has authored 127 publications and his work has been cited 915 times in other publications.

He has studied the pathogens that infect patients, as well as the sources of contamination in the operating theatre by water, hands and clothing. In his field of expertise, shoes,



Professor Daniel Talon, head of Hygiene Services at the University Hospital Centre in Besançon, France



The ScreenAir device measures and quantifies the potential for aero-biocontamination during surgery

gloves and the fabrics used for surgical gowns are subjects for intensive study and discussion. Floor bacteria, for example, has been found to contribute up to 15% of airborne bacterial contamination in operating theatres. Microscopic particles of the patient's own skin floating in the air may carry flora that can establish a colony of fast-growing bacteria on freshly exposed tissue.

The professor first suggested bacteriological testing is crucial in a paper published in 2006, 'Air cleanliness in operating rooms: on-site controls and biological testing.'

'Today there is nothing available to measure and quantify the potential for aero-biocontamination of a patient during surgery,' he told European Hospital, adding: 'We are unable to say if an infection was caused by an operation or not. Now there is a device with ScreenAir.'

The device was developed in a tight collaboration between Prof. Talon, the Clinical Investigation Centre affiliated with the University hospital and STS Industrie. The director of STS Industrie, Dimitri Fournier, said the partners are now looking for opportunities to win regulatory approval for the device and begin commercialisation.

STARLED1 EVO offers cold light which will not alter or change

the target temperature on the surgical field or on the surgeons head

Exceptional versatility

LED exam lamp promises superior adaptability and control

STARLED1 EVO, an LED lamp manufactured by ACEM Medical Company in Italy, has been developed to suite several medical specialities, e.g. dermatology, general medicine, gynaecology, dentistry.

ACEM reports that it is multifunctional, versatile, and ideal for diagnostics, cosmetic medicine, first aid and recovery room. 'It's a reliable product that assures excellent light intensity and low consumption (12W) at the same time. The lamp is easy to move and the light head remains steady during its use once positioned, the firm adds. Its light beam is homogeneous and intense with 60.000 lux at 50 cm and produces an unparalleled quality of light together with a colour temperature of 4.900 °K and a colour rendering index (CRI) of 95.' Additionally, using the innovative I-SENSE touch panel light intensity can be adjusted to a desired light level for different needs. The lamp is available with an articulated or flexible arm and, according to its final use, can be provided with wall, rail and table clamp

or configured as ceiling or adjustable height trolley version.

One further important point, the firm explains: 'The lamp has a

smooth and easy-to-clean surface to allow the best cleanliness.'

Details: www.acem.it or info@acem.it

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