

## Is HIMSS ready for the technology of the future?

This is the question that Peder Jest, medical director at Odense University Hospital, will ask at the HIMSS conference in April 2015 in Chicago. In Odense, patients are treated in a way that not even Level 7 of the EMRAM model covers today.



- Is the EMRAM scale equipped to evaluate the health technologies on the future? Both technologically, but also concerning patient involvement?

These are some of the questions medical director at Odense University Hospital (OUH), Peder Jest will ask at the HIMSS conference in Chicago. The Electronic Medical Record Adoption Model scale (EMRAM) goes from zero to seven with seven representing the absolute best in the field of digitization and integration of IT systems in a hospital.

Healthcare Information and Management Systems Society (HIMSS) is an international organisation whose purpose is to promote the use of IT and telemedicine in healthcare systems across the world. On their website, HIMSS states *"Delivering Market Intelligence and Foresight so you Know What's Next."* Peder Jest kiddingly questions whether this is the case.

### **Odense is leading the way**

In Odense, they use the Shared Care platform which supports the cross-sectorial collaboration in regards to communication and sharing of data for patients with chronic disorders. The communication is between the general practitioners, hospitals, municipalities and the patients, based on the assumption that as much of the care as possible should be done in the primary care sector by general practitioners, specialist consultants, physiotherapists, chiropractors, psychologists, podiatrists and others.

- At Odense University Hospital we are able to do something that the EMRAM Level 7 does not cover today. For instance, we have the Shared Care platform and we have high expectations for medico technology and robot assisted surgery. A modern pacemaker, for example, contains data of great significance, and there are mobile patient data, which in the future will deliver data directly into the healthcare system, states Peder Jest.

In addition to this, there is the question of patient involvement and the use of health data generated by the patients themselves. In Denmark, the patient's own data are just as valuable as data generated at the hospital or GP when it comes to understanding and treating the condition of the patient. These things are not accounted for in the present model.

### **Patient involvement**

In Denmark and the Nordics patient engagement is a natural part of the healthcare system, and it will play an even bigger role for the coming citizens and users of health services.

In the future, patients will register many different kinds of data themselves. It raises the question of ownership, who has ownership of those data, what should be saved and where should it be saved?

Who is responsible for decisions made on the basis of the patient's own reported information?  
How will the EMRAM model handle these practical but also legal and ethical issues?

### **The road to Level 7**

A hospital at Level 7 provides the very best for its patients. Therefore, at the upcoming HIMSS conference, OUH and medical director Peder Jest will also be asking the following question to other colleagues; what is required to reach Level 7?

He is looking forward to hearing about the Dutch hospital that scored a 7 and whether it is based on the American or European model? What has the hospital been measured on?

### **Which model?**

At the first EMRAM assessment in 2012, OUH got a 6, based on the European EMRAM scale. At the latest assessment in 2014, OUH was assessed by the American model and achieved a 5.3 in total. To this, medical director Peder Jest says:

- In the European model we were close to a 7 and by the American model we only got 5.3. To reach Level 7, we have to maintain a highly developed IT system in the hospital – this is especially important so that we can keep developing and improving our treatment methods and the way we interact with patients. We are focused on what is missing in order to be assessed higher, and are continuously working on it. The new hospital will be built after the "Harvard Medical school model", where the university hospital is supported with a business area containing health economics, health technology and a humanities area. We will get a handle on this within the not too distant future and then achieve a Level 7 assessment.

### **Two particular areas need improving**

In order for OUH and other hospitals in Denmark to achieve a Level 7 in the assessments, they need to improve the medicine processes and achieve a 'closed loop medication system' where medicine is tracked from prescription to intake; the doctor prescribes medication for the citizen, information goes in the electronic medical record, the drugstore is responsible for a safe dosage distribution, and a documentation is created on whether or not the patient is taking his or her medication.

In Denmark, this area is closely related to the general practices, meaning the general practitioner and the municipality – and it is an area that should be developed in collaboration with the industry.

The second area that OUH needs to look at in order to reach the top grade is Clinical Decision Support (CDS), meaning ready-to-use support for clinicians. This can be done by collecting "Big Data" on each patient, i.e. all patient data - even the patient's own registration of symptoms and pain and whether the prescribed medication helped or did not help. *"This is based on the idea that the patient knows more about themselves than we do, and we should take their knowledge on their own health and condition into account when we treat them in the hospital"*, says Peder Jest.

Read about the innovative solutions that Odense University Hospital has in daily operations - and collaborate with other sectors on - on the website for the [Centre for Innovative Medical Technology, OUH](#).

To learn more about Odense University Hospital in general, visit [www.ouh.dk/english](http://www.ouh.dk/english).