

Club of Amsterdam

the future of Medicine  
**The Patient Experience**  
May 2003



Part I: **Keynotes** by



**Oliver Angerer**, MD, MSS, Human Exploration Science Coordinator, **European Space Agency**

[You can download his presentation 'Medicine for Mars'](#) (PDF, 1,487KB)

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**Prof. Dr. Chris De Bruijn**  
**European Institute of Molecular Medicine (EURIMM)**

[You can download his presentation 'My Genes, My Health'](#) (ppt, 41KB)

Part II: **Panel** with Keynote Speakers and  
**Ronald F. Schreuder**, Director, **Foundation STG/Health Management Forum**,  
**Rik Riemens**, Consultant, **Achmea Healthcare**,  
**Wouter Keijser**, MD, Medical Director, **dokterdokter.nl**, Board Member, **Dutch Patient and Consumer Federation (NPCF)**  
and our Host **Bernard Vast**, M.D. Healthcare ICT Specialist, **2Cure**.  
The panel is followed by an open discussion.

**Oliver Angerer, European Space Agency:** *"A manned mission to Mars is widely seen as the next step in human exploration. The technological and scientific preparation for these future exploration missions (lasting up to 1,000 days) is the mandate of ESA's new Aurora programme.*

One preparatory step for the manned Mars mission is to simulate long duration missions in isolated environments on Earth. This will be done in the Concordia Antarctic station where adaptation to extreme environments, altitude physiology, laboratory medicine, etc., will be studied. Telemedicine and self-monitoring of health are key components of such an isolated living environment. Concepts such as low invasiveness, speed, self-diagnosis and ease-of-use of instrumentation are being studied.

These studies can contribute directly to solving problems of living on Earth today in areas such as medical home monitoring, remote healthcare, waste management, stress management and dealing with hazardous elements."

### **Chris de Bruijn, European Institute of Molecular Medicine (EURIMM)**

#### **An outlook for the next ten years:**

"The next decade will show significant changes in the way healthcare is provided and financed in the industrialised world. The following forces will drive these changes:

- **Empowered patients will be impatient patients.** Inevitably there will be an empowered and more critical health consumer because they will pay more for medical care.

- **As a consequence of ICT developments, web-based e-health adaptability will be essential for survival of all players in the healthcare business.** Small, flexible health organisations could win the race, because they will adapt faster than large bureaucracies. Service and speed will be keys for consumer satisfaction.

- **Genomics will cause the shift from cure to prevention, pushing us to "live up to our genes".** Patients will know more about their own genetic profiles, motivating them to concentrate on illness prevention. New technologies will lead to more rational and standardised forms of medicine, requiring health providers and consumers to adjust from traditional frameworks."

### **Manage your Health**

*by Menno Scheers, Club of Amsterdam*

#### **the future of Medicine - the Patient Experience**

The Club of Amsterdam organised a conference about the future of healthcare focussing on the patient experience on May 28th, 2003. This report will give you a brief summary of the topics and the discussion between the panel and the participants of the Club of Amsterdam. The participants of the event filled out a questionnaire. The results are given in this report as well. Wanda van Kerkvoorden, (CEO, SOLV new business advocaten) was the host of this evening.

According to Chris de Bruijn (Scientific Coordination, European Institute of Molecular Medicine) the next decade will show significant changes in the way healthcare is provided and financed in the industrialised world. Empowered patients, ICT developments and genomics will drive these changes.

#### **Genomics**

Oliver Angerer (Human Exploration Science Coordinator, European Space Agency) explains that it's very important for ESA to be able to predict individual risks on bone mass reduction during a mission. In the future people will know more about their genetic profiles. Chris de Bruijn thinks that this will motivate them to concentrate on illness prevention. For example, specific food leads to a depression for people with specific DNA. With knowledge of genomics it's possible to prevent this depression by a diet.

Patients experience that their medical doctors aren't able to discover their disease. On molecular level there's really something wrong with those patients. These patients get a wrong medical treatment in different hospitals. New technologies and knowledge of the molecular level will lead to more rational and standardised forms of medicine. Genomics will cause the shift from cure to prevention, pushing us to "live up to our genes" (Chris de Bruijn).

Chris de Bruijn agrees with an attendant that in future we're able to focus on health instead of disease. At the moment the focus is on disease with genomics. Genomics makes it possible to focus on building blocks of health. This more positive view on health can help to cure

The Club of Amsterdam asked the attendants if they want to know that their health percentage is only 34% and that they have 8 years and 145 days left. 58% of the attendants answered yes. The others said no. 84% of the participants wants to know how big the possibility is that they get a specific disease. 68% of the attendants thought that they would quit with a specific bad habit when they know exactly how much longer they would live. 74% said they would use knowledge of their genes to predict the possibility on specific diseases before getting a baby.

### **Technology developments**

Chris de Bruijn thinks that web-based e-health adaptability will be essential for survival of all players in the healthcare business as a consequence of ICT developments. Small, flexible health organisations could win the race, because they will adapt faster than large bureaucracies. Service and speed will be keys for consumer satisfaction.

Technology is pushed forward for empowerment of patients. Don't people have to change their attitude first? Wouter Keijser (Medical Director, dokterdokter.nl, Board Member, Dutch Patient and Consumer Federation (NPCF)) describes a patient as 'the waiting.' In the future the patient is more active. Dossiers will be accessible all over the place. The medical doctor will be a coach. It needs time to change this attitude.

Rik Riemens (Consultant, Achmea Healthcare) states that a lot of people won't use technology and change their behaviour to a more active approach. As an example he tells about a person with a broken hip who had to wait two months for their medical treatment. He didn't pick up the phone, even if he knew that he could get help immediately.

42% of the visitors would mind to be medically treated by a robot or a computer. To the question if hospitals should focus more on technologies rather than on social aspects to provide a higher quality of healthcare in the future, 37% answered yes. 58% thought that clonage should be allowed to develop for example a second hart or kidney for transplantation.

74% wouldn't prefer to go to a medical doctor instead of using a self-monitoring system to get a diagnosis for their disease. 84% of the visitors thought that real-time information about the health of their body would make them live healthier. 26% thought that real-time information about the health of their body would make them feel happier.

### **Financing healthcare**

Empowered patients will be impatient patients according to Chris de Bruijn. Health consumers will be more empowered and more critical, because they will pay more for medical care. The way of financing of healthcare will change because of the shift from cure to prevention in the future. How do we have to finance prevention?

It is possible that insurance companies are going to select their clients. Then people with a high risk for cancer who smoke won't get an insurance. Rik Riemens says that insurance companies should only use general information for the insurance instead of individual genomics. To the question if people with 'good' genes should have to pay less insurance, 95% of the participants answered no.

But if you know what you get, why should you have an insurance? Ronald Schreuder (CEO, STG/Health Management Forum) thinks that the whole insurance concept needs to be re-defined. People with a lot of overweight are sure to get a lot of other diseases. An insurance company might say that people with overweight get surgery, but that they have to pay a part of the money back if they eat too much again. An attendant stated that 'someone' has pushed bad products with wrong information to us. What are insurance companies going to do? At the moment the government is making policy for it.

The shift from cure to prevention seems to be less expensive. Ronald Schreuder states that this is not really true. Some ways of prevention are very expensive. People will get older and die of other diseases. Patients with lung cancer are relatively cheap.