Status of Austrian Telemedicine & ehealth Activities

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URL: www.telemedicine.at

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Status of Austrian Telemedicine & ehealth Activities

Quelle: Google Earth 2006
Facts:

8 neighbour states - international partners

9 district countries - national/ local government

approx. 8,3 Mio citizens (source: Statistik Austria 2006)

over 29 Mio guests every year (19 Mio from the neighbour states) (source : Statistik Austria 2005)

10% of the Austrian employees earn direct or mediate their income due to health- services (source : BMS 2004)
TM & e-Health Centers in Austria

3 public Medical Universities in Vienna, Graz and Innsbruck (www.meduniwien.ac., www.meduni-graz.at, www.i-med.ac.at)

1 privat Medical University in Salzburg

1 privat University for Medical Informatics and Technics in Hall in Tyrol www.umit.at

2 postgraduate Master Degrees for TM & E-Health in Graz and Krems
Austrian Law - Gesundheitsreformgesetz 2005

Excerpt from the Artikel 10 - Gesundheitstelematikgesetz:

✓ eHealth-directors of members
  (health services)
✓ Monitoring eHealth
  (infrastructure reports, Evaluations)
✓ Internet platform for e-Health
  (Quality Criteria’s and Guidelines)
✓ Informationmanagement
  (Transfer of Knowledge and Experience: best practices, Berichte)

Source: Mag. Engelbert Prenner - BMGFJ
Status of Austrian Telemedicine & eHealth Activities

Official WG´s for TM & e-Health in Austria

from the Austrian Government

WG for TM & e-Health (BMGFJ und BMUKK) www.bmgfj.gv.at www.bmukk.gv.at

STRING Commission (BMGFJ) www.bmgfj.gv.at

eHI-Plattform - AG2 und AG7 (BMGFJ) www.bmgfj.gv.at

ARGE ELGA - BGA www.arge-elga.at

several Commissions, WG´s in the 9 district countries

societies and companies with mainfocus to TM&ehealth:

ASSTeH - Austrian Scientific Society for TM & ehealth www.telemedicine.at

Austrian Research Centers - ARC, eHealth Systems www.arcs.ac.at

HITT www.hitt.at
Austrian Scientific Society for Telemedicine and eHealth www.telemedicine.at is the National Member of the ISfTeH - www.isft.net

official organ of the society: Journal for Telemedicine and Telecare - www.rsmpress.co.uk/jtt.htm
Facts:

• approx. 4 Mio Austrians (62% age > 14) uses the internet and has access from home (source: Marktforschungsinstitut INTEGRAL 4.Q 2006)

every second Austrian internet user (57%) already shopped in the internet (source: medienforschung.orf.at; 2005)

over 8 Mio e-card-users
Frage: Derzeit ist der Ausbau der e-card geplant. Sagen Sie bitte zu den folgenden Ausbaubereichen, ob Sie da dafür oder dagegen sind.

(in Prozent)

- die Installation des e-card-Systems auch in den Spitälern und Krankenhäusern: 90% dafür, 0% dagegen, 0% w.n.
- das elektronische Rezept, also auch die Einbindung der Apotheken in das System: 73% dafür, 15% dagegen, 12% w.n.
- die elektronische Überweisung an andere Ärzte, so dass man keinen Überweisungsschein mehr braucht: 83% dafür, 10% dagegen, 7% w.n.
- das Enthalten von medizinischen Befunden durch medizinische Einrichtungen, um unnötige Mehrfachuntersuchungen zu vermeiden: 77% dafür, 15% dagegen, 8% w.n.

source: poll to the e-card 06/2006 IFES SV sample: 1000 citizens over 18
Telemedicine Projects in Austria?

6 presentations > 5 projects at the Med-e-Tel 2007:

1. **A Telemedical Therapy-Management System with Rule-Based Active Patient Feedback**
   M. Pinsker, P. Kastner, G. Schreier
   Austrian Research Centers - ARC, eHealth Systems, Austria

2. **CANIS - Quality Enhancement in Emergency Medicine through Wireless Wearable Computing**
   S. Grasser, J. Thierry, C. Stingl, C. Hafner
   Carinthia University of Applied Sciences, Department of Medical Information Technologies (MedIT), Austria

3. **The Emergency Physician: A Beast of Burden?**
   C. Hafner, J. Thierry, S. Grasser
   Carinthia University of Applied Sciences, Department of Medical Information Technologies (MedIT), Austria

4. **A Geo-eHealth System for Large Scale Epidemiological Blood Pressure Assessment**
   G. Schreier, S. Welte, Hayn, P. Kastner
   Austrian Research Centers - ARC, eHealth Systems, Austria

5. **Status of Austrian Telemedicine Activities**
   P. Soegner[1,2,3], V. Soegner-Tinhof[2], D. zur Nedden[1,3]

6. **Video-Communication in Home Care: The Application and the Business Model**
   T. Pfeller
   TELEMEDconsult, Vienna, Austria
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Proven Outcome?

36 indexed publications about TM in Austria (source pubmed 4.Q 2006)
since the last 10 years over 150 projects in the different fields of eTM in Austria

but

only about app. 15 eTM projects persist longer than 5 years
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Continual improvement of the quality management system

Key
- Value-adding activities
- Information flow

Figure 1 — Model of a process-based quality management system
Masterplan: Circle of E-Health Projects - Model Tyrol

- medical Workflow
- medico-legal
- Quality Management
- economy
- technic
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Decision-Model for future projects in e-Health and Telemedicine

Analysis of the 1.st proposal
Analysis of the 2.st proposal
Ready-to-go Project
Tyrolean TM-Project 1997-2001

Medical Fields:

- Teleradiology
- Teledermatology
- Teleophthalmology
- Telepathology
- Teleradiooncology
- ...
ISO 9001:2001 Description of the teleradiology workflow (Dept. Rad2/ MUI)
### Status of Austrian Telemedicine & ehealth Activities

**The number of all transferred emergency teleradiology cases**

<table>
<thead>
<tr>
<th>Scenario 1 (48 months)</th>
<th>Scenario 2 (54 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3788 cases</td>
<td>4212 cases</td>
</tr>
<tr>
<td>Ø 78,92 pat. /month</td>
<td>Ø 78,92 pat. /month</td>
</tr>
<tr>
<td>Ø 68,1 pat. /month</td>
<td></td>
</tr>
<tr>
<td>Tyrolean hospitals: 3.267 (68,1 TR-cases/ month)</td>
<td>Only Tyrolean hospitals</td>
</tr>
<tr>
<td>Austrian Military Camp in Albania: 521TR-cases</td>
<td></td>
</tr>
</tbody>
</table>

☑ **Increase of access of care**
Teleradiology

Teleradiology is a subprocess of the radiologist’s broad range of duties. The final report is only part of a clinico-radiological procedure, that includes the justification, modality selection, protocol of investigation. The clinical responsibility for the whole process bears the radiologist according to Austrian law (§5 MedStrSchV, i.e. medical radiation protection law 2004).

Statement Mosser as chairman of the working group Teleradiology/eHealth of the Austrian Roentgen Society 2007
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Welcome to telederm.org!

Open Access Teleconsultation in Dermatology

telederm.org is a unique medical application for medical students, physicians and healthcare workers interested in dermatology with the goal to facilitate the online discussion of interesting and unusual cases in clinical dermatology and dermatopathology.

In the spirit of Open Access Teleconsultation every user can easily seek diagnostic advice from a pool of other users willing to share their knowledge, some of whom might have more experience in a particular clinical setting. This open access structure encourages reciprocal exchange: simply by using the multi-hub facilities of the Internet, a colleague seeking help in one instance may later have the opportunity to provide expert help in another instance.

This teleconsultation service is based on the transmission of digital images following the store-and-forward method. Every user can submit clinical and dermatopathologic cases to the "discussion forum" visible to all users, who can review the cases and submit on-line opinions. So, the content is user-generated based on the Open Access philosophy.

Because of this open and basically unstructured approach the role of moderators is crucial in order to introduce and explain the concept of Open Access Teleconsultation to the users and most important to guide and supervise the discussion. In this context it is our pleasure to introduce the new and international team of moderators, all of them dedicated and enthusiastic on the emerging world of teledermatology.

A special "thank you" and a salute go to Cesare Massone, who was for more than two years the moderator of telederm.org.

Please register yourself to the service. (See menu on the right side) You will be informed by e-mail regarding the next steps.

Only medical students, physicians or healthcare workers are able to register and access the application. telederm.org is completely free of charge and the site does not host or receive funding from advertising.

For more information on the telederm.org project please go to:

- An interview with Cesare Massone in "Health Information on the Internet" (April 2005) can be found here

H. Peter Soyer, MD
Rainer Hofmann-Wolffhof, MD
Department of Dermatology
Medical University of Graz
Graz, Austria

Source: Prof. Peter Soyer - Dermatology Graz
Health in Action

telederm.org: Freely Available Online Consultations in Dermatology

H. Peter Soyer*, Rainer Hofmann-Wellenhof, Cesare Massone, Gerald Gabler, Huiting Dong, Fezal Ozdemir, Giuseppe Argenziano

Introduction

e-Health matters. It can improve access to healthcare and boost the quality and effectiveness of the service offered.

e-Health describes the application of information and communications technologies across the whole range of functions that affect the health sector.

This is the introductory statement of a recent communication from the European Commission that produced the report “e-Health—Making Healthcare Better for European Citizens: An Action Plan for a European e-Health Area” [1]. Easy access to expert medical information and counseling independent of social, economic, ethnic, and regional factors is regarded as a major goal of medical policy today.

Figure 1. Discussion Forum: Image Viewer Allows Magnification of an Unusual Elbow Lesion

DOI: 10.1371/journal.pmed.0020087.g001

Figure 1. Discussion Forum: Image Viewer Allows Magnification of an Unusual Elbow Lesion

are free, and are controlled and subsequently activated by the moderator. Each user is also given a
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Nokia 7650

Lichen planus

Origin: Prof. Peter Soyer - Dermatology Graz
Ideal TeleDiagnosis
Mobile Application

- Speed diagnosis and lower costs by automating data collection and submission
  - Patient billing info
  - Personal history
  - Basic case information
  - Site photos
- Integrate with Telephony for real time consultative sessions
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Austrian Camp in Shkodra

Teleradiology during 05.-11.1999 over 400 transmitted patients
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Tyrolean Telemedicine Project
Innsbruck - Shkodra
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Tyrolean Telemedicine Project
Innsbruck - Shkodra

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More information under: www.healthatnet.at
Invitation to Austrian ehealth Conferences

ehealth Benchmarking Conference - 10.- 11.05.2007 - Hall i.T. UMIT


ehealth2007 - Vienna - 1.06.2007

www.ehealth2007.at
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 Wouldn’t it be great if he could stand up and see the whole picture?
Thank you for your attention!

For further questions:
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