Latest Developments of Telecare in Germany

International Congress on Telehealth and Telecare
Dr. Detlef H. Schmidt, MSc.
Federal Association of the AOK
## Agenda

1. Different Construction Sites
2. Official Efforts
3. Pragmatic Users
4. Oscillating Attempts
5. Summary and Conclusions
Different Construction Sites
Drivers of Health Telematics in Europe

Source: The European Health Telematics Observatory
Three Layers of Telecare Use

- Official efforts
- Pragmatic users
- Oscillating attempts

Course of time
Official Efforts

- Purpose: Economy - Quality - Transparency
- Introduction has a delay of 4 years so far
- Several pilot regions refused to test the card
- Chamber of Physicians rejected the card in their National Assembly 2010; reasons mentioned:
  - Piloting failed
  - Data protection of patients is not given
  - Protection against control by health insurance funds
  - Data must not be stored on a central server and
  - must not get into the hands of health insurance funds
- Estimated costs 4.5 to 7.6 Billion €

Mandatory applications

- Provision of administrative data (data identifying the citizen and his or her insurance status, address etc.),
- Provision of information about share of private co-payments,
- Transmission of electronic prescriptions,
- Provision of data required by European regulations for having access to medical treatment in the Member States of the EU (in Germany the data will not only be visible but also stored on the chip, thereby creating an “Electronic European Health Insurance Card” - e-EHIC).

Voluntary applications:

- Emergency data set (minimum health data set),
- Electronic physician letter: transfer of various messages on test results, diagnoses, suggested therapies, treatment reports and similar to support patient centric services of providers,
- Full documentation on all prescribed or otherwise bought or taken drugs,
- Electronic patient record: integrated documentation of data on test results, diagnoses, therapies, treatments and immunisations covering all interventions across all service providers,
- Integration of data supplied by the patient or third parties (e.g., on blood sugar level, patient testament and similar),
- Electronic administration of mandatory private co-payments.
Official Efforts: The Long Way to Introduction of the Electronic Health Card IV

Present Consensus

- Process is moderated (mediated) by former Secretary of State
- Dedicated working packages to the partners:
  - Federal Association of the Social Health Insurance Funds (GKV-SV): Development of an online management of insurants administrative Data
  - Chamber of Physicians (BÄK): Development of an emergency data set
  - National Association of Statutory Health Insurance Physicians (KBV): Communication between health care providers

Statutory Health Insurance Funds are forced to supply at least 10% of all insurants with the card by 31.12.2011, otherwise administrative costs are cut by 2%
Efforts of the National Association of Statutory Health Insurance Physicians

- Implementation of online “SafeNet”, originally built for online reimbursement and administrative issues
- Since beginning of 2011 online reimbursement mandatory
- SafeNet also applicable for communication among the different providers and for storage of patient documentations
- Of 130,000 physicians only 18,000 use the SafeNet or similar nets

Apparently physicians do not feel a need to use ICT for their purposes although they spend up to 1 hour daily only for scanning documents to be sent
Providers’ Opinion about Telematics in Health Care

Significant improvement would be:

- Electronic record of emergency data: 68% (Physicians total), 57% (in outpatient care), 79% (in hospitals)
- Electronic doctors’ letter: 63% (Physicians total), 49% (in outpatient care), 76% (in hospitals)
- Electronic prescription check: 56% (Physicians total), 50% (in outpatient care), 61% (in hospitals)
- Electronic patient record: 55% (Physicians total), 36% (in outpatient care), 73% (in hospitals)
- Electronic prescription: 23% (Physicians total), 18% (in outpatient care), 28% (in hospitals)
- Nothing of all: 10% (Physicians total), 20% (in outpatient care), 1% (in hospitals)

Source: IfD Survey 5283 2010 Dtsch. Ärztebl. 105:A1685-90
### Benefits of Different Fields of Application of Telemedicine

5 = very high benefit, 1 = no benefit

<table>
<thead>
<tr>
<th>Field</th>
<th>Very High Benefit</th>
<th>No Benefit</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teleradiology</td>
<td>43 %</td>
<td>37</td>
<td>4</td>
</tr>
<tr>
<td>Teleconsultation</td>
<td>20</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td>Telemonitoring</td>
<td>18</td>
<td>36</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: IfD Survey 5283 2010 Dtsch. Ärztebl. 105:A1685-90
Pragmatic Users
Pragmatic Users

- Usually hospitals taking advantage of more efficiency of ICT (mainly radiology, dermatology, telecontrol of intracardiac devices)

- Special situation of „virtual stroke units“: overcoming the structural deficit

- In outpatient care few examples exist of taking advantage from telecare: Common use of telematics for the transferral of blood-sugar tests and Insulin-injections via PEN by diabetologists to work more efficiently
  - work-up of the results by the server
  - individual alarms according to situation of the patient
  - feed-back to patients
Pragmatic Use of Telemonitoring of ICD I

Number of Patients Visits According to Controlling Method

Pragmatic Use of Telemonitoring of ICD II

Reduction of the clinical visits (REFORM-Study)
preliminary results 115 patients

Oscillating Attempts
Between Piloting and Marketing: Individual Monitoring of Patients with Specific Diseases

Despite of hundreds of papers, results are not convincing in terms of:

- Is it effective? If so…
- What is the effective element?
- To whom is it effective?
- At what stage of the disease is it effective?
- How long is it effective?
- Is it cost-effective?
- …
What is the research question?

- Does the technical equipment work adequately and is the quality of the transmission as well as the native signal?

- Are people capable to handle the technical equipment? Where are the limits?

- Does it provide an advantage in terms of effectiveness or efficiency?

- The question of outcome: does the individual monitoring contribute to an improvement of care in terms of complications, hospitalisation, survival?

If it is so…

- What implications of telecare on the health care system have to be managed?
Difficulties of Proper Research: Quality of Studies

- Multimorbidity
- Different study design
- Standards of intervention
- Comparative studies (monitoring vs. nurse telephone service)
- Cost-effectiveness
Results: The Telemedicine to Improve Mortality in Heart Failure Study (TIM-HF)

In stable ambulatory patients with chronic heart failure, remote telemedical management does not reduce:

- All-cause Mortality
- Rates of hospitalizations

Important aspects of physical function and quality of life (i.e. depression) can be improved by remote telemedical management.

Subgroups with possible benefit that require further investigation:

- HF patients with prior HF hospitalization
- HF patients without depression
- HF patients without very low LVEF (i.e. <25%)

Source: Presentation Köhler, Charité Berlin, Congress of the American Heart Association, 13-17. Nov. 2010
Summary and Conclusion
Summary

- In Germany it seems to be difficult to implement a telematic infrastructure by law
- Apparently organised enterprises like hospital chains can take advantage of some telematic applications
- Research is often focussing feasibility rather than health care
- Research is often focussing marketing rather than science
- Research is not focussing the implications of telcare for the whole system
Conclusion

- The outpatient section of the German health care system with isolated private practices is not the adequate structure for telecare
  - no orientation on microeconomics in terms of efficiency
  - communication with other providers is not in the centre
  - therefore the meaningful use is not recognizable from that perspective

- Managed structures are able to raise the benefit of telecare

- Health care research is required to study the effects of telecare in terms of the implication on...
  ... resources and time of the providers involved, both of the hub and the spoke
  ... specifying the target groups both of the providers and the patients
  ... the concept of health care provision (organisation, education, patient orientation, etc.; pictures vs. patients)

...and finally on the financing model for those applications not efficient at the first sight but necessary
Thank you for your attention!