Session 9
Conclusions & Recommendations

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Presentations in Session 9

1) Measuring Economic Benefits of E-Health
   Mr. Masatsugu Tsuji

2) Measuring Economic Benefits of E-Health
   Mr. Peter C. Waegemann

3) Economic Benefits of E-Health Standardization from Japanese Perspective
   Mr. Makoto Ishikawa
Highlights from Presentation 1
(Measuring Economic Benefits of E-Health)

- Revealed preference method
  1. Travel cost method (Evaluation I)
  2. Replacement cost method
     (Evaluation II)
  3. Hedonic method

- Stated preference method
  1. Contingent valuation method (CVM)/Willingness to Pay (WTP) approach (Evaluation III)
    a) Less anxiety in day-to-day life
    b) Enhanced consciousness towards health
    c) Stabilization of illness
    d) Decrease in medical expenses, etc.
There are benefits for electronic administrative and financial systems in health care, for e-pharmacy, for mobile health (m-health), as well as for electronic health record systems.

Benefits are described in five categories:
1. Financial benefits/return on investment,
2. Reduction of medical errors,
3. Benefits to patients,
4. Benefits to practitioners and providers, and
5. Better efficiency.
Highlights from Presentation 3

(Economic Benefits of E-Health Standardization from Japanese Perspective)

- **Businesses benefit from standards.**
- Potential Competitive Advantage through Standards
- Cost Reduction through Standards
- Effects of Standards on the Supplier/Client Relationship
- Effects of Standards on R&D Activities
- Benefits for Intellectual Property Holders through Standardization

- **Users benefit from standards. (for doctors and their staffs, and hospitals using E-health products and systems.)**
- Price reduction of products/services
- Facilitates the selection of sellers in the market
- Facilitates training for machine/system operation
- Facilitates the acquisition of complementary goods in the market
Overview of issues in the session

- Subjective evaluation and objective evaluation methods were discussed but it may be too early to finalize items to quantify the benefits of E-Health.
- Quantitative evaluation results were provided by one of the presenters. Accumulation data and continuous monitoring of such data will reach to the basic Key Performance Indicator to measure the benefits of E-Health of country, community levels including developing countries. More wider collection of case studies should be encouraged.
- There was the argument about the quantification of benefits of E-Health. Patients satisfaction in various angles were stressed. The given figure of medical errors was surprising. The target of working area for this E-Health group should be identified since the area will be wide.
- In the mean time there people in the developing world who have no opportunity to expose themselves to the medical services in their life.
Electronic Health Record

m-Health

m-Health

Electronic Health Record

Administrative and Financial Systems

e-Pharmacy

e-Health

Standardization in E-health
Recommendations

- List up the items to evaluate the benefits of E-Health from various angles such as B/C, WTP/CVM, reduction of medical errors, better efficiency, user/business perspective, etc.
- Continuity of data monitoring of listed items
- To establish data base may be useful, in particular, with regard to the data and case studies in developing countries
- Defining Key Performance Indicator to evaluate the benefits of E-Health implementation should be studied based on the field data
<table>
<thead>
<tr>
<th>Action Item</th>
<th>Lead</th>
<th>Other Players</th>
<th>Priority</th>
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<tbody>
<tr>
<td>List up the items for monitoring</td>
<td>Prof. M. Tsuji</td>
<td>Any volunteers</td>
<td>As necessary</td>
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<td></td>
<td>as agreed</td>
<td></td>
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<td>Accumulation of data (database)</td>
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<td>If funded</td>
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<tr>
<td>Definition of KPI</td>
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<td>ditto</td>
<td>As necessary</td>
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<tr>
<td>Qualitative approach</td>
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<td>ditto</td>
<td>As necessary</td>
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**Conclusion**

- It may be early to conclude the KPI for measuring the benefits of E-Health
- Qualitative and quantitative evaluation should be pursued
- Accumulation of data from various countries, agencies and institutes, etc to conclude the KPI
- Collection of case studies will advance the work