Web-Based Personal Health Records

A holistic approach for health management, prevention and early diagnostics

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Background

- A structured provision of Prevention and Early Diagnostics is needed to significantly improve healthy life years
- Empowerment of individuals in their health management is crucial in realizing prevention
- Personal Health Records can fulfill these needs

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Objective

- To identify issues in preventive health services via web-based PHRs

- To propose a framework for a holistic approach for prevention and early diagnostics via web-based Personal Health Records

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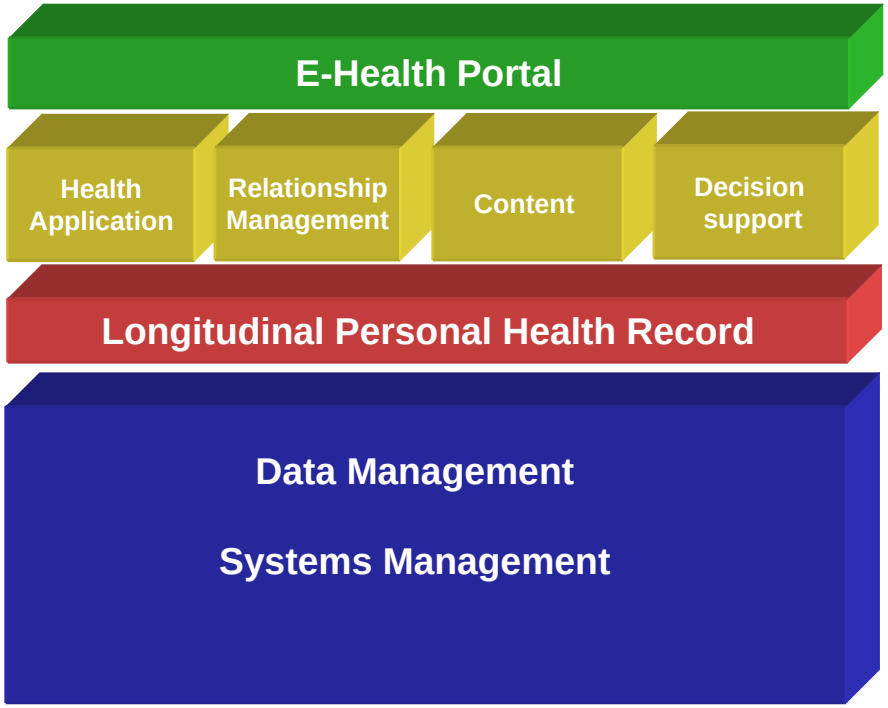
Web-based Personal Health Records

- **Web-based PHRs:**
  - **contain longitudinal health information**
  - **are sourced by both the individual as well as the health care professional**

- **Contained information comprises:**
  - **major illnesses**
  - **family and social history**
  - **medication, allergies and immunizations**
  - **lifestyle data**
  - **diagnostic test results**
  - **Home-monitored data**

→ **Web-based PHRs therefore enable additional services based on this information**



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Interactive prevention and early diagnostics services

- Current online health services mainly have a disease management focus
- Currently a holistic and structured approach for Prevention and Early Diagnostics services are lacking

→ A more prevention and early diagnostics focus is needed to improve individual health

→ A common structure is needed for provision of preventive services

→ Web-based PHRs can do just this

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Empowerment of individuals

- Web-based PHR can also provide preventive decision support for the individual, making the individual in charge of its own health

- Algorithms providing this functionality should therefore be:
  - Evidence-based and quality assured
  - Supported by healthcare providers to guarantee acceptance

- Process flow of individual decision support:
  - Knowledge system processes PHR data into personal risk profiles
  - Risk profiles are communicated to the individual
    → health education
  - Risk profiles are converted in tailored health plans
    → health improvement
  - Repeating the cycle gives insight in advances
    → health monitoring

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Discussion and conclusion

- Currently preventive and early diagnostic services are scattered and structural provision is lacking
- Web-based PHRs provide a unique opportunity to implement a holistic approach for prevention and early diagnostics
- To broadly implement effective prevention, early diagnostics and subsequent early intervention, a PHR with the functionality of health risk assessments and tailored health plan generation is necessary.

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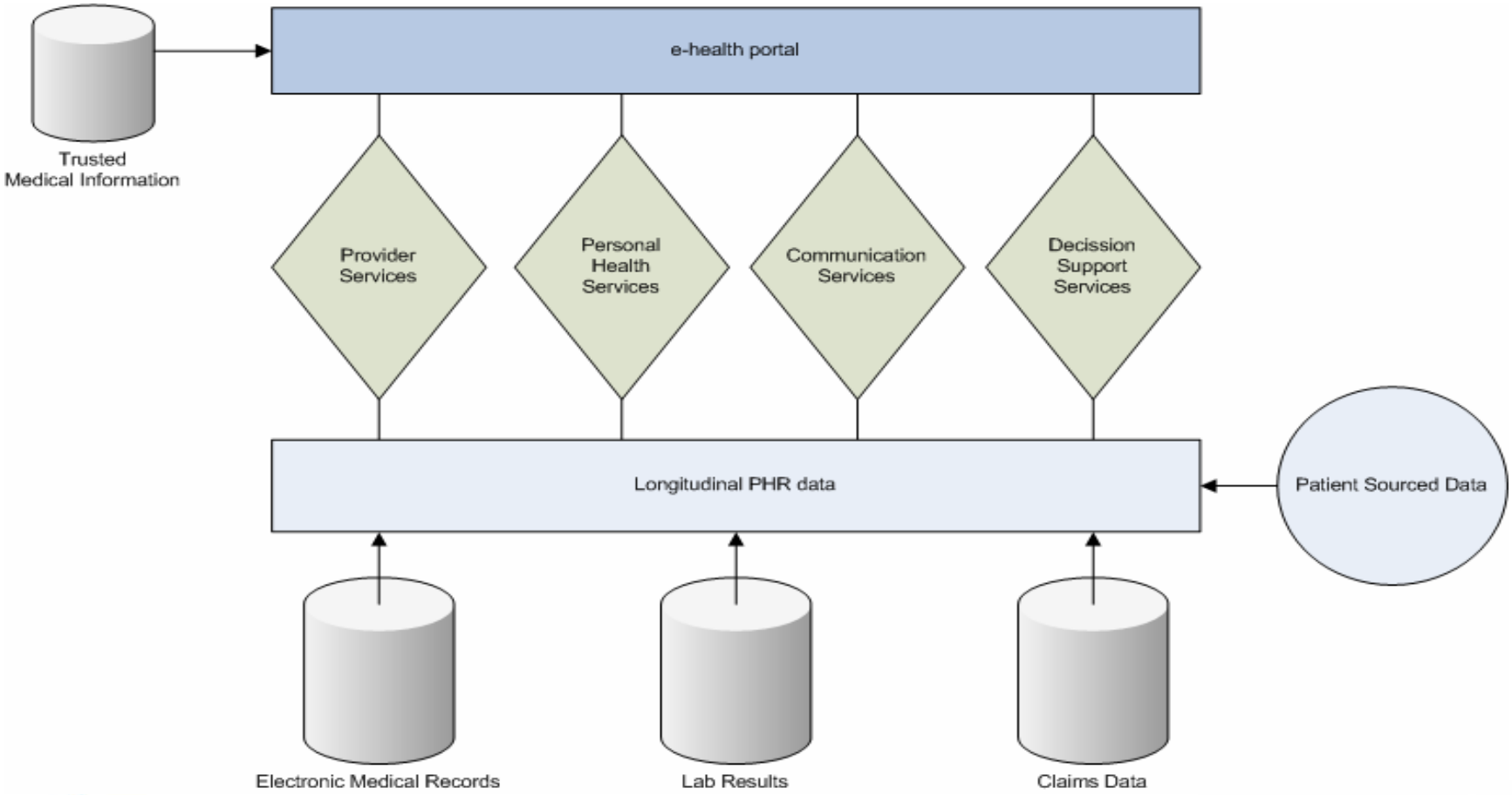
A holistic approach platform for prevention and early diagnostics



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