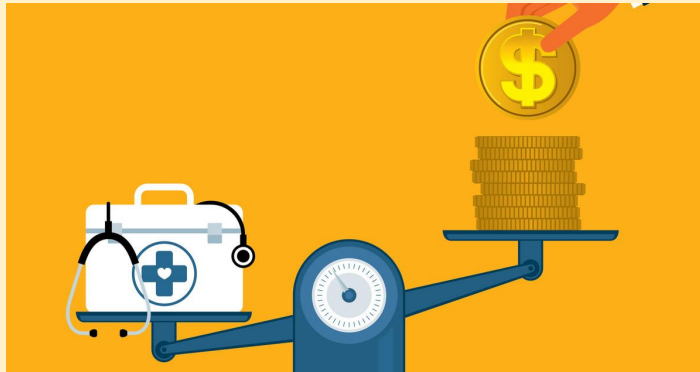


Improving Healthcare Quality and Costs through Health Informatics

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SAT 5424



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Informatics Role in Healthcare

“Health informatics plays a crucial role in healthcare by combining information technology, computer science, clinical knowledge, and management science to ***improve patient care***, enhance efficiency, and ***reduce overall costs***.”



(Gibson, 2023)



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Relevance

- Large quantities of data being collected/analyzed
 - better patient diagnosis/treatment
 - improve public health systems
 - assist government agencies to design/implement policies
 - research



Target Population

- Patients/communities
- Healthcare providers
- Administrators
- Payers
 - insurance companies
 - government agencies



Impact on Population Health

- Identify health trends and patterns
- Preventative care and chronic disease management
- Coordinated/comprehensive care
- Public health surveillance
- Value-based payment models
- Access to care
- Patient engagement



Challenges

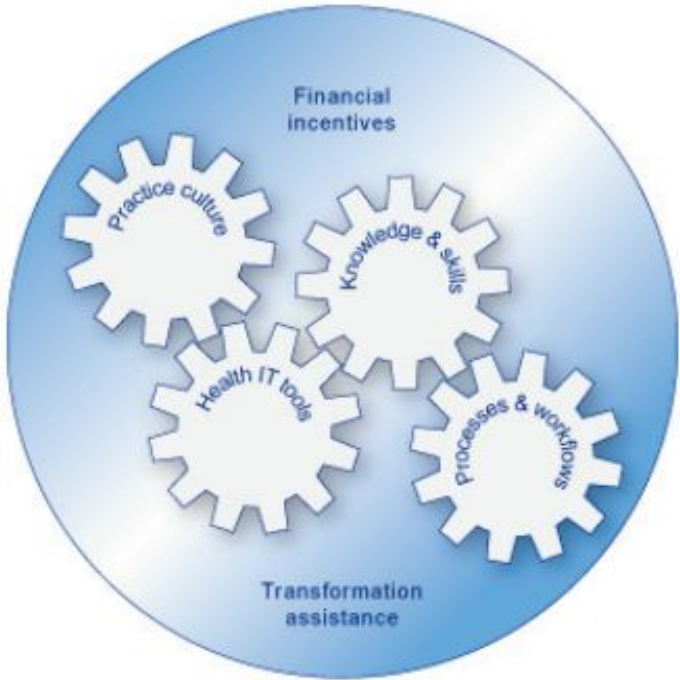
- Rapid influx of clinical data
- Integration in clinical workflow/resistance of staff
- Interoperability
- Data quality
- Data Privacy and Security
- Cost and Return on Investment



Related Work

White Paper

Using Health Information Technology to Support Quality Improvement in Primary Care



Perceived Impact of Digital Health Maturity on Patient Experience, Population Health, Health Care Costs, and Provider Experience: Mixed Methods Case Study

Health care costs

Resource burden of ongoing investments

Resource burden of a skilled workforce

Economic benefit visible

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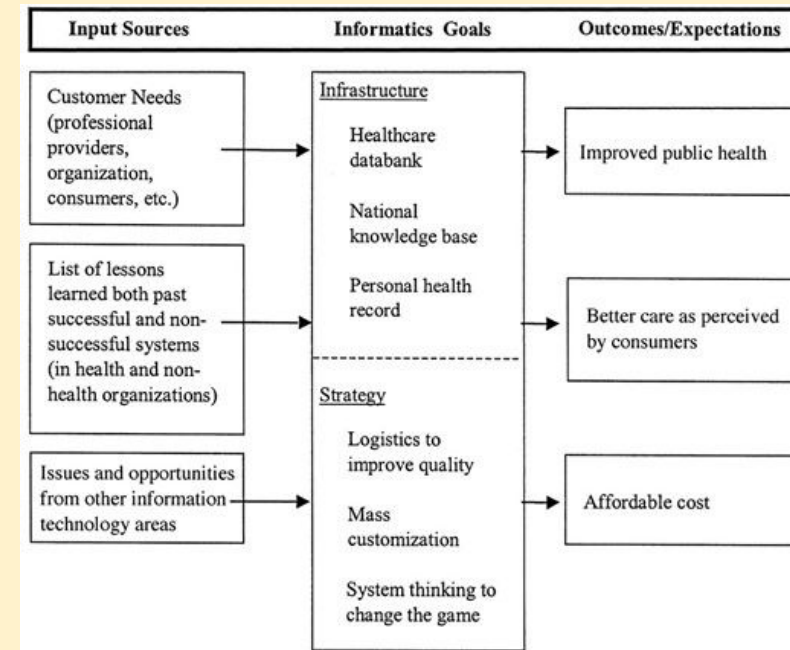
Opportunities Moving Forward

- Impact of Artificial Intelligence on Healthcare Quality and Cost
- Telehealth and Remote or at home Monitoring
- Adoption and Implementation of HIT
- Data Standards and interoperability



Conclusions

- Improved quality of Patient Care
- Cost Reduction
- Opportunities for Research
- Effective Population Health Management



Source: Health Informatics: Linking investment to value.



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