

THE CHANGING WORLD OF HEALTH CARE I.T.

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Health Care Software

CLINICAL SYSTEMS

- Electronic Medical Record
- Specialty Medical Records (e.g. cancer, pharmacy, medication, radiology, lab)
- Imaging Systems (PAC' s, RIS)
- Decision Support (case management, variation reduction)
- Departmental Systems (ED, ICU, Radiation Oncology)
- Demographic Analyses (SEER, CPIC, Medicare)

BUSINESS SYSTEMS

- Revenue cycle management
- Supply chain management

CLIENT SYSTEMS

- Patient Portal
- Medical websites / app' s
- e-Visits
- Telemedicine

Health Care Problems

COST

- Medical errors
- Coding/billing errors
- Duplicate testing
- Unwarranted variability
- Complexity
- Process inefficiency

QUALITY

- Deviation from best practice
- Misdiagnosis
- Innovation

ACCESS

- Patient confusion
- Irregular patient follow-up
- Inconvenience

Health Care Problems (cont' d)

COST

- Medical errors
 - Coding/billing errors
 - Duplicate testing
 - Unwarranted variability
 - Complexity
 - Process inefficiency
- Electronic Medical Record
 - Specialty Medical Record
 - Imaging Systems
 - Decision Support
 - Departmental Systems
 - Demographic Analyses
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- ```
graph LR; A1[Medical errors] --- B1[Electronic Medical Record]; A1 --- B2[Specialty Medical Record]; A1 --- B3[Imaging Systems]; A2[Coding/billing errors] --- B2; A2 --- B3; A3[Duplicate testing] --- B3; A4[Unwarranted variability] --- B4[Decision Support]; A4 --- B5[Departmental Systems]; A5[Complexity] --- B4; A5 --- B5; A6[Process inefficiency] --- B4; A6 --- B5; A6 --- B6[Demographic Analyses];
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## QUALITY

- Deviation from best practice
  - Misdiagnosis
  - Innovation
- Revenue Cycle Management
  - Supply Chain Management
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graph LR; A7[Deviation from best practice] --- B7[Revenue Cycle Management]; A7 --- B8[Supply Chain Management]; A8[Misdiagnosis] --- B7;
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ACCESS

- Patient confusion
 - Irregular patient follow-up
 - Inconvenience
- Patient Portals
 - Medical Websites / App' s
 - e-Visits
 - Telemedicine
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graph LR; A9[Patient confusion] --- B9[Patient Portals]; A9 --- B10[Medical Websites / App' s]; A9 --- B11[e-Visits]; A9 --- B12[Telemedicine]; A10[Irregular patient follow-up] --- B9; A10 --- B10; A10 --- B11; A10 --- B12; A11[Inconvenience] --- B9; A11 --- B10; A11 --- B11; A11 --- B12;
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# IMPROVEMENTS

- Transactional → Relational
- Reduce HIPAA Requirements
- Delay ICD-10
- Reprioritize
- Simplify
- Database → Cloud