Care without boundaries

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Overview

Problem
health care is obstructed by a litany of IT boundaries. The legacy health IT ecosystems, poor integration and proprietary data models are a significant contributor to the problem.

Solution
Standards driven, open IT approach to build a public health utility to rationalize our health IT ecosystem.

Why it’s important
- The costs of health care (financial and human suffering) are increasingly untenable
- A health care market is actively emerging around standards driven health care automation. Don’t miss it
- Join a #hit2.0 open standards community:
  - BPM+ health
  - Logica health
Patient journey: Our expectations

PCP clinic → Home care → Specialist

Specialist → Urgent care → Hospital

Care manager → Specialist
Challenges

- **Customer’s server** systems locked in closets
- Static **digital ink**: fragmented, poorly standardized health care data across the patients journey
- **Poor integration** between legacy health IT tech
- Population health analytics driven primarily by **months old claims data**

Effect

- Health care delivery is a slow, inefficient, **gap filled and incredibly expensive** endeavor
- It is a profoundly **unsatisfying experience** for all users; patients, health care providers, caregivers and public health workers
- It is **obstructed** by a litany of IT boundaries
Patient journey: The reality

PCP clinic  Home care  Care manager

Specialist  Urgent care  Hospital

Specialist
Health IT 2.0
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Attributes of next generation health IT

• Democratization of health care data and knowledge

• Aligned to industry standards: API-based, cloud hosted and secure

• Plug: Play SaaS marketplaces on standards driven platforms

• Event driven automation of accepted clinical practice guidelines

• Population health analytics driven by just-in-time electronic health record (eHR) data
The next great disruption in health care is happening now
The conceptual solution: A system of insight

- Systems of record
  - Data ingestion and standardization
  - Knowledge evaluation
  - Business process automation
  - Secure data and knowledge syndication

- Systems of engagement
Digital health platform – reference architecture

Data ingestion and standardization

- Data retrieval
- Persistence

Knowledge evaluation

- Orchestration
- Auditing
- Provenance
- Error management

Business process automation

- Surveillance
- Workflow
- Knowledge
- Automation
- Secure APIs

Secure data and knowledge syndication

Core platform

- Business process automation

Services ecosystem

- Transformation services
- Terminology services
- Identity management services
- Unstructured data/NLP services
- Data validation services
- Data labeling and metadata services
- Deduplication services
- Record linking services
- Privacy and consent services
- Access and control services

Container platform

- Cloud providers
Demo
HealthConcourse solutions

Legacy EHR modernization
- Optimize current data
- Cloud migration
- FHIR modernization

Best practice guidelines
- Automate into workflows using BPM+ Health
- Near real-time quality monitoring
- Own your IP

Registry 2.0
- Automate data collection
- Augment existing registries
- Bi-directional APIs
- Smart on FHIR

Sentinel
- Near real-time risk identification
- Diseases outbreak
- Drug and vaccine adverse events
HealthConcourse partner coalition
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Questions at the end

Did we show you:

• Aggregation, standardization and optimization of patient data to drive process interoperability, computations, automation and analytics

• Invocation of best in breed third-party knowledge services, such as clinical decision support rules, expressed through a CDS-Hooks interface

• Orchestration and automation of the VA and DoDs clinical practice guidelines (CPG) using enriched FHIR endpoints and the BPM+ Health standard

• How these technologies and standards are applied within a holistic digital health platform with the VA/DoD CPG for CKD use case

• Provide reusable business process models and executable knowledge artifacts in a standards based, SOA middleware
  • Automate menial human tasks clogging in health care workflows
  • Operate with population health science and along each patient’s journey
Thank you