Veteran care without boundaries

Standards-based automation of clinical practice guidelines

Date: March 10–13, 2020
Time: Demonstrations start on the hour
10:00 a.m. – 4:00 p.m.
Location: Hall E – Interoperability Showcase

perspecta.com/healthconcourse

Our vignette partners | healthconcourse
What you are going to see

You will discover how standards allow complex teams to make continuous improvements to care plans, such as CKD management, and ensure compliance throughout the process.

Along the patient’s journey, you’ll see best practices implemented to ultimately avoid the devastating impacts of kidney failure and costly dialysis, including how closed-loop process automation can provide both real-time monitoring for high-risk cohorts and mitigate risks at the patient level.

Interoperability supported by FHIR, BPM+ for Health, and CDS-Hooks for the automation of the VA-DoD Clinical Practice Guideline for the Management of Chronic Kidney disease.
True patient centered care is obstructed by a litany of IT boundaries that markedly increase cost and complexity to achieve health and well being goals.

Our current healthcare is:

1) Too expensive
2) Too unreliable
3) Too inaccessible
4) Too inefficient
5) Too unsatisfying

Legacy (1.0) healthIT systems bind their customers into longterm, inflexible IT contracts using proprietary data models.

Facts:

It takes **17 years** for best practices to spread across healthcare workflows.

Over the past 4 decades we have seen a **31X** increase in U.S. per capita healthcare costs.

Medical knowledge doubles every **73 days**
Chronic kidney disease CKD

What it is:
Over time, kidneys are damaged and can’t filter blood the way they should.
This damage can cause deadly build up of wastes in the body.
Preventable condition most frequently caused by diabetes and hypertension

Why it’s bad:
Medicare $120B annual spend (33% of FFS budget)
9 in 10 patients don’t know they have it
3x weekly dialysis is required once kidneys die
CKD is a high risk condition for pain management with Opioids

How to prevent it:
Identify the high risk patients early and give them:
• $20 diabetes education annual subscription
• $100 bag of IV fluid at the right time
• Treat hypertension
• Encourage healthy eating habits and encourage exercise

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Field leading information on mitigating CKD risks

Extremely effective at decreasing costs and human suffering when followed closely

Currently only on paper and not in Patients or Providers workflows
Care with Boundaries

Sources
- EHR Vendor 1
- EHR Vendor 2
- RDBMS
- Mobile App
- HIE

Knowledge
- Decision Support
- Calculators
- Algorithms
- Artificial Intelligence

Insights
- Dashboards
- Analytics
- Mobile Apps
- SMART on FHIR Apps

Processes
- Manuscripts
- Pocket Cards
- SOPs
- Guidelines
Solution

Care without Boundaries

• Standards driven, Open IT movement to build a Public Health Utility to rationalize our healthIT ecosystem

• CKD e-pocket card

• Workflow integrated

• Identify high risk patients from cohorts early, intervene before irreversible kidney damage occurs
Chronic Kidney Disease – ePocket card
BPM+ Health, FHIR and CDS Hook automation

VA/DoD CKD Pocketcard:
Demo – HealthConcourse

BPM+ implemented as software
Chronic Kidney Disease BPM+ Model Implemented as Software

Operationalization

- Automated Implementation
- Automation of Process Improvement
Operationalization: Binding Data Objects

Data objects needed as input or output from modeled activities

Bound to FHIR endpoints from HealthConcourse (patient data sourced from multiple EMRs/SORs)
Operationalization: Binding Decision Nodes to Knowledge Services

Key decisions in the model

Bound to knowledge services brokered through HealthConcourse

Care without Boundaries