

# SETTING THE WORLD ON FHIR®

Published by HL7®, an international not-for-profit organization, Fast Healthcare Interoperability Resources (FHIR®) is a standard for exchanging healthcare information electronically.

A series of case studies illuminating how HIT professionals are using HL7® FHIR® to improve and advance modern healthcare

## GEISINGER AND THE STEELE INSTITUTE FOR HEALTH INNOVATION

Geisinger is committed to making better health easier for the more than 1.5 million consumers it serves. Founded more than 100 years ago by Abigail Geisinger, the system now includes 13 hospital campuses, a 600,000-member health plan, two research centers and the Geisinger Commonwealth School of Medicine. With 32,000 employees and 1,800 employed physicians, Geisinger boosts its hometown economies in Pennsylvania and New Jersey by billions of dollars annually.

Its Steele Institute for Health Innovation acts as an accelerator and an incubator for new ideas with a goal of not only improving health, care delivery, patient experience and affordability, but of also leading the nation in building transformative, scalable, measurable and sustainable solutions for the healthcare industry.

### Goal

- To standardize MedTrue™, Geisinger's EHR-integrated workflow solution that gives healthcare providers and their patients a complete and accurate list of all medications used by a patient for use outside of Geisinger's technical ecosystem

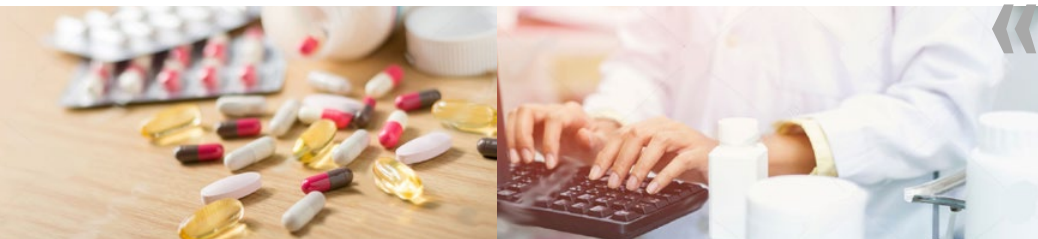
*MedTrue™ was developed through a collaboration between Geisinger and Merck, Sharp & Dohme Corp.*

### Opportunity

- By converting the MedTrue's application programming interface (API) from standard electronic health record (EHR) web services to HL7® FHIR® services, Geisinger aimed to pull data from a more standard, scalable range of sources



CASE STUDY



At one time, about 70% of our medication lists were inaccurate. MedTrue™ has helped us clean up medication lists so patients and providers can be on the same page—an important step toward improved patient safety.

— Mike Evans, RPh, VP of enterprise pharmacy and chief pharmacy officer, Geisinger

## Project

MedTrue utilizes many custom data sources that allow physicians to review patient-reported and nurse-verified medication lists and push them into the EHR, providing instant updates to the patients' charts. Without FHIR, MedTrue has challenges pulling data from standard, non-custom sources such as non-Geisinger EHR systems. With FHIR, MedTrue would be able to pull from more standardized sources extending its potential scalability. Due to the limited adoption of FHIR write backs by the major systems, it remains only able to push these lists back to Geisinger's EHR via custom data services.

Medication Changes		Current Medications	
Name	Ignore/Approve	Name	Adherence Fill Rate Taking Last Taken Edit Remove
<b>Cardiovascular</b>		<b>Cardiovascular</b>	
ATORVASTATIN CALCIUM 20 MG PO... LIPITOR Ordered - Sep 4, 2018 Source - SureScripts	Ignore Approve	CHLORTHALIDONE 25 MG PO TABS HYGROTON 1 Tab. Source - Epic	80% 100% [X] Last Taken [Edit] [Remove]
<b>Endocrine</b>		<b>Endocrine</b>	
REPAGLINIDE 2 MG PO TABS PRANDIN Ordered - Aug 21, 2018 Source - Epic	Ignore Approve	METFORMIN HCL 500 MG PO TABS GLUCOPHAGE Take 2 Tabs by mouth 2 times a day with morning and evening meals. Source - Epic	100% 40% [X] Last Taken [Edit] [Remove]
<b>Unknown</b>			
aspirin Source - Patient	Ignore Approve	EMPAGLIFLOZIN 25 MG PO TABS JARDIANCE Take 1 Tab by mouth daily. Source - Epic	NA 73% [ ] Last Taken [Edit] [Remove]

MedTRUE™

## Progress

Geisinger remains hopeful that write backs and other custom data services will be able to use FHIR in the future with MedTrue, and if successful, it can be shared with other FHIR-enabled health systems to enhance their medication reconciliation processes, uncover patient issues with medication adherence and support patient engagement.

**MedTrue™ has helped us clean up medication lists in our system to reflect patients' total medication use. Technologies like FHIR® enable us to share our successes more easily with other systems.**

— Eric A. Wright, PharmD, MPH, professor and director, Center for Pharmacy Innovation and Outcomes, research system director, Research and Innovation, Enterprise Pharmacy

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