

SETTING THE WORLD ON FHIR®

Published by HL7® International, a 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

BOOKZURMAN INC.

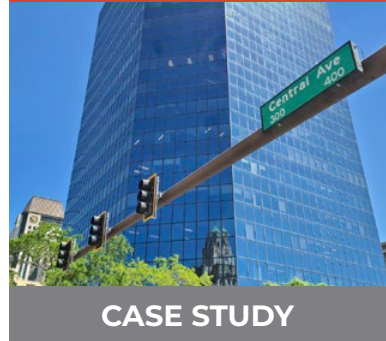
BookZurman is a healthcare technology and consulting company in St. Petersburg, Florida that works with healthcare organizations, government agencies, and other stakeholders to improve healthcare delivery, data management and interoperability, and patient outcomes. The company specializes in managing complex program lifecycles that include developing, deploying, and maintaining large-scale, enterprise-wide healthcare IT systems.

Goal

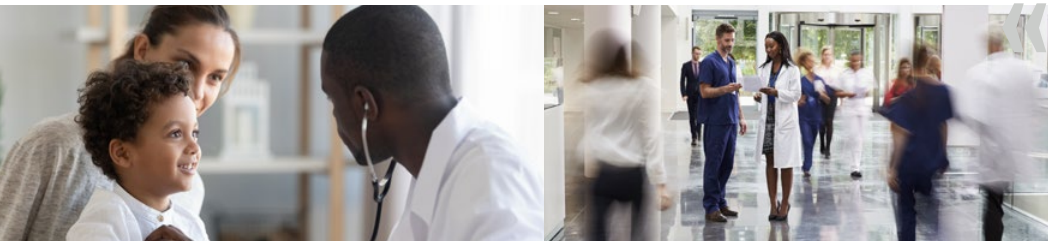
To improve healthcare coordination across the continuum of care

Opportunity

To develop a technology solution using HL7®FHIR® that connects community-based providers and patients with the right patient data at the right time



CASE STUDY



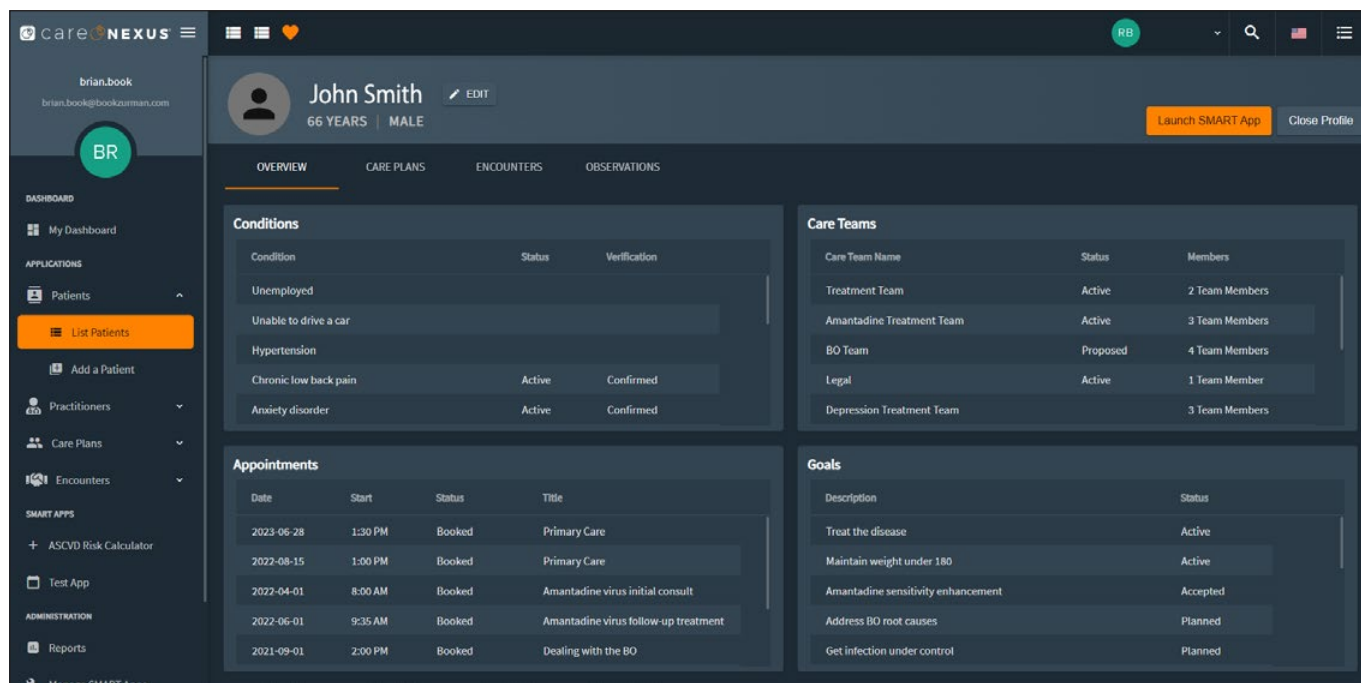
CareNexus enables care team members from multiple organizations immediate access to patient information in one place – improving communication among patients and cross-community care teams.

— Brian Book, president, BookZurman

Project

When diagnosed with one chronic condition, patients are very often plagued with healthcare issues that go beyond the challenges of their initial concern. Along with additional chronic conditions, patients deal with cascading costs and the need to work with multiple providers and healthcare organizations to coordinate care.

The U.S. healthcare system lacks incentives and quantitative evaluation tools to assess coordination in a patient's care transition process. This is necessary because poor care coordination has been identified by many studies as one of the major root causes for the U.S. health system's inefficiency, poor outcomes, and high cost.



Despite efforts dedicated to improving care coordination, technical gaps still exist on how to understand and assess care coordination in a qualitative, quantitative, effective, and methodological manner. This prompted BookZurman to develop CareNexus®, a coordinated care planning solution that connects community-based providers and patients across the continuum of care.

This solution gives organizations the patient data needed to enable providers with the right information, for the right patient, at the right time—improving care quality and data management. CareNexus is a chassis that aggregates patient data in a single place and makes that data available to all participants in the care plan. The key element comes in its ability to launch HL7 SMART on FHIR applications that allow the extension of functionality to support any workflow needed for diagnosis, treatment, and management of the patient journey.

Connecting to any data source, including health information exchanges (HIEs), CareNexus shares information with any electronic health record (EHR) or care provider consolidating current systems into one HL7 FHIR database. Extensible for future requirements through SMART on FHIR apps, CareNexus is continually updated to support rapidly evolving standards. The HL7 FHIR SMART App Launch Framework connects third-party applications to EHR data, allowing apps to launch from inside or outside the user interface of an EHR system.




Progress

The patient data that is currently and primarily used by service providers and care managers resides in case management systems and provider systems. CareNexus is designed to streamline the ability to exchange and make this data available to all members participating in patient care.

Care coordination is identified by the National Academy of Medicine (formerly Institute of Medicine) as a key strategy that has the potential to improve the effectiveness, safety, and efficiency of the American health care system. Well-designed, targeted care coordination that is delivered to the right people can improve outcomes for everyone: patients, providers, and payers.

One challenge for CareNexus is community adoption of FHIR and access to FHIR compliant data. As the adoption of FHIR continues to accelerate this will become less and less of a barrier.



CareNexus is flexible. It can run as a stand-alone platform; it can be connected to multiple FHIR endpoints with the capability to launch SMART on FHIR (SoF) apps; or it can be launched as a SoF application within another platform like Epic or Cerner.

— Dave Carlson, MBA, Ph.D., standards-based solutions architect, Clinical Cloud Solutions, LLC



Health Level Seven International 3300 Washtenaw Ave. Suite 227 Ann Arbor, MI 48104 USA
P: 734.677.7777 E: hq@HL7.org W: HL7.org