Data Exchange Solution Summary

Data Exchange Solution Name:	Emergency Medical Services
Sponsor:	Not Applicable
Date:	August 25, 2025

Executive Summary

The purpose of this data exchange solution is to establish a streamlined process for the seamless sharing of (Continuity of Care Documents) among EMS services, hospitals, and members of the patient's care team.

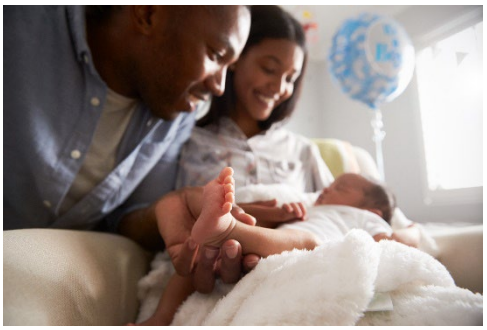
Purpose of Data Exchange Solution: The purpose of this Data Exchange Solution is to establish a streamlined process for sharing Continuity of Care Documents (CCDs) among EMS services, hospitals, and members of the patient's care team. This collaborative effort aims to enhance the quality and timeliness of care delivery by ensuring the efficient communication of crucial patient information. With the implementation of this solution, hospital staff will gain access to a variety of important information from the patient's emergency medical team prior to a patient's arrival, including their demographics, medical history, where available, medications, and other pertinent information, such as the patient's current vital signs, that can help make the difference in critical care situations.

This comprehensive data exchange is designed to accelerate patient care and treatment. Furthermore, by extending the access of CCDs, real-time updates from the ambulance ride and hospital stay can benefit members of the patient's care team who have onboarded to receive messages from this and other data exchange solutions. This proactive approach enhances overall patient care coordination and contributes to improved patient outcomes.

Overview

The Emergency Medical Service data exchange solution provides many improvements in transitions of care and the communication of vital information between emergency teams and hospital staff. Especially in situations where time is of the essence, ability for care staff awaiting a patient to review their status and prepare accordingly can make all the difference to a patient's wellbeing in a traumatic situation. This streamlining of care coordination with the assistance of this data exchange solution is illustrated in the following persona stories.

Persona Stories



Alex Thompson, a 34-year-old environmental engineer from Seattle, always considered himself healthy. Regular hikes and a careful diet gave him confidence in his well-being. But one Tuesday morning, a sudden, severe chest pain turned his world upside down. Initially, he thought it was stress or indigestion, but the pain intensified, radiating to his left arm and jaw. Feeling faint and drenched in sweat, Alex realized he was in serious trouble. Fighting panic, he dialed 911.

The 911 operator's calm voice guided him until the paramedics arrived. They confirmed he was having a heart attack and began immediate treatment. They gave him aspirin, monitored his heart with an EKG, started an IV, and administered medications to stabilize his heart rate, reassuring him throughout.

The paramedics transferred Alex to the ambulance, continuing to monitor his vital signs and provide oxygen. They transmitted a detailed report to the nearest hospital via a Continuity of Care document sent through its connection with MiHIN, ensuring the ER team was prepared for his arrival. Upon reaching the hospital, Alex was swiftly taken to the cardiac unit, where the ER team, fully briefed on his condition, continued his treatment seamlessly. The coordinated effort between the EMS team and the hospital staff ensured Alex received prompt and efficient care, significantly improving his chances of recovery.

Lying in his hospital bed, Alex felt profound gratitude for the quick actions of the paramedics and the seamless communication of his status between teams. This experience reminded him of life's fragility and the critical importance of timely and coordinated medical care.

Gail Simpson, a 61-year-old resident of Southfield, Michigan, always took meticulous care of her health. Despite successfully managing hypertension and diabetes, one crisp morning she felt sudden numbness on one side of her body. Her right arm became immobile, and her speech became slurred. Realizing the severity, Gail dialed 911 before collapsing.

Paramedics arrived swiftly, recognizing stroke symptoms and administering Alteplase to minimize brain damage. They provided oxygen and monitored her vitals on the way to the hospital. Gail's Continuity of Care Document (CCD), detailing the medical history the EMS team was able to ascertain and her current medications, was transmitted to the ER team enroute.

Upon arrival, the ER staff, prepared by the CCD, quickly took over, conducting a CT scan to confirm the stroke's nature and location. Knowing her medical background, they continued her treatment without delay.

Thanks to the seamless coordination between the EMS team and the hospital, and the vital information in the CCD, Gail received prompt and effective care, improving her chances of recovery.

Diagram

This diagram shows the information flow for this data exchange solution.

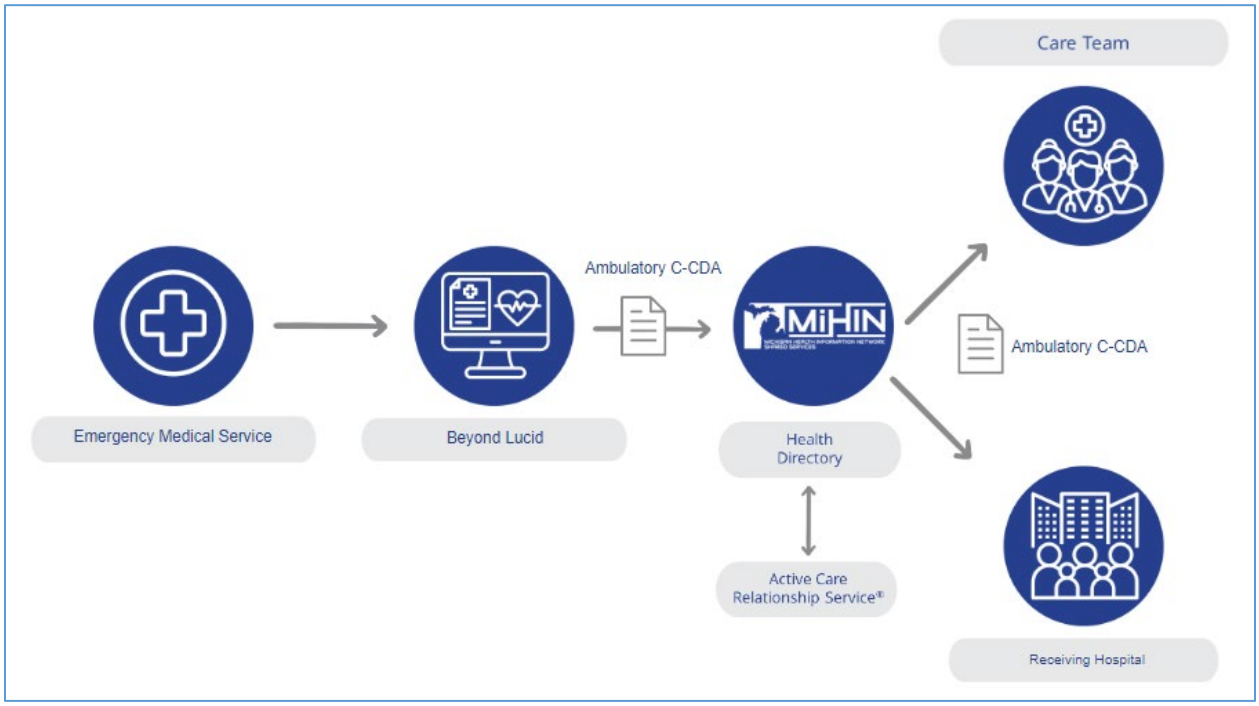


Figure 1. Emergency Medical Services Data Flow Diagram

1. Emergency Medical/Ambulance Service on route to a hospital will generate and send patient data, including current health status and medical history information to BeyondLucid vendor.
2. BeyondLucid receives patient information and generates a corresponding ambulatory C-CDA, and sends to MiHIN.
3. MiHIN receives the ambulatory C-CDA and uses it to create a Real-Time Active Care Relationship between the patient and the hospital they are enroute to.
4. MiHIN sends the ambulatory C-CDA to the receiving-hospital and all members of patient's care team that have onboarded as an ambulatory C-CDA receiver.