DATE: March 1, 2024

TO: Region 11 EMS Systems Participating Hospitals

FROM: Region 11 EMS Systems Resource Hospitals

SUBJECT: **NEW ECG TRANSMISSION TO HOSPITALS**

Dear Participating Hospitals,

The Chicago Fire Department (CFD) will be transitioning to new cardiac monitor equipment in June 2024. This transition will require all hospitals to update the mode in which they receive 12-lead electrocardiograms from CFD EMS in the field to emergency department and cardiology staff at receiving hospitals.

The new *ZOLL* EMS monitors use *ZOLL RescueNet 12-Lead* (see enclosed product information) to transmit and alert ECG transmission from EMS to the hospitals. This product is **NO COST** to Region 11 EMS Systems Participating Hospitals.   Hospitals that wish to continue using the current *Stryker LIFENET* product, may do so but will still need to work with *ZOLL* to integrate the *LIFENET* system at their hospital, and they will have to continue paying for the *LIFENET* product.

Please complete [this online form as soon as possible](#) so that we may begin the transition process. After completing the online form, Zoll representatives will reach out to the identified contacts at each institution to begin the implementation and customization of *ZOLL RescueNet 12-Lead* at your facility. Finally, please note that we must complete this process as soon as possible so that there is no interruption in ECG transmission to your hospital when the transition occurs.

Please confirm completion of the online form by replying directly to this email or emailing cboyd@team-iha.org.

If you have any questions, please feel free to reach out to Dr. Joseph Weber at jweber@cookcountyhhs.org.

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Enclosed: [RescueNet 12-Lead Development Plan Introduction](#)

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RescueNet® 12-Lead

Development Plan Introduction

February 20, 2024

Confidentiality Statement

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DOCUMENT OVERVIEW

Purpose

The purpose of the Deployment Plan Introduction is to identify the appropriate deployment resources and strategies and activities for successful implementation of ZOLL RescueNet® 12-Lead.

This introduction is to provide a high-level overview of ZOLL RescueNet® 12-Lead application and an understanding of options available to help support the new processes and/or technology for receiving pre-hospital 12-Leads.

Audience

This document is intended for use by:
- Administrator
- Clinical Leads
- IT Services

Objectives

Ensure that all impacted departments understand the requirements for the implementation of ZOLL RescueNet® 12-Lead.

Dependencies

Access to business resources for input and review of the deployment plan

- Clinical leads
  - Emergency Department Leads
  - Cath Lab Leads
- IT / Digital Services Groups
  - Application Support
  - Security Teams

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Overview

ZOLL Online

ZOLL Online is a cloud base SaaS solution that provides access to ZOLL RescueNet® 12-Lead and ZOLL other Code Data software.

Efficiently manage defibrillator ECG data with ZOLL Online applications for hospital, paramedic, and fire services enable collaboration and improve access to data for the continuum of care. Safe, secure, and redundant management of your critical data lets you focus on patient care to improve outcomes.

Available in the United States, Canada, Germany, and Australia, ZOLL Online is hosted by Amazon Web Services (AWS), one of the world's leading cloud service providers, and adheres to all data privacy and protection regulations for each country.

www.zollonline.com

RescueNet® 12-Lead Application

Deliver prehospital care at the patient's side and transmit 12-lead lead data from the X Series® or X Series Advanced monitor/defibrillator for complete collaboration between pre-hospital and hospital care providers. Strong prehospital and hospital collaboration positively impacts outcomes for STEMI (ST-elevation myocardial infarction) patients. Initiate STEMI bypass protocols as needed. RescueNet® 12-Lead enables rapid diagnosis and distribution of secured and efficient management of 12-leads. EMS to hospital collaboration has had a major impact on outcomes for STEMI (ST-elevation myocardial infarction) patients. Pre-hospital management of these patients allows for distribution of 12-lead to hospitals, and anyone involved in the continuum of care.

Secure cloud browser-based application makes 12-lead data accessible to hospitals and services in the continuum of care within minutes. Innovative technology enables real-time communications. Securely send 12-lead data directly from the patient's side, enabling rapid diagnosis and treatment.
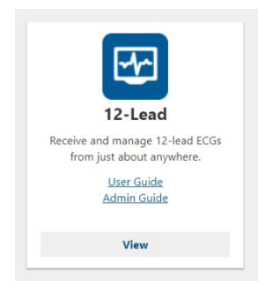
This deployment introduction plan provides a clear understanding of options available and requirements to support the processes and technology of 12-lead management and distribution.

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ZOLL RescueNet® 12-Lead

12-Lead Application

Access through secure website. Provides access to any 12-leads that have been sent from Fire/EMS services with ZOLL defibrillators to the selected destination. All 12-leads received by RescueNet 12-Lead by are available to view, print, export and redistribute if needed.

Hospitals can have access to any 12-lead that has been sent to their specific hospital. Hospitals will be able to login and view the list of 12-leads and information such as the received and acquired date/time, the agency, unit, and device interpretation.

12-Lead Interface

The Inbox is the repository of all 12-Leads received by RescueNet 12-Lead for the destination hospital. The Inbox displays basic 12-lead information such as the received and acquired date/time, the agency, unit, estimated time of arrival (ETA), status, and interpretation.
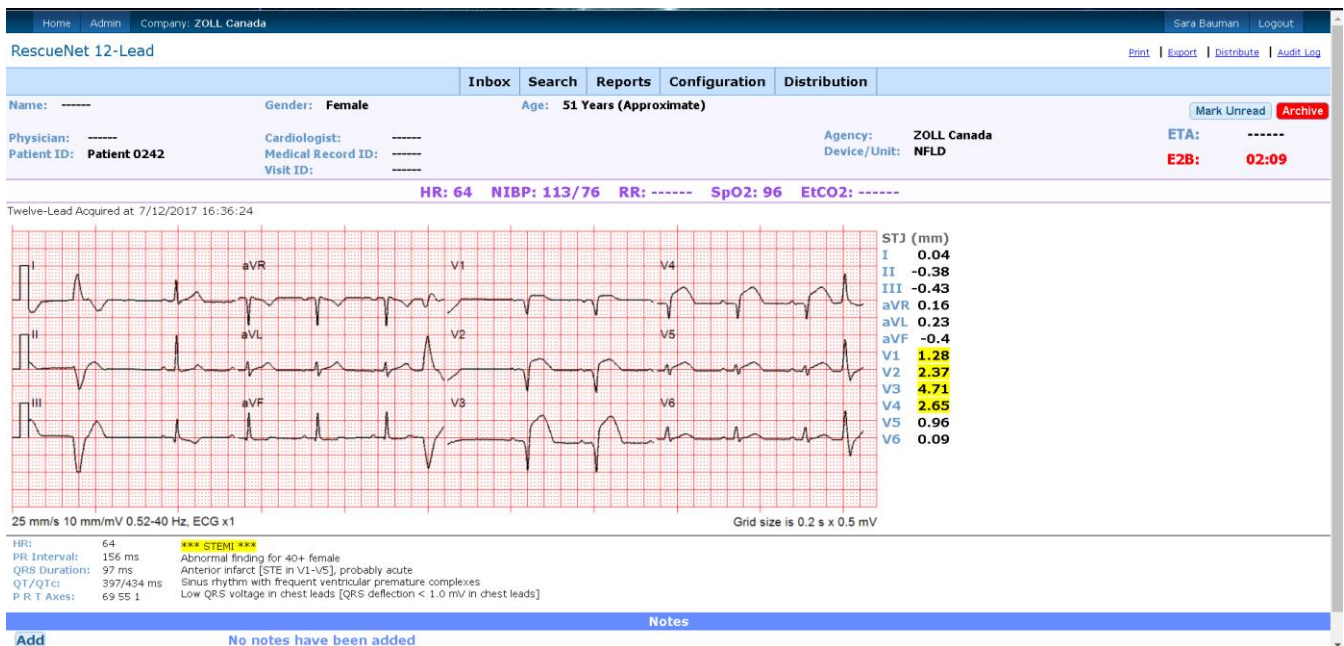
Inbox Features and Functionality

- Displays the latest 12-lead record first, based on received time, not acquired time.
- Color display, and notifications
- Print and redistribute a 12-Lead.
- Visual and auditable alerts
- Time Display
- Acute MI – yellow alerts

12-Lead Details Page

- Mark a record as 'Unread'
- Edit; add a note and/or edit the 12-lead's patient information, EMS Time, and Balloon Time
- Distribute a 12-Lead to an email address, a fax number, and a distribution.
- Print the 12-lead.
- Archive a 12-lead.
- View the audit log for the 12-lead.
- Export the 12-lead.

Companion Software Options

RescueNet® 12-Lead Import/Export Agent and Notifications Client

ZOLL has the option for a local installation of our Import/Export Agent and Notification clients. These applications run as windows service that can be installed on your PC or server. The benefits of the applications include.

Notification Client

Provides a visual and audible alert when a new 12-lead is received. Can be installed on multiple computers that communicate with the Import/Export Agent. Does not require access to, nor communicate directly with, ZOLL Online.

Import Export Agent

- Checks ZOLL Online for new 12-leads every 30 seconds and can print data to a preconfigured printer.
- Highly configurable, provides import and export utilities.

    Auto Exports:
    - Auto-print 12-leads received to network printers.
    - Auto-exports 12-leads to PDF and binary formats.
    - Provides an XML for direct import into MUSE (Site ID and name required)

    Auto Imports:
    - Import PDF of 12-leads acquired by other 12-lead systems.
    - Import MUSE® 12-leads.

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Hardware and Software Specifications:

Below are the minimum hardware software specifications. ZOLL Sales Engineering Department will work with your IT Departments for configuration and optimized deployment.

ZOLL Online Supported Browsers:

Name	Version
Google Chrome	Current version
Microsoft Edge	Current version

Import/Export Agent hardware minimum Requirements

Minimum Requirements Before you begin, ensure that .NET Framework 4.7.2 or above is installed on your PC. *Windows 11 is currently being validated.*

Operating System	Supported Editions	Additional Information
Windows 10	64-bit	Includes the.NET Framework 4.6
Windows 8.1	32-bit, 64-bit	Includes the.NET Framework 4.5.1
Windows 7 SP1	32-bit, 64-bit	
Windows Server 2019	64-bit	Includes the.NET Framework 4.7.2
Windows Server 2016	64-bit	Includes the.NET Framework 4.6.2
Windows Server 2012 R2	64-bit	Includes the.NET Framework 4.5.1
Windows Server 2012 (64- bit)	64-bit	Includes the.NET Framework 4.5.1
Windows Server 2008 R2 SP1	64-bit	The.NET Framework is supported in the Server Core Role with SP1 or later. It is not supported on Windows Server 2008 R2 for Titanium-Based Systems.
Windows Server 2008 SP2	32-bit, 64-bit	The.NET Framework is not supported in the Server Core Role.

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ZOLL Notification Client

Minimum Requirements Before you begin, ensure that .NET Framework 4.7.2 or above is installed on your PC.   *Windows 11 is currently being validated.*

Operating System	Supported Editions	Additional Information
Windows 10	64-bit	Includes the .NET Framework 4.6
Windows 8.1	32-bit, 64-bit	Includes the .NET Framework 4.5.1
Windows 7 SP1	32-bit, 64-bit	
Windows Server 2019	64-bit	Includes the .NET Framework 4.7.2
Windows Server 2016	64-bit	Includes the .NET Framework 4.6.
Windows Server 2012 R2	64-bit	Includes the .NET Framework 4.5.1
Windows Server 2012 (64-bit edition)	64-bit	Includes the .NET Framework 4.5.1
Windows Server 2008 R2 SP1	64-bit	The .NET Framework is supported in the Server Core Role with SP1 or later. It is not supported on Windows Server 2008 R2 for Itanium based systems.
Windows Server 2008 SP2	32-bit, 64-bit	The .NET Framework is not supported in the Server Core Role.

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Workflow

Pre-hospital (EMS/Fire)
1. Paramedic captures a 12-lead and selects the hospital they want to transmit data to.
2. The device transmits data via ZOLL Online over port – 443, Protocol – TCP / TLS.
3. Authentication to ZOLL Online API occurs with a username and password.
4. A distribution list is stored for each hospital.
5. After successful transmission, each 12-lead is stored in the database for future searching and reporting.

Hospital
6. 12-leads can be viewed via web browser, email (PDF attachment), or fax, and can be distributed to another ZOLL Online customer (i.e., hospital, Cath lab). This enables Paramedic Services to deliver 12-leads to multiple departments or hospitals. Hospital staff members can log in and view all 12-leads transmitted to their facility from all EMS agencies.
7. Optional companion software Import/Export Agent allows a Windows application to receive 12-leads from ZOLL Online to a local server at the hospital. When a new 12-lead is received, it is sent via this tool (Port – 443, Protocol – TCP / TLS).
8. Optional companion Notification Agent sends new 12-lead notifications to individual workstations. This can activate alerts on hospital workstations. Port – 1001 (Configurable) , Protocol – TCP MUSE Export (optional) via Import/Export Agent creates an XML file of each 12-lead record.

ZOLL Online– RescueNet 12- Lead

Data Flow Overview