Your Guide to PreManage ED (aka EDIE):
The Technology Platform for New Mexico’s ER is for Emergencies Project

We are proud to collaboratively support the successful integration and implementation of PreManage ED, an invaluable tool that improves the continuity, quality and efficiency of care delivered to all New Mexicans.

This innovative tool is funded entirely by New Mexico’s four Medicaid managed care organization (MCOs), including Presbyterian Health Plan, Molina Healthcare, Blue Cross Blue Shield of New Mexico, and United Healthcare. In addition, the following organizations endorse and proactively support the integration of PreManage ED: the New Mexico Hospital Association, the New Mexico Chapter of the American College of Emergency Physicians (ACEP), and the New Mexico Human Services Department (HSD).

The following information intends to provide an overview of the PreManage ED, its benefits, and the opportunities it provides.

What is PreManage ED?
An Emergency department (ED)-based collaborative care management tool designed to increase the effectiveness of existing care management resources, reduce medically-unnecessary ED readmissions, and improve quality of care through consistent delivery of care.

How does PreManage ED work?
• Integrated with Clinical Workflows. PreManage ED integrates within existing clinical workflows — generally right into the EHR ED tracker board — to push high-value, actionable insights to ED providers the moment a high-risk patient presents.

• Real-Time, Proactive Notifications. PreManage ED automatically sends notifications in real-time as a patient presents at the ED to give providers immediate perspective on the patient without having to search through voluminous clinical records.

• Content Specific to the ED. PreManage ED notifications deliver a synthesized amount of insight—including ED visit history, community-sourced care plans, and other valuable clinical and social history information.

What impact does PreManage ED have?
• Improved Patient Outcomes. By giving clinicians visibility into prior ED visit and prescription history in real-time, PreManage ED enables them to deliver higher quality and better coordinated care.

• Reductions in Inappropriate ED Utilization. ED clinicians and case managers can identify high utilizing patients and connect with their other treating providers to help meet underlying patient needs in more appropriate care settings. In Washington State, PreManage ED enabled the “ER is for Emergencies” initiative, which resulted in state-wide savings of over $33 million to the state Medicaid program in the first year.

• More Efficient Use of ED Resources. PreManage ED delivers critical information to ED providers proactively in an easily digestible format so they don’t have to waste time searching for it. This allows ED resources to be redirected to the truly urgent cases for which the ED is designed.

How does PreManage ED differ from but also complement New Mexico Health Information Collaborative?
• Opt-out vs. Opt-in: PreManage ED operates on a patient opt-out model (compliant with both federal and state regulations); this enables the system to fairly and systematically identify a high-need patient who may present to the ED.

• Workflow Integration: PreManage ED pushes real-time alerts directly into your hospital’s EHR, which provide a synthesized amount of clinical information, without requiring providers to log into a separate system, look up the patient, and sift through full clinical records in search of select high-value information relevant to their particular ED interaction with the patient; this enables providers to make rapid medical decisions within the ED.

• Living Care Guidelines: PreManage ED maintains a living care guideline, specific to an individual patient, as authored by potentially multiple prior treating providers; this enables providers to coordinate their care decisions, proactively understand what happens to a patient both before and after he/she enters or leaves an ED, and contribute incremental information to the plan of care rather than to a static document which lives within the provider’s EHR alone.

How is PreManage ED being implemented?
New Mexico hospitals with emergency rooms are contracting with Collective Medical Technologies (CMT) to support the technical integration and data flow.
High-level Technical Requirements

Most hospitals and health systems find integrating with PreManage ED to be relatively rapid and straightforward:

- **10 hours to establish connectivity, send data, and receive it back via print/fax.**
- **50-65 additional hours to receive data within the EHR, depending on EHR type and flexibility.**

The system has been specifically engineered with interoperability in mind and is agnostic to the bevy of formats, specifications, and protocols that exist in today’s healthcare marketplace. Integration includes three steps, each of which can be customized to meet specific requirements and capabilities:

### Step 1: Establish secure connectivity
- Establish secure site-to-site VPN to facilitate the exchange of an ADT feed.

### Step 2: Send Data to PreManage ED
- Clone or structure an ADT feed of ED and in-patient visit encounters to be sent over TCP/MLLP. Though PreManage ED supports many robust data elements, the feed only requires the following: patient demographics, insurance, encounter class and type, attending providers, allergies, complaints, and diagnosis information. Additional details can be found in the HL7 specification section.
- PreManage ED makes use of ETL to support virtually any format a hospital wishes to use for sending and receiving data, including HL7 2.x, HL7 3.x, 270/271, 834, and Custom Flat Files. The most commonly used protocols for programatically interacting include MLLP, HTTP, HTTPS, Restful, Soap, SFTP, TLS over TCP, STunnels, etc. However, PreManage ED works in a scripted environment and will support virtually any structured or loosely-structured data form irrespective of standard.
- **[Optional]** Send one to two years of historical encounter and patient demographic data in initial on-boarding to expedite system match rates and usefulness. Historical data help PreManage ED to understand past patient utilization patterns and pre-match populations of patients to existing patients within the coverage universe. Additional details on preloading historical data can be found in the Flat File Details section.

### Step 3: Receive Data from PreManage ED
- PreManage ED supports sending data back to hospitals via several different channels, including EHR direct, Direct, fax, print, email, and SMS. Most common is via EHR, in which data will be returned over an HL7 feed using MDM/ORU messages customized to the specific format best suited to be ingested by the respective EHR. Additional details can be found on the CMT onboarding site.

### Resources and Timeline
- Generally, the following individuals are required to support implementation:
  - Network Engineer (1-2 hours).
  - Interface Engineer (1-2.5 hours).
  - Clinician with test access.
  - If feeding data back into the EHR, an EMR Implementation Engineer (50-65 hours) will also be involved.
- Additional process detail, EHR build books, and process specifications are available on the CMT onboarding site.
- In order to ensure system accuracy and minimize the testing burden for your organization, CMT encourages making use of a Soft Go-Live in which production messages are validated before turning the facility live.

For detailed requirements, go to https://onboarding.premanage.com. To discuss details or implementation, please contact Tristan Van Horne at tristan.vanhorne@collectivemedicaltech.com.
PreManage ED ALERT 04/13/2015 14:18 PM Mouse, Mickey (DOB: 10/01/1928)

This patient has registered at the Ford Medical Center Emergency Department. You are being notified because this patient has recommended Care Guidelines. For more information, please log in to the Emergency Department Information Exchange (EDIE) system and search for this patient by name.

**Care Providers**

<table>
<thead>
<tr>
<th>Provider</th>
<th>Type</th>
<th>Phone</th>
<th>Fax</th>
<th>Service Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOHN K SMITH MD</td>
<td></td>
<td>(801) 856-8575</td>
<td>(855) 343-7671</td>
<td>Current</td>
</tr>
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</table>

**ED Care Guidelines from Ford Medical Center**

**Care Recommendation:**

Pain contract and scheduled substance prescribing: Patient had a controlled substance agreement with Dr. Smith, but Dr. Jamison prescribes regular 1 mg Clonazepam, 1 mg Lorazepam, and hydrocodone as needed. Please do not use controlled substances in the ER, unless there are new objective findings.

**Additional Information:**

1. No opiates in the ED for chronic pain or opiate withdrawl. No opiate or benzodiazepine prescriptions at discharge (d/c).
2. Strongly encourage or assist a physical therapist (PT) in making a primary care practitioner (PCP) appointment prior to d/c.

**Care Histories**

**Behavioral**

03/04/2015 Ford Medical Center
- **AXIS I**: Bipolar disorder, type I, hypomanic.
- History of PTSD
- **AXIS II**: Borderline personality features.

**Radiation History**

- 15 CT scans on record from 2007 through 02/06/15, as well as numerous radiology exams.

**Security Events**

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Type</th>
<th>Specifics</th>
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<tbody>
<tr>
<td>11/03/2014</td>
<td>Ford Medical Center</td>
<td>Verbal</td>
<td>Patient was verbally abusive toward care providers, staff, or patient.</td>
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**Washington PDMP Report**

<table>
<thead>
<tr>
<th>Fill Date</th>
<th>Drug Description</th>
<th>Qty.</th>
<th>Prescriber</th>
<th>CS</th>
<th>MED</th>
<th>Rx Summary (12 Mo.)</th>
<th>Count</th>
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<tbody>
<tr>
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<td>HYDROCODONE - ACETAMINOPHEN 7.5-325</td>
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<td>John Smith, MD</td>
<td>3</td>
<td>60.0</td>
<td>CS II-V Rx</td>
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<td>2014-10-31</td>
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<td>John Smith, MD</td>
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<td>Long Acting Opioids</td>
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**Rx Risk Assessment:** High

**Recent Visit Summary**

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<th>Visit Date</th>
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<th>Type</th>
<th>Diagnosis</th>
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<tbody>
<tr>
<td>03/24/2015</td>
<td>Ford Medical Center</td>
<td>Inpatient</td>
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<tr>
<td>02/21/2015</td>
<td>Ford Medical Center</td>
<td>Surgery</td>
<td>- Malignant neoplasm of liver, secondary</td>
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<td>04/13/2015</td>
<td>Ford Medical Center</td>
<td>Emergency</td>
<td>- Fever</td>
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<tr>
<td>03/30/2015</td>
<td>Murray Medical Center</td>
<td>Emergency</td>
<td>- Cough</td>
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<tr>
<td>03/18/2015</td>
<td>Ford Medical Center</td>
<td>Emergency</td>
<td>- Fever, unspecified</td>
</tr>
<tr>
<td>03/03/2015</td>
<td>Providence Centrallia Hospital</td>
<td>Emergency</td>
<td>- Long-term (current) use of other medications</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Other chronic bronchitis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Fever, unspecified</td>
</tr>
</tbody>
</table>

**ED Visit Count (1 Yr.)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Visits</th>
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<tbody>
<tr>
<td>Providence Centrallia Hospital</td>
<td>4</td>
</tr>
<tr>
<td>Ford Medical Center</td>
<td>37</td>
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<td>Murray Medical Center</td>
<td>6</td>
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<tr>
<td>Total</td>
<td>47</td>
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Note: Visits indicate total known visits.

The above information is provided for the sole purpose of patient treatment. Use of this information beyond the terms of Data Sharing Memorandum of Understanding and License Agreement is prohibited. In certain cases, not all visits may be represented. Consult the aforementioned facilities for additional information.

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All hospitals in Oregon and Washington use PreManage ED.

In Washington state, on top of nearly $34 million of savings in emergency costs in 2013*:

- Rate of ED visits declined by 9.9%.
- Rate of visits by frequent clients (more than five visits annually) decreased by 10.7%.
- Rate of visits resulting in a scheduled drug prescription decreased by 24%.
- Rate of visits with a low acuity diagnosis decreased by 14.2%.
- Standardized care plans are available through the Emergency Department Information Exchange (EDIE) system in more than 90 emergency rooms across the state so all ED providers have access to care guidelines.

*Center for Health Policy, Brookings Institute

“I am pleased to support the utilization of an Emergency Department Information Exchange (EDIE) system in various settings throughout the New Mexico healthcare system ... The Human Services Department looks forward to the collaboration among the various healthcare partners in New Mexico to implement EDIE.”

- Nancy Smith-Leslie
  Director of New Mexico Human Services Department