# Care Pathways

5 TH 2020 EDITION

# MedTrak learning

# Learn by doing

Build your own care pathways for the treatment of patients with specific conditions. using the

ELECTRONIC HEALTH RECORD

Rick Schanhals

edited by David A. Blaszak

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## Publications with integrated MedTrak usage include:

**Published by ADePT Electronic Solutions, LLC** — written by Rick Schanhals

**Medical Clinic Workflow** • 6th Edition (2019)

**Billing and Reimbursement** • 6th Edition (2019)

**Medical Assisting - Clinical and Administrative** • 2nd Edition (2019)

**Care Pathways** • 5th Edition (2020)

MedTrak eBook Processor (custom curriculum developer) • (2019)

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# **Preface**

# What is this book about?

*Care Pathways, 5th Edition* provides a unique opportunity for health care students to experience real-world interactions with health care professionals. This "experiential learning" text introduces health care students to care pathways and enables the students to work with health care professionals to build their own versions of care pathways.

Efficient medical workflow is paramount to effective patient care that produces the desired patient outcomes in the shortest period of time at the lowest possible cost. This is a tall task that requires the input of experienced care givers to build the necessary care pathways for the most complicated presenting problems. The goal of this book is to provide health care students the experience of working with a clinical advisor to build a care pathway for the treatment of a specific presenting problem. This type of direct learning project combines the critical thinking elements of comprehending content, following directions, interpreting provider treatment knowledge, translating that knowledge into a usable care pathway, and applying the care pathway to patient care.

This book provides a step-by-step guide to eliciting the necessary medical workflow knowledge to build a care pathway involving the treatments, tests, observations, and instructions using MedTrak's care pathways internet-based methodology. Students can work on their care pathways from anywhere at anytime they have an internet connection.

MedTrak is the developer of an EHR (electronic health record) that is a problem-focused, rules-based, health care workflow system. With millions of patient visits processed in a variety of healthcare settings, MedTrak is time-tested and proven technology that enables healthcare facilities to operate at peak efficiency, and it includes not only the EHR but also a fully-integrated practice management system.

MedTrak's roots originate in the emergency department.

# Logging into MedTrak

- MedTrak is an internet-based, fully integrated EHR (electronic health record) and practice management system that can be accessed anywhere there is an internet connection. While completing the exercises in this book, MedTrak is your **Application Services Provider (ASP)**, thus enabling you to use the same programs and database servers as other students.
- ➤ You do not need to install any software. Every time that you click a button in MedTrak, your work is saved.
- ▶ Write down your MedTrak username and password, and keep it somewhere safe.
- ▶ Log out of MedTrak by clicking the *Log Off* button.

#### **Browsers and devices**

Although MedTrak works with most modern browsers, it works best when run in Google Chrome.

Not all of MedTrak's functionality may work as designed when using other browsers, such as Internet Explorer, Mozilla Firefox, Safari, and Opera.

The use of mobile devices is discouraged. Traditional computers are recommended, due to the size of the display, the efficiency of data entry, and cursor precision.







Chrome, Internet Explorer, and Mozilla Firefox are recommended.





Other major browsers will work with MedTrak, but functionality may differ.





Mobile devices can access MedTrak, but it is best to use a computer.

# Using your browser with MedTrak

When you access your virtual clinic in MedTrak, you should not use your browser buttons for navigation. In order to move from one part of the system to another, you will use MedTrak's internal links and buttons.







Please do not use your browser's navigation functions in MedTrak.

# **Important Note**



It is recommended that you complete the <u>first eleven chapters</u> of the MedTrak *Medical Clinic Workflow* book before proceeding any further in this book.

You can skip Chapter 6, Scheduling.

You should be familiar with the basics of how to use MedTrak's medical workflow system to fully understand how to build a care pathway and run a patient using the care pathway.

Introduction



A care pathway involves the care of a patient from initial notification of a medical condition through completion of treatment by all disciplines involved and facilities utilized over a span of time that is based on the patient's presenting problem.

To be effective, the care pathway must include input from all caregivers and provide efficient methods of notification (reminders) and documentation of the anticipated process. The care pathway includes all treatments, tests, observations, and instructions at the point-of-care and allows caregivers to deviate from the care pathway when necessary.

# History of care pathways

The building blocks of modern care pathways date back to the 1940s when the chemical company DuPont developed a project modeling technique later named the *critical path method*. In the 1980s, this was translated into a case management method for the Center for Case Management, and subsequently applied to clinical care theory.

The first real-world clinical care pathway was introduced in 1985 at the New England Medical Center in Boston.

Below is the definition of a care pathway adopted in 2008 by the European Pathway Association. Dr Kris Vanhaecht originally wrote this definition in his 2007 Phd dissertation.



A care pathway is a complex intervention for the mutual decision making and organization of care processes for a well-defined group of patients during a well-defined period.

Defining characteristics of care pathways include:

- (i) An explicit statement of the goals and key elements of care based on evidence, best practice, and patients' expectations and their characteristics;
- (ii) the facilitation of the communication among the team members and with patients and families;
- (iii) the coordination of the care process by coordinating the roles and sequencing the activities of the multidisciplinary care team, patients and their relatives;
- (iv) the documentation, monitoring, and evaluation of variances and outcomes; and
- (v) the identification of the appropriate resources.

The aim of a care pathway is to enhance the quality of care across the continuum by improving risk-adjusted patient outcomes, promoting patient safety, increasing patient satisfaction, and optimizing the use of resources.

# **Medical Clinic Workflow**

Medical workflow Integrating the electronic medical record into the health care management system provides the basis for efficient **medical workflow**. When done in a logical and smooth flowing manner, this type of system enables clinicians to better care for their patients while lowering the cost of the patient's treatment. The result is improved patient care by integrating rules-based problem solving with evidence-based medical actions. This reduces patient treatment time, while producing accurate and timely billing.

#### Medical workflow efficiencies focus on:

- Supporting the collaboration of the medical staff.
- Improving communications both within the medical facility and with outside resources and agencies.
- Reducing or eliminating the paperwork where appropriate.
- Integrating evidence-based actions at every step of treatment while using rules-based problem solving.

Medical processes

**Medical processes** are like business and manufacturing processes that can be broken down into the detailed steps needed for completion. By performing these detailed medical steps the same way each time, the medical staff is able to diagnose and treat each patient in a consistent, thorough, and efficient manner. Medical workflow systems enable the clinicians to always complete every step in the patient's care without missing anything. It does not matter whether the clinician is experienced or new on the job, using a medical workflow system will help ensure that each patient's care is consistent with the standards set by the medical facility.

#### Medical workflow systems enable the clinical staff to know:

- What clinical process step (action) the patient needs next
- How long the patient has been waiting for the next step
- Who is responsible for performing the next step

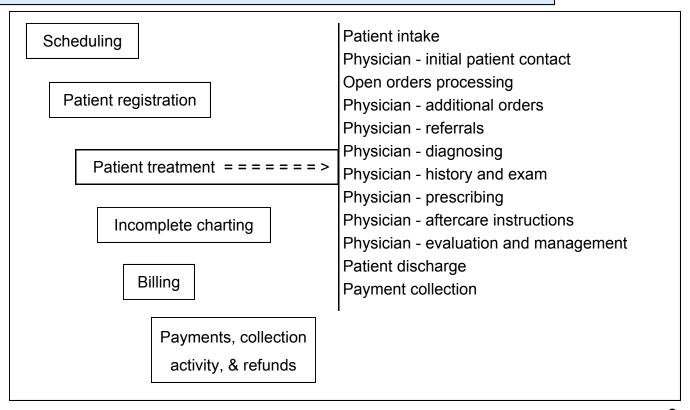
Medical workflow systems also help to reduce the stress level in a medical facility by providing up-to-the-second patient tracking information for each patient in the medical facility. This information makes it easier for new employees to perform their job with the same consistency and efficiency as the experienced clinicians. This information also makes it easier for physicians and administration to manage the medical facility.

Responsibilities, skills, and medical knowledge in the health care setting clearly separate the medical disciplines into a hierarchical structure:

- The physician has direct responsibility for the patient's care.
- The nursing staff supports the physician by carrying out the physician's orders.
- The front desk personnel schedule, register, and collect payments.
- The administrative staff monitors patient charts and outside communications.
- The billing staff prepares and sends out bills and records payments.

Medical workflow is further complicated by the very nature of the patient's presenting problems. While some medical facilities see predominately one type of presenting problem, others see patients for everything from a drug screen collection, a sports physical, chronic asthma, a broken arm, a laceration of the foot, to a sore throat. Many of these patients are scheduled, but some are walkins without an appointment. The medical facility needs to efficiently treat each one of these types of patient encounters without missing a single necessary process. In order to do this, the facility needs to be able track each patient from registration through discharge. This tracking needs to include all physician orders for diagnostics and treatments. Additionally, the clinical staff needs to coordinate their actions to ensure that each step in the patient's care is done efficiently and in the proper order.

# Major Categories of Medical Workflow .....



# Structure of MedTrak's care pathways

Care Pathway name and description

Patient locations

Time frames

Categories

Process steps

Rules

The structure of MedTrak's care pathways includes the following elements:

Care pathway name and description

Patient locations during treatment

Time frames for the treatments, tests, observations, and instructions

**Categories** of the treatments, tests, observations, and instructions

**Process steps** involved in the treatments, tests, observations, and instructions

**Rules** - Orders involved in each of the process steps

Patient's age range – if applicable

Patient's gender – if applicable

Patient's weight range – if applicable

Questions (steps) or results of the rule's workflow

Triggers for normal answers to a question (step)

Values of the test results that will drive another rule (order)

# Coming up...

In the next chapters, you will follow a patient (suffering from chest pains) through all the aspects of a care pathway.

After studying this care pathway example, you will build your own care pathway in MedTrak.

# Cardiac Patient Workflow Documentation

Below is a summary of the treatment of a patient who is suffering from chest pains.

A patient calls the hospital's call center to report that they are having chest pains. The call center triages the patient over the phone by calling up a chest pain protocol. The call center connects the patient to 911 to request an ambulance. While on the phone with the patient, the call center gathers some minimal information about the patient.

The emergency medical services team picks up the patient; and while en route to the emergency department, the EMS team evaluates the patient and connects them to a real time ECG.

Upon arrival at the emergency department, the ER physician continues to evaluate the patient, starts treatment, and contacts the cardiologist.

The cardiologist examines the patient in the emergency department and determines that the patient needs heart catheterization. The patient is transferred to the cardiovascular operating department and prepped for surgery. The cardiologist performs the surgery, and the patient is moved to the post anesthesia care unit (PACU) to start their recovery.

The patient is moved from PACU to the cardiovascular intensive care unit (CVICU). When the patient's condition improves, the cardiologist has the patient moved to a regular medical unit. The Cardiologist orders cardiac rehab for the patient.

The cardiologist discharges the patient from the hospital to the continued care of the cardiac rehab department. When appropriate the cardiac rehab therapist recommends to the cardiologist that the patient is capable of continuing their rehab on their own.

In the example above, the patient is tracked from the time of the phone call to the hospital's call center until they are self-treating at home.

Detailed documentation of the care pathway for this type of patient condition is illustrated on the following pages of this chapter.





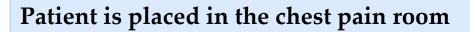
Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Pre- Arrival	Patient's Home	Patient: Calls 911 or Hospital Call Center  Call Center: triages patient, assess severity of chest pain connects patient to 911  1. Register patient – minimal information  2. Select chest pain from problem list – this drives chest pain protocol with some orders being optional and some being automatic. The completion of some orders, drives the next order. So that no orders are done out of sequence.  3. Load patient onto call center status screen  4. Connects patient to 911 – based on answer to question about disposition – "connected patient to EMS" – auto order EMS run sheet and ECG  5. Patient appears on EMS status screen	EMS run sheet ECG Vital Signs	Call Center collects data on basic Demographics, known historical problems, currents meds, allergies primary care physician.  1. Call center status screen shows patient.  2. Central control status screen shows all patients.
Pre- Arrival	EMS	Receives call and picks up patient		
Pre- arrival	EMS	EMS evaluates patient, connects patient to real time ECG Collects or verifies basic demographic patient information, current medications, allergies and any known chronic conditions.  1. Picks up patient and logs in system that patient is in route. 2. Hooks up ECG 3. Verifies patient demographic information 4. Verifies or collects history, current meds, allergies 5. First question of EMS run sheet is ETA also drives order for checking on prior admissions. Using IHE rules would bring old information to screen for viewing by clinical staff.		EMS triages patient en-route. Patient condition determines action taken and time taken to ED.  EMS status screen shows patient with outstanding run sheet questions.

# Patient is in the ambulance

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Pre- Arrival	EMS	EMS sends communication on patient status to ED. Info includes basic demographic patient information, current medications, allergies and any known chronic conditions.  Informs ED of Estimated Time of Arrival		ETA is communicated to charge nurse. Auto-orders prior admissions check, pulling of old charts, chest pain protocol, chest pain room prep list, and paging order for ED MD.
Pre- Arrival	In ED	Unit secretary commences pre-registration with data received from EMS, looks for patient prior admissions, pulls old charts  1. Unit secretary accesses the EMS status screen to log whether there are any old charts available.  2. Based on providers on duty census (based on log-in information, system auto pages ED MD		ER status screen shows orders for prior admissions check, pulling of old charts, chest pain protocol, chest pain room prep list and paging of ED MD.
Pre- Arrival	In ED	Charge nurse receives information from EMS, preregistration information from unit clerk- pages ED MD, mobilizes staff and reviews chest pain protocol and prepares chest pain room.		Interface to cell phone system for messaging.

# Patient arrives in emergency department

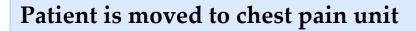
Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
ED Arrival	In ED	EMS takes patient through designated entrance for car- diac patients and takes patient direct to chest pain receiving room		EMS documents in their hand- held that they delivered pa- tient to chest pain receiving room and they document any supplies and additional proc- esses,
ED Arrival	Reception Area	Unit secretary receives patient information from EMS, utilizes EMS run sheet and additional information from patient's relatives if accompanying patient, continues preregistration		All EMS information is attached to patient and is available to ED personnel from their status screen. Any missing patient demographic information is flagged for capture by the unit secretary.



Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
ED Unit	Chest Pain Room	Unit secretary completes pre- registration at patient bedside. Scans old charts into new chart, if needed.		Interface for scanning of old records.
ED Unit	Reception Area	Unit secretary verifies patient insurance eligibility status		Interface to insurance system for eligibility status.
ED Unit	Chest Pain Room	Nursing staff commences online documentation, utilizes information from call center, EMS and data obtained from patient/accompanying rela- tives	Start Chest Pain Pathway	Any missing patient medical history, current medications and allergies information is flagged for capture by the nurse.
ED Unit	Chest Pain Room	ED Physician assess patient, reviews chart, EMS run report, previous admission charts and takes full history from patient or accompanying relatives - verifies current meds and known historical problems		Online documentation Any missing patient information is flagged for capture by the physician.
ED Unit	Chest Pain Room	ED physician orders 12 lead ECG; cardiac serum markers; admission blood tests x-rays and echogram	Vital signs ECG Pulse oximetry CBC w/diff w/platelets CKO CMP PT PTT Type and Serum ABGs Chest x-ray (portable) Bed rest NPO - nothing per oral	within 15 minutes of arrival  1. Results of orders will drive other ED personnel into action.  2. Any verbal orders must be placed into system. ED personnel should not perform any order that is not in the system.  3. Status screen displays all orders and current status of each.
ED Unit	Chest Pain Room	ED physician reviews lab & x- rays results as they come through on-line		Providers use status screen to access results to all orders.

# **Chapter 2** — Cardiac Patient Workflow Documentation

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
ED Unit	Chest Pain Room	ED Physician prescribes meds, IVs as indicated	Heparin lock Continuous cardiac monitoring I & O Fluids per physician	<ol> <li>Orders placed by physician will drive other ED personnel into action.</li> <li>Status screen displays all orders and current status of each.</li> </ol>
ED Unit	Chest Pain Room	ED physician pages Cardiologist and patient's primary care phy- sician	Contact cardiologist Contact patient's physician	Status screen displays all orders and current status of each.
ED Unit	Chest Pain Room	Cardiologist evaluates patient, reviews chart, meds and test results		Cardiologist uses EHR to review all patient information.
ED Unit	Chest Pain Room	Cardiologist informs ED physician and ED charge nurse need to admit patient to chest pain unit.	Admittance Transport Room assignment	ED transport tech and receiving nurse in chest pain unit auto-notified of pending admission  1. ED status screen displays patient in transit to chest pain unit.  2. Chest pain unit status screen displays patient in transit from ED.  3. Chest pain unit status screen displays order to ready a room for patient.
ED Unit	In-transit	ED tech transport accompanied by ED nurse picks up patient and transports to chest pain unit		<ol> <li>Upon arrival in chest pain Unit, ED tech/nurse triggers arrival in EHR.</li> <li>Patient moved to chest pain unit room in EHR.</li> </ol>



Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Chest Pain Unit	Chest pain unit	Cardiologist re-evaluates the patient's condition, reviews charts, current meds and confirms the need for cardiac catheterization	Cardiac catheterization	Cardiologist options at this step. Patient to have catheterization or remain in unit for stabilization or other testing.
Chest Pain Unit	Pre-Cath	If cath lab is ready for patient, cath lab pages patient transport to transport patient to cath lab		If cath lab is ready, auto order patient transport.
Pre- Proce- dure	Pre-Cath	If the cath lab is not ready, patient waits in chest pain unit	Transport	Nurse contacted when room is ready  Patient transport status screen will show pending orders for transport of patients and current status of timing.
Pre- Proce- dure	In-transit	Chest pain unit tech moves the patient to the cath lab holding area.		Patient transport status screen is auto updated with patient movement.  Cath lab status screen shows patient is at the cath lab table and auto orders safety check and cath procedure.

# Patient is moved to cardiovascular pre-operating unit

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Pre-Op	CVOR	Nurse initiates safety record online (right patient, right ECG, etc.)	Safety record	CVOR status screen shows that the nurse needs to complete the safety record.
Pre-Op	CVOR	Anesthesiologist fills out assessment sheet online in the holding area	Anesthesia assessment	Based on appropriate answers to assessment sheet, EHR will order up equipment preparation order.

# **Chapter 2** — Cardiac Patient Workflow Documentation

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Pre-Op	CVOR	Anesthesia tech/nurse pre- pares anesthesia equipment	Equipment preparation	CVOR status screen shows that the nurse needs to prepare the equipment.
Pre-Op	CVOR	Patient prepared for surgery	Patient preparation	CVOR status screen shows that the nurse needs to prepare the patient for surgery.
Pre-Op	CVOR	OR Tech ensures equipment needed intra-operatively is on case cart		OR tech documents in EHR the equipment on the case cart.
Pre-Op	CVOR	Patient in OR suite		CVOR status screen shows that the patient is in the OR suite and ready for surgery.
Pre-Op	CVOR	Auto-notification to surgeon and anesthesiologist of pa- tient's arrival in OR	Paging orders	CVOR status screen shows that the surgeon and anaesthesiologist have been paged or otherwise notified.
PreOp	CVOR	Surgeon checks and signs consent prior to entering OR suite	Surgery consent form	CVOR status screen shows that the surgeon needs to sign the consent form.  1. Surgeon's signature on patient consent form documented in EHR
Pre-Op	CVOR	Surgeon, anesthesiologist, and nurse sign safety form	Safety form signed	Surgeon's and nurse's signature on safety form documented in EHR.
Pre-Op	CVOR	Patient prepped for surgery	Surgery preparation	Surgery nurse to document in EHR the prep work.



# **Patient in surgery**

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Intra-Op	CVOR	Surgery begins		
Intra-OP	CVOR	In-case documentation completed by appropriate perioperative team	In-case documentation	CVOR status screen displays documentation needed for each team member by discipline.

# **Post-operative steps**

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Post-Op	CVOR	Surgeon completes post- operative summary and orders in CPOE	Post operative orders	<ol> <li>CVOR status screen displays orders placed by surgeon and post-operative summary questions.</li> <li>Status screen prompts the surgeon for post-operative orders.</li> </ol>
Post-Op	CVOR	Equipment prepared for transfer	Transfer	Status screen shows patient ready for transfer. All information needed in system before transfer is entered.
Post-Op	CVOR	Anesthesiologist, CVOR staff, OR transport escorts patient to PACU	Transport	OR transporter updates EHR of completion of patient move.

# Patient in post-anesthesia care unit (PACU)

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
PACU	PACU	PACU receives the patient	Post procedure readiness order	PACU status screen shows patient in unit.
PACU	PACU	PACU assess patient's readiness for transfer to CVICU (24 hours post-procedure).		<ol> <li>PACU documents the patient's post-procedure readiness.</li> <li>Auto-orders patient transfer to CVICU based on answers to readiness questions.</li> <li>PACU status screen to show if CVICU has a bed available or not.</li> </ol>
PACU	In transit	Patient transferred to CVICU	Transport	<ol> <li>PACU status screen shows patient moved to CVICU.</li> <li>Patient transport status screen shows patient in CVICU.</li> <li>CVICU status screen shows patient in unit.</li> </ol>

# Patient in cardiovascular intensive care unit (CVICU)

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
CVICU	CVICU Room	Necessary equipment arrives with the patient. CVICU checks off that necessary equipment arrived with the patient.	Equipment order	EHR auto-orders missing equipment based on answers to equipment checklist.
CVICU	CVICU Room	Nurse processes accompanied orders; if no orders, nurse contacts physician for new orders (via phone); Physician gives nurse orders	Physician orders	1. CVICU status screen shows that the physician has been paged or otherwise notified about the need for patient orders.
CVICU	CVICU Room	Orders placed in EHR alert all departments of the patient's needs for their services.	Post-operative orders	<ol> <li>CVICU status screen shows orders placed by de- partment.</li> <li>Various departmental status screens show their orders for this patient.</li> </ol>



Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
CVICU	CVICU Room	Nurse performs admission	Admission order	CVICU status screen shows patient admitted to department.
CVICU	CVICU Room	Nurses performs patient assessment throughout the day. (Critical Care Flowsheet)- online documentation	Critical Care Flowsheet order	CVICU status screen reminds nursing of critical care as- sessment information and timing of assessments.
CVICU	CVICU Room	Physician assesses patient twice a day with ability to re- view assessment by others via on-line patient record	Physician Assessment order	CVICU status screen reminds provider of critical care assessment information and timing of assessments.  1. Patient assessment is a timed order that remains active until the physician says that it can be stopped.  2. When patient assessment order is closed by physician system auto-orders patient transfer to medical unit.
CVICU	CVICU Room	Nurse processes physician orders throughout patient stay		<ol> <li>CVICU status screen reminds nursing of critical care assessment information and timing of assessments.</li> <li>CVICU status screen to show if medical unit has a bed available or not.</li> </ol>
CVICU	CVICU Room	The physician writes a unit- transfer order in CPOE when patient is stabilized.	Unit Transfer	<ol> <li>This is an auto-order based on the physicians closing of the assessment order.</li> <li>Nurse verifies transfer order</li> </ol>
CVICU	In Transit	Patient transferred to medical unit		<ol> <li>CVICU transporter updates EHR of completion of patient move.</li> <li>CVICU status screen shows patient in transit to medical unit.</li> </ol>

# Patient is moved to medical unit

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Patient Rounds	Medical Unit	A cardiac patient is ordered by a cardiac surgeon or a cardiologist to attend cardiac rehab.	Cardiac Rehab order	Cardiac surgeon writes the cardiac rehab order for the patient.
		пар.		1. Medical unit status screen shows open order for cardiac rehab.
	Medical Unit	The patient schedules a cardiac rehab appointment before being discharged from the hospital.		After discharge, the patient is responsible for scheduling the cardiac rehab appointment.
				1. Cardiac rehab unit status screen shows that patient is to call to schedule appointments.
				2. This order remains as a reminder until patient is scheduled.
Dis- charge process	Medical Unit	Patient is discharged from the hospital before attending cardiac rehab.	Rehab discharge order	Medical unit discharges patient from their status screen.
	hospital with aftercare ins tions based on instruction lections and orders by the	Patient is discharged from hospital with aftercare instructions based on instruction selections and orders by the discharging physician.		2. Instructions and prescriptions printed out for patient including medications and cardiac rehab order.
		discharging physician.		3. Case is still open pending the cardiac rehab phase.
				4. Patient is still on the cardiac rehab pending screen as a patient who is still being treated.

# Patient is in cardiac rehab

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Prior to patient's first appt	Cardiac Rehab	Cardiac rehab defines the patient as an Acute patient or a Maintenance patient. Patient is reminded by system of scheduled appointment for cardiac rehab. Either by autocall, email, fax, or personal call.	Cardiac rehab order	An acute patient is defined as being out of the hospital for less than 12 months.  A maintenance patient is a patient who has recently completed the Acute rehab phase and would like to continue cardiac rehab or have been out of the hospital more than 12 months.



Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Day of sched- uled appt	Admis- sion / Registra- tion	The patient arrives at MOB registers and is admitted into cardiac rehab	Registration	Based on registration (using above criteria) the system places the proper order.
Initial Acute Visit	Cardiac Rehab	If the patient is acute, the cardiac rehab director conducts a complete medical evaluation of the patient. The cardiac physical therapist conducts a complete physical evaluation of the patient.	Physical evaluation	The evaluations help cardiac rehab design a rehab program for the patients. Cardiac rehab status screen shows patient's rehab program steps.
Initial Acute Visit	Cardiac Rehab	Based on the evaluations, an acute rehab program is designed specifically for the patient.	Acute Rehab	The duration of the rehab program varies between 1-3 months depending on the evaluation results.
Subsequent Acute and Maintenance Visits	Cardiac Rehab	The patient attends cardiac rehab 3 times a week on Mondays, Wednesdays, and Fridays for the duration of the rehab.  1. Results of ECG analysed by therapist. Based on therapist assessment system could auto-order notification of results to the cardiologist.  2. System generates charges based on steps performed by therapist.	ECG order	Patient ECG measurements are recorded online: 1) Patient is resting prior to start of rehab, 2) During rehab at the peak portion of the program, 3) Patient is resting after completing rehab. If any significant problems arise, the patient's cardiologist is immediately informed. At the end of the day, the cardiac rehab director enters charges for the patients.
Subsequent Acute and Maintenance Visits	Cardiac Rehab	The cardiac RN evaluates the progress of the patient during each rehab visit.	Progress notes	During each visit, the nurse writes progress notes in the patient online chart. A patient progress summary is completed every 10-12 visits. This summary is sent to the patient's referring cardiologist and/or surgeon. (Or Auto-faxed)
Subsequent Acute and Maintequance Visits	Cardiac Rehab	Cardiac rehab designs a patient home rehab program online while the patient continues therapy.	Home rehab program	The home program is written up on the Exercise Prescription form for the patient to take home.  System generates home exercise program based on therapist's selections.

# Patient is moved to medical unit

Timing	Location	Workflow Step	Care Pathway Orders	Notes (comments)
Rehab Progress Assess- ment/ Dis- charge Process	Cardiac Rehab	If the patient has completed his/her therapy goals, the patient is discharged from the hospital.  If the patient has not reached his/her goals, the rehab continues.	Cardiac rehab discharge order	Cardiac rehab completes a patient discharge summary. Auto-notification to patient's primary physician. The summary is sent to the patient's referring cardiologist and/or surgeon. Patients can continue rehab up to 36 visits or the amount specified by the insurance provider.
Post- Rehab	Cardiac Rehab	Cardiac rehab conducts a follow-up phone call to check on the patient's progress with the home rehab program.	Cardiac follow-up order	Auto-notification of patient progress phone call  Based on patient' progress auto orders to be placed to alert of possible issues.
END				

As you can see from the previous documentation, there are a number of workflow steps required by many different disciplines that need to be taken to treat an emergency cardiac patient. Each one of these steps can be broken down into the individual parts needed to fully treat and document the treatment of the patient.

The breakdown of these steps is very involved and needs the collaboration of each discipline to be sure that nothing is missed.

The example care pathway that follows is only a portion of the above example.

MedTrak is set up to enable the clinical team to begin building the care pathway with minimal information, and then to continue to build out the care pathway with input from everyone concerned. By using the care pathway on test patients, the clinical staff will see the pathway in action and be able to add to it, modify it, and remove parts in real-time.

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# Cardiac Patient - Narrative and Spreadsheet

The example in this book tracks a chest pain patient from the time that they arrive at the emergency department until they are discharged from the hospital on the third day

After complaining of chest pain and numbness in the left arm at home, John Smith's wife drives him to the emergency room at Bedford Memorial Hospital. Upon arrival at the hospital, the emergency department's triage nurse alerts the charge nurse and emergency department MD that a chest pain patient just arrived, places John in a wheelchair, and moves him into the emergency department's chest pain room. The charge nurse activates the chest pain care pathway while the unit secretary collects demographic and insurance information from John's wife.

The chest pain care pathway requires the completion of the following treatments, tests, observations, and instructions at the **initiation** (**zero minute mark**) of the pathway. The nurse asks some basic patient medical history questions that the physician reviews with the patient. The physician obtains the rest of the patient's medical history and performs a physical examination following the chest pain protocol questions. The tests done by the nursing staff include an ECG within the first 15 minutes, and a pulse oximetry test where if the result is less than 95%, the value will trigger an order for oxygen and an order for an ABG (arterial blood gas) lab test. But, if the result of the pulse oximetry test is less than 98% but greater than 94%, the input of the value will trigger the order for the oxygen only and not the ABG lab test. The provider considers giving the patient SL Nitro. The lab does the following tests, CK, CMP, PT, PT, and type and serum (draw and hold). The nurse inserts an IV with a Heparin lock and gives the patient fluids as indicated by the physician. The nurse takes the patient's vital signs every 15 minutes during the first hour, and hooks the patient up to a continuous cardiac monitor. The patient is instructed to stay in bed and not to eat or drink anything. The nurse also monitors the patient's intake and output (I&O).

At the fifteen minute mark, the care pathway calls for the completion of the following treatments, tests, observations, and instructions. If the chest pain persists, the physician is to consider giving the patient Nitrates – SL, either topical or IV, also ASA 325mg, and Glyco-protein. The x-ray department x-rays the patient's chest using a portable x-ray machine. The physician notifies the patient's personal physician of the patient's condition, and orders a consultation with a cardiologist. The nurse continues the Heparin lock, the continuous cardiac monitoring, and the recording of the patient's intake and output. The nurse also takes the patient's vital signs and reminds the patient to stay in bed and to not eat or drink anything. The nurse orients the patient to their physical surroundings, explains all of the procedures, and assesses the patient's risk factors. At thirty minutes, the nurse takes the patient's vital signs, and again at 45 minutes.

At one hour post arrival to the emergency department, the cardiologist evaluates the patient with the ED physician and reviews the on-line chart, the medications, the chest x-ray, and the CBC lab results. The cardiologist informs the ED physician and the ED charge nurse of the need to admit the patient to a monitored bed in the chest pain unit. The nurse continues the Heparin lock, the continuous cardiac monitoring, and the recording of the patient's intake and output. The nurse also takes the patient's vital signs and reminds the patient to stay in bed and to not eat anything. The patient is now allowed to drink clear liquids. The nurse explains the plan of care and admission to a monitored bed to the patient and the patient's family. The nurse also assesses the patient's home situation, family resources, and support system.



At **two hours post arrival** to the emergency department, the cardiologist has the nurse repeat the ECG. The patient is then transported to a monitored bed in the chest pain unit by an ED tech.

At three to six hours post arrival the patient is now In the chest pain unit. The lab does another CK. The nurse continues the IV with a Heparin lock, taking vital signs each hour, and also the continuous cardiac monitor. The nurse instructs the patient to continue drinking only clear liquids and stay in bed other than using the bathroom. The nurse also continues to monitor the patient's intake and output (I&O). Social services meets with the patient and the patient's family to discuss the patient's care at home after they are discharged from the hospital. The dietary staff discusses the patient's diet with the patient and patient's family.

At **six to twelve hours post arrival** the lab does another CK at the eighth hour. The nurse continues the IV with a Heparin lock, taking vital signs each hour if still on nitroglycerin or every two hours if not, and also the continuous cardiac monitor. The nurse instructs the patient that they can have solid food as tolerated and stay in bed other than using the bathroom. The nurse also continues to monitor the patient's intake and output (I&O). The nurse also instructs the about medicating to manage their symptoms.

At twelve to 24 hours post arrival the cardiologist orders an ECG if indicated and considers cardiac catheterization if indicated. The nurse continues the IV with a Heparin lock, taking vital signs per the unit routine, and also the continuous cardiac monitor. The patient can advance their diet as tolerated and should stay in bed other than using the bathroom. The nurse also continues to monitor the patient's intake and output (I&O).

At day two post arrival the cardiologist decides that the patient does not need cardiac catheterization and will release the patient to home on the third day. The lab does a PTT test, and the nurse does another ECG. The nurse continues the IV with a Heparin lock, taking vital signs per the unit routine, and also the continuous cardiac monitor. The patient can advance their diet as tolerated and should stay in bed other than using the bathroom. The cardiologist reviews the assessment and plan of care, the risk factors, the prescribed medications, and the chest pain assessment with the patient and the patient's family. The nurse reinforces the dietary instructions.

At day three post arrival the nurse does another ECG and discontinues the IV. The nurse discharges the patient with written copies of all of their instructions.

To enable more efficient building of the care pathway, use a spreadsheet (see the next pages) to break down the processes into categories (shown below). These categories of processes are specific to this example. MedTrak's care pathway processor enables you to build any categories and associated rules necessary for your care pathway.

The categories in this example are: activities, tests, diet, medications, consultations, IVs, treatments, vital signs, discharge planning, and teaching.

Time Activities Tests Diet Meds **Consults** IV's Tx's Vital Disch **Teaching**Signs Plan

Teaching								
Disch Plan								
Vital Signs	On presenta- tion 15 min Pulse Ox	Continuous cardiac monitoring until 12 lead done & evaluated by MD						
Txs	Intake & output (I & O)							
≤  	Insert <b>Hepa-</b> rin lock	Fluids as indicated						
Consults								
Meds	Consider SL Nitro	If <b>pulse ox</b> 98% and chest pain start <b>O2</b>						
Diet	NPO							
Tests	ECG within 1st 15 min	CKO within 1st 30 min (stat)	CMP	свс	PT	FI	<b>Type and</b> <b>serum</b> (draw and hold)	ABG's if pulse ox 95%
Activities								
Time	0-15 min Bed rest							

Teaching	Orient patient to physical surroundings. Explain all procedures. Assess risk factors.				Assessment Explain ad- of home mission and family re- plan of care sources sup- to patient and port systems family		
Disch Plan					Assessment Explain ad- of home mission and family re- plan of care sources sup- to patient an port systems family		
Vital Signs	Continuous cardiac moni- toring	VS q 15 min x 4			Continuous Assessm cardiac moni- of home toring family re sources port syst	VS q 30 min while on IV Nitro	
Tx's	180				0 % –	Admit to 6 South or ICU	
IV's	Heparin lock   & O				Heparin lock 1 & O	Continue IV	
Consults	Notify <b>PMD</b> and obtain <b>Cardiology</b> consult						
Meds	If pain persists: Ni- trates - SL topical or IV	Start IV Heparin as per protocol	<b>ASA</b> 325 mg pp	Consider Glyco- protein in- hibitor	Consider Beta blockers		
Diet	OPO				Clear liq- uids		
Tests	Portable CNR NPO	Send all bloods drawn except <b>Type</b> and Screen (stat)	Repeat <b>ECG</b> at 60 min		Check <b>CKO</b> results at 1 hour post sent	Check <b>CBC</b> at 1 hour post sent	Check CNR results
Activities	Bed rest				Bed rest	Arrange for admission to monitored bed	
Time	15-30 min				1-3 hrs		

Teaching			Medication instruction as indicated - symptom management		
Disch Plan					
Vital Signs		Continuous cardiac monitoring VS q 1 hr while on IV	Continuous cardiac moni- toring	VS q 1 hour if still on IV Ni- tro	VS q 2 hr if off
T×'s		0 %	0 %		
<u>\$</u>		Heparin lock	Heparin lock		
Consults		Social services  Vices  Dietary as indicated			
Meds		Continue IV Heparin	Continue IV Heparin		
Diet		As appro- priate	As appro- priate		
Tests	Repeat <b>ECG</b> at hour 2 if indicated	Check <b>CK4</b> at hour 4 Check <b>CK4</b> results	Check <b>CK8</b> at hour 8	Check <b>CK8</b> results	Schedule Stress test as indicated
Activities		Bed rest with to bathroom a privileges	Bed rest with (bathroom privileges		
Time	2 hrs	3-6 hrs	6-12 hrs		

Teaching			Teach: A & P Risk factors Activity Chest pain assessment Medications Reinforce diet teaching Cardiac cath teaching if indicated		
Disch Plan			Identify dis- charge needs		Discharge patient
Vital Signs	Continuous cardiac moni- toring	VS per unit routine			
Tx's	0 & 0				
IV's	Heparin lock		Heparin lock		
Consults					
Meds	Continue IV <b>Heparin</b>		Advance as Continue IV tolerated Heparin		Advance as Discontinue tolerated IV <b>Heparin</b>
Diet	Advance as tolerated		Advance as tolerated		Advance as tolerated
Tests	Consider Echocardio- gram if indi- cated	Consider  Cardiac Cath  for day 2 if indicated	<b>PTT</b> as per protocol	ECG	ECG
Activities	12-24 hrs Bed rest with bathroom privileges		Bed rest with <b>PTT</b> as per bathroom protocol privileges		Advance as tolerated
Time	12-24 hrs		Day 2		Day 3

# Helpful Tips and

# 4

# **Navigation**



# **Learning Outcomes**

- ▶ How to identify the common elements on a MedTrak screen
- ► How to use the function keys
- ► How to use the tab key
- How to select an item in a list
- ▶ How to select a command from the Help screen
- How to enter a command
- ▶ How to use multiple commands on the same screen
- ▶ How to search
- ► How to use selection boxes



# **Key Concepts**

- User Guide
- ▶ Common elements
- ► Function keys
- ▶ Basic navigation
- Selecting items
- ► Entering commands
- ▶ Searching
- Selection boxes

## MedTrak's Online User Guide



This chapter utilizes the **User Guide** on the <u>MedTrak Main Menu</u>. Because you will reference the **User Guide** throughout the exercises in this chapter, keep it open on your desktop (it is in its own window).

Do These Steps 4.01 ===>

1. Sign into MedTrak

(You should be on the MedTrak Main Menu)

- 2. Click the *User Guide* button (The User Guide will open in a new window)
- 3. Move the User Guide aside to keep it accessible
- 4. In the MedTrak window:

Click the *Patient Registration* button (You should be on the <u>Patients</u> screen)

### **Section 1 - Common Screen Elements**



Do These Steps 4.02 ====>

1. In the User Guide window:

Read Section 1 - Common Elements

2. In the MedTrak window:

Review the different elements on the <u>Patients</u> screen

# **Section 2 - Function Keys**



Do These Steps 4.03 ====>

1. In the User Guide window:

**Read Section 2 - Function Keys** 

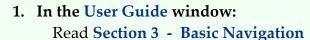
2. In the MedTrak window:

Try the different function keys on the <u>Patients</u> screen

# hapter 4

# Section 3 - Basic Navigation

•••



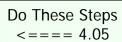
Do These Steps <==== 4.04

2. In the MedTrak window:

Press the *Tab* key to move the cursor down the screen

3. Hold the *Shift* key down and press the *Tab* key to move the cursor up the screen

# **Section 3.1 - Selecting Items**



- 1. Place the cursor in the command field next to a patient
- 2. Press the *ENTER* key
- 3. On the next screen, click the *Exit Screen* button (*F3* key)
- 4. Type an "x" and press the ENTER key
- 5. On the next screen, click the *Exit Screen* button (*F3* key)
- 6. Click the *Select Patient* button under Available Functions on the left side of the screen
- 7. On the next screen, click the *Exit Screen* button (F3 key)

# **Section 3.2 - Entering Commands**



- 1. Place the cursor in the command field next to a patient
- 2. Click the *Change Patient* button under Available Functions on the left side of the screen
- 3. On the next screen, click the *Exit Screen* button (F3 key)

Do These Steps <==== 4.06

Do These Steps 4.07 ====>

- 1. Place the cursor in the command field next to a patient
- 2. Type the Change command "ch"
- 3. Press the *ENTER* key
- 4. On the next screen, click the *Exit Screen* button (*F3* key)

Do These Steps 4.08 ====>

- 1. Place the cursor in the command field next to a patient
- 2. Click the *More Functions*... button under Available Functions on the left side of the screen (*F1* key)
- 3. Click the *Change* checkbox
- 4. On the next screen, click the *Exit Screen* button (*F3* key)

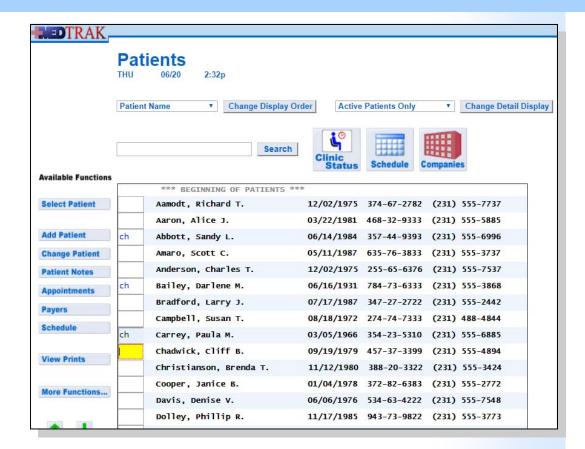
Do These Steps 4.09 ====>

- 1. Place the cursor in the command field next to a patient
- 2. Click the *More Functions*... button under Available Functions on the left side of the screen (*F1* key)
- 3. Click the Change web link button
- 4. On the next screen, click the *Exit Screen* button (*F3* key)

# Multiple Commands on a Screen

Manual entry offers an additional benefit of being able to run several commands on records consecutively. To change three patient's records using the change command, type "ch" in three command fields (shown on the next page) and press the *ENTER* key. Use the *Tab* key to move to the next field. The change program processes three times in a row - once for each selected record, thus saving time.

You can navigate nearly every screen without taking your hands away from the keyboard.



1. On the <u>Patients</u> screen, type the "ch" command next to three patients

- 2. Press the ENTER key
- 3. When the 1st patient screen appears, click the *Exit Screen* button (*F3* key)
- 4. When the 2nd patient screen appears, click the *Exit Screen* button (*F*3 key)
- 5. When the 3rd patient screen appears, click the *Exit Screen* button (F3 key)

Do These Steps <==== 4.10

# **Section 4 - Selection Boxes**

1. In the User Guide window:

Read Section 4 - Selection Boxes

(You will use selections boxes during patient registration and clinical processing.)

Do These Steps <==== 4.11



Searching



Do These Steps 4.12 ====>

1. In the User Guide window:

Read Section 7 - Searching

2. In the MedTrak window:

Practice searching for some patient names

# **Browsers and Devices**



Do These Steps 4.13 ====>

1. In the User Guide window:

Read Section 8 - Browsers and Devices

# Computerized Provider Order Entry (CPOE)



#### **Learning Outcomes**

- ► An understanding of computerized provider order entry (CPOE)
- ► How a care pathway uses orders from the CPOE



## **Key Concepts**

- Adding a care pathway name and description
- Adding categories to a care pathway
- Adding processes to a category
- Adding rules to process
- ► Creating freeform (custom) patient orders
- ► Changing the name of the care pathway or description
- ► Changing the sort order of records in a care pathway
- ► Changing a patient order that is attached to a rule
- Deleting a record in the care pathway
- ▶ Un-deleting a record in the care pathway
- ▶ Reviewing the log of a record in the care pathway
- Printing your care pathway

**CPOE** 

Problem-focused

Most likely orders

Radiology

Laboratory

**Ancillary Studies** 

Treatment (Injuries)

Treatment (HEENT/Systems)

Treatment (Follow-up)

Providers use the **computerized provider order entry** (CPOE) feature of an EHR to place orders on behalf of the patient. An order is a request by the provider for a test, treatment, or administrative process. Typical orders are requests for imaging (x-rays), laboratory tests, hearing and sight tests, treatments for injuries and illnesses, medications, and referrals to specialists or scheduled testing like MRIs and CT scans.

MedTrak is a **problem-focused** system. This means that when a patient is seen for a specific injury or illness, the **most likely orders** for that injury or illness would appear first for the provider to select. This saves the physician time when placing orders in the CPOE. If the patient has a right elbow injury, then MedTrak would display the most likely orders that the provider would need for that type injury. If the patient has an earache, then MedTrak would display the most likely orders for that type of illness.

MedTrak's CPOE categorizes orders as follows:

**Radiology** - This category includes all of the imaging that is done on-site.

**Laboratory** - This category includes laboratory tests that are done on-site and off-site (meaning that the laboratory test will be done by another facility). The laboratory sub-categories include:

General lab work Coagulation
Arthritis lab work Blood bank
Aspiration Serology
Blood borne pathogens (BBP) Urine Analysis

Laboratory collectionsMicrobiologyHematologyToxicologyBlood chemistryDrug Screens

**Ancillary Studies** - This category includes all types of testing not in the radiology or laboratory categories. The ancillary studies subcategories include:

Echocardiogram tests Respiratory tests
ECGs TB skin tests
Hearing tests Vision tests

Physical tests

**Treatment (Injuries)** - This category includes surface trauma repairs and splinting or bracing of body parts.

**Treatment (HEENT/Systems)** - This category includes head, eye, ear, nose, throat, respiratory, cardio, and skin treatments.

**Treatment (Follow-up)** - This category includes suture removals and any other type of procedure needed following the patient's initial treatment.

#### **Chapter 5** — Computerized Provider Order Entry

**Treatment (Medications)** - This category includes medications that are given in the medical facility. The treatment medications subcategories include:

Cardiac medications G.I. medications

Allergy medications Immune medications

Antibiotics Muscle relaxants
C.N.S. medications Pain medications

Endocrine medications Other miscellaneous meds

**Medications** - This category includes both dispensed and prescribed medications that the patient takes at home.

**Referrals / Authorizations** - This category includes referrals to specialists and specialized testing. It also includes requests for authorization for a procedure or surgery. The referrals / authorizations subcategories include:

Accupuncturist Neurology

Allergist Nuclear Medicine
Anesthesiology OB - Gynecology
Attorney Ophthamology
Audiology Optometrist
Cardiology Oral Surgeon

Chiropractic – In house Orthopedic Consultation

Chiropractic – Referral Pain Management

CT Scan Pediatrics
Dentist Physiatry

Dermatology Plastic Surgeon

Emergency Room Podiatrist
EMG – In house Psychology
EMG – Referral Pulmonology

Endocrinology Radiology - Referral

ENT Rehab Services - In-house Family Physician Rehab Services - Referral

Gastroenterologist Rheumatology

General Surgeon Scheduled Testing - Other
Gynecology Surgery Authorization

Hand Surgeon Toxicology
Internal Medicine Ultrasound
Interpreter Services Urology

Mammography Wound Specialist

MRI

Neurologic Surgeon

Treatment (Medications)

Medications

Referrals / Authorizations



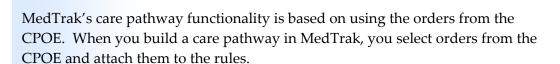
Administrative Orders

> Additional Orders

**Administrative Orders** - This category includes orders that are for case management and other non-treatment related purposes.

**Additional Orders** - This category includes any orders that do not fall into one of the previous categories.

#### Care Pathways and the CPOE



When a provider selects an order from the CPOE, the EHR places a single instance of that order resulting in an open order for completion. An order attached to a rule in a care pathway, can be a single order or a multiple order placed several times over a period of time.

For example, when treating a patient, the provider places an order for a pulse oximetry test for a patient. This order is placed in real-time and immediately becomes an open order for the clinical staff to complete for the patient. In a care pathway, the pulse oximetry order might be needed several times over the period of a couple of hours. The pulse oximetry order is attached to a rule that starts at the zero minute mark of the care pathway and is then automatically placed every half an hour over the next two hours. The structure and functionality of the care pathway enables the placement of orders to be immediate and in the future. The functionality of establishing rules for orders gives care pathways the power to be a very useful tool for certain presenting problems.

The use of MedTrak's CPOE is described in more detail in the next chapter and in several chapters in the *Medical Clinic Workflow* book.

# Building a Care Pathway In MedTrak



#### **Learning Outcomes**

► How to build a care pathway in MedTrak



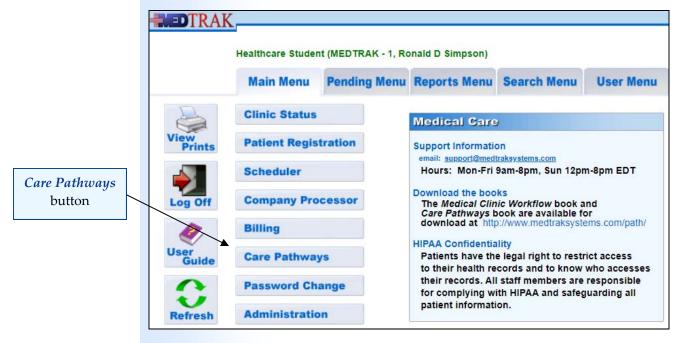
## **Key Concepts**

- Adding a care pathway name and description
- Adding categories to a care pathway
- Adding processes to a category
- Adding rules to process
- ► Creating freeform (custom) patient orders
- ► Changing the name of the care pathway or description
- ► Changing the sort order of records in a care pathway
- ▶ Changing a patient order that is attached to a rule
- Deleting a record in the care pathway
- ▶ Un-deleting a record in the care pathway
- ▶ Reviewing the log of a record in the care pathway
- ► Printing a care pathway



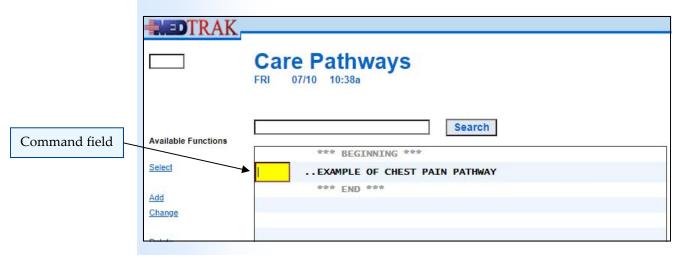
The following is an example of how to build a care pathway in MedTrak. By completing the steps in this chapter, you will learn the basics of how to add a new care pathway, add and change categories, add and change processes, attach rules (orders) to a process, and how to build a freeform rule when the rule does not exist in MedTrak's computerized provider order entry (CPOE) system. You will build just enough of a chest pain care pathway to develop an

After logging into MedTrak, you land on the MedTrak Main Menu (shown below).



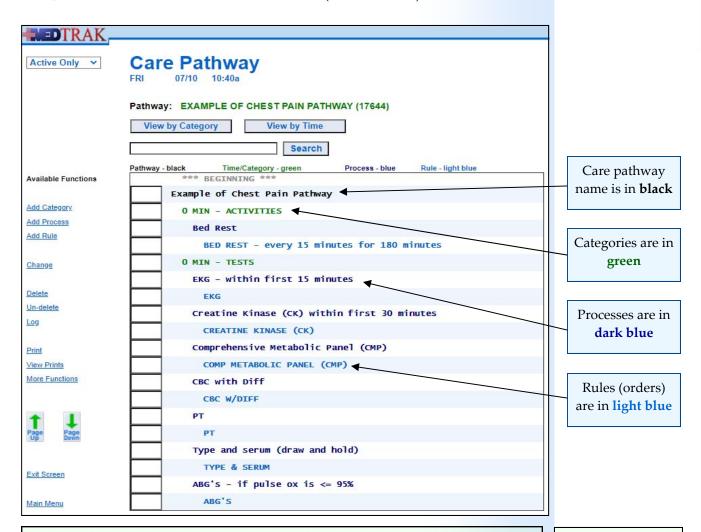
understanding of how to build your care pathway.

Click the *Care Pathways* button to display the <u>Care Pathways</u> screen (shown below).



When you first access this screen, the chest pain care pathway as described in the previous chapters appears. You can view this care pathway and use it for patient care, but you cannot change it.

With the cursor in the command field next to the **..Example of Chest Pain Pathway**, click the *Select* button, to display the <u>Care Pathway</u> screen. At this time, take a few minutes to review this screen (shown below).



1. Sign into MedTrak

(You should be on the MedTrak Main Menu)

2. Click the Care Pathway button

(You should be on the **Care Pathways** screen)

- 3. Be sure the cursor is in the command field next to the ..Example of Chest Pain Pathway
- 4. Click the Select button

(You should be on the Care Pathway screen)

5. Review this care pathway

#### Adding a new care pathway

After reviewing the example care pathway, click the *Exit Screen* button to return to the <u>Care Pathways</u> screen (shown below).



To add a new care pathway, click the *Add* button. The next screen to appear is the <u>Care Pathway: Add</u> screen (shown below).

<b>DTRA</b>	ζ	
	Care Pathway: Add	
Exit Screen	Name  Description  Submit	

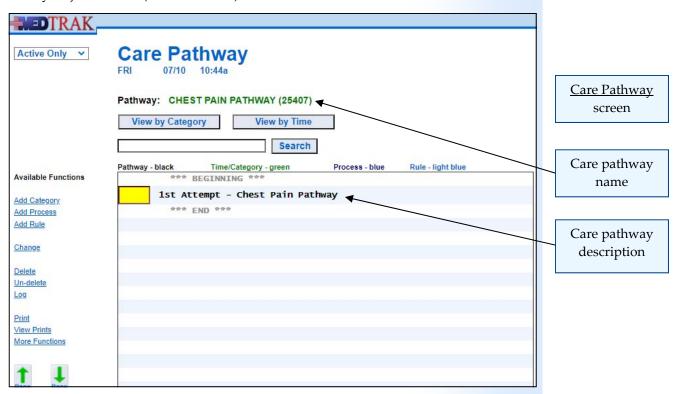
<u>Care Pathway:</u> <u>Add</u> screen

On this screen, enter the name of the care pathway (Chest Pain Pathway) and the description (1st Attempt - Chest Pain Pathway) (shown below).

TRAK		
	Care Pa	athway: Add
Exit Screen	Name	Chest Pain Pathway
	Description	1st Attempt - Chest Pain Pathway Submit
Exit Screen	111111111111111111111111111111111111111	1st Attempt - Chest Pain Pathway

Care Pathway:
Add screen
filled in

After entering the care pathway name and description, click the *Submit* button. The next screen to appear is the <u>Care Pathway</u> screen for the new care pathway that you just added (shown below).



1. Click the Exit Screen button

(You should be back on the <u>Care Pathways</u> screen)

2. Click the *Add* button

(You should be on the <u>Care Pathway: Add</u> screen)

- 3. Type "Chest Pain Pathway" in the Name field
- 4. Type "1st Attempt Chest Pain Pathway" in the Description field
- 5. Click the Submit button

(You should be on the Care Pathway screen)

### Adding care pathway categories

The first step, after adding the care pathway, is to start adding the categories. To add a category to the new care pathway, with the cursor in the command field next to **1st attempt - Chest Pain Pathway**, click the *Add Category* button. The next screen to appear is the <u>Care Pathway / Category: Add</u> screen (shown on the next page).



Category: Add screen



In this example, the first category you will add is the **Activities** category at the **zero minute** mark. This information is filled in on the <u>Care Pathway / Category: Add</u> screen (shown below).

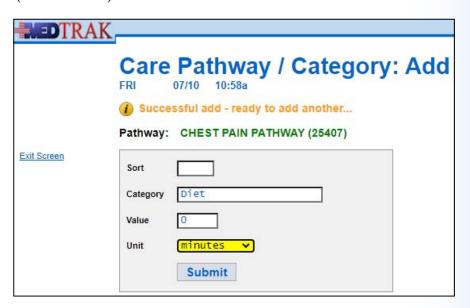
<b>EDTRA</b>	K
	Care Pathway / Category: Add
Exit Screen	Pathway: CHEST PAIN PATHWAY (25407)  Sort  Category Activities  Value 0  Unit minutes  Submit

Activities category at zero minutes

After entering the category information, click the *Submit* button. The <u>Care Pathway / Category: Add</u> screen refreshes with the message "Successful add ready to add another..." at the top (shown below).



Now enter the information for the **Diet** category at the **zero minute** mark (shown below).



Diet category at zero minutes

Click the *Submit* button to add the **Diet** category.

You could continue to add the rest of the categories at this time, but for the purposes of learning how to build a care pathway, click the *Exit Screen* button to return to the <u>Care Pathway</u> screen showing the addition of the <u>Activities</u> and <u>Diet</u> categories at the <u>zero minute</u> mark (shown below).



Activities and Diet categories added

1. With the cursor in the command field next to 1st Attempt - Chest Pain Pathway

2. Click the Add Category button

(You should be on the <u>Care Pathway / Category: Add</u> screen)



Do These Steps 6.04 ====>

- 1. Type "Activities" in the Category field
- 2. Type 0 (zero) in the Value field
- 3. Select minutes from the Unit drop-down list
- 4. Click the *Submit* button

(The <u>Care Pathway / Category: Add</u> screen refreshes)
(The message "Successful add - ready to add another..."
appears)

- 5. To add the Diet category, type "Diet" in the Category field
- 6. Type 0 (zero) in the Value field
- 7. Select minutes from the Unit drop-down list
- 8. Click the Submit button

(The <u>Care Pathway / Category: Add</u> screen refreshes)
(The message "Successful add - ready to add another..."

appears)

9. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen) (Both the <u>Activities</u> and <u>Diet</u> categories should appear)

Now build the remaining categories in this example. With the cursor next to the care pathway description, click the *Add Category* button. On the <u>Care Pathway / Category: Add</u> screen enter the <u>Tests</u> category at the <u>zero minute</u> mark (shown below).

Tests
category at zero
minutes

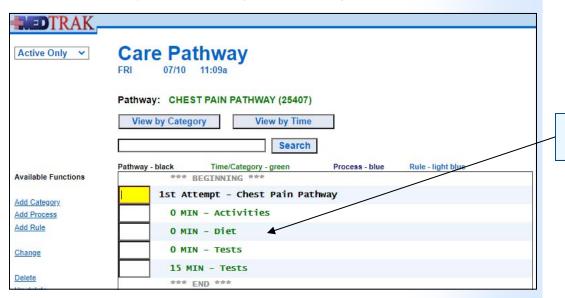
<b>DTRA</b>	K
	Care Pathway / Category: Add
Exit Screen	Pathway: CHEST PAIN PATHWAY (25407)  Sort  Category Tests  Value 0  Unit minutes V  Submit

Now add the **Tests** category at the **fifteen minute** mark (shown below).



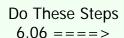
Tests category at fifteen minutes

After adding both of the **Tests** categories, click the *Exit Screen* button to return to the <u>Care Pathway</u> screen showing all of the categories (shown below).



All categories added

- 1. Be sure the cursor is in the command field next to 1st Attempt - Chest Pain Pathway
- 2. Click the *Add Category* button
  (You should be on the <u>Care Pathway / Category: Add</u>
  screen)
- 3. Type "Tests" in the Category field
- 4. Type 0 (zero) in the Value field
- 5. Select minutes from the Unit drop-down list



1. Click the Submit button

(The <u>Care Pathway / Category: Add</u> screen refreshes)
(The message "Successful add - ready to add another..."
appears)

- 2. To add the Tests category at the fifteen minute mark, type "Tests" in the Category field
- 3. Type 15 (fifteen) in the Value field
- 4. Select minutes from the Unit drop-down list
- 5. Click the Submit button

(The <u>Care Pathway / Category: Add</u> screen refreshes)
(The message "Successful add - ready to add another..."
appears)

6. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen) (All of the categories should appear)

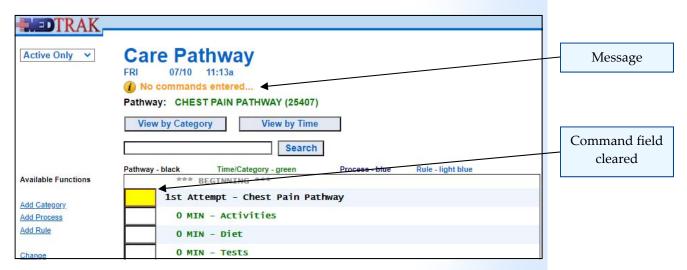
### Adding processes to categories

Now let's add the **Bed Rest** process to the **Activities** category at the **zero minute** mark. To add a process to a category, you need place the cursor next to the category.

If you have still have the cursor next to the care pathway description when you click the *Add Process* button, you will get the following error message "Can only Add Process from Category level." Also, MedTrak will leave the cursor in the command field next to the care pathway description. In the command field will be the ADP command for adding a process (shown below).



If this occurs, you need to clear the **ADP** command from the command field and press the *ENTER* key. The <u>Care Pathway</u> screen refreshes with the message "No commands entered…" (shown below).



- 1. Place the cursor next to 1st Attempt Chest Pain Pathway
- 2. Click the Add Process button

(The message "Can only Add Process from Category level." appears)

(The **ADP** command is in the command field)

- 3. Clear the ADP command from the command field
- 4. Press the *ENTER* key

(The Care Pathway screen refreshes)

(The message "No commands entered..." appears)

Place the cursor in the command field next to the **Activities** category at the **zero minute** mark (shown below).



Do These Steps

<==== 6.07



Click the *Add Process* button. The next screen to appear is the <u>Care Pathway / Category / Process: Add</u> screen (shown below).



Process: Add screen

The process for the **Activities** category at the **zero minute** mark is to instruct the patient to stay in bed for the first hour. In the process **Desc** (description) field, type the following "**Bed rest - patient to stay in bed for the first hour**" (shown below).



Click the *Submit* button. All of the MedTrak add screens work in a similar manner. The category, process, or rule will add and the screen will refresh for you to add the next one at that level (shown below).



Now check out how adding the first process looks. Click the *Exit Screen* button to return to the <u>Care Pathway</u> screen (shown below).



Bed rest process

- 1. Place the cursor in the command field next to the Activities category at the zero minute mark
- 2. Click the Add Process button

(You should be on the <u>Care Pathway / Category / Process:</u> <u>Add</u> screen)

- 3. Type "Bed rest patient to stay in bed for the first hour" in the Desc field
- 4. Click the *Submit* button

(The <u>Care Pathway / Category / Process: Add</u> screen refreshes)

(The message "Successful add - ready to add another..." appears)

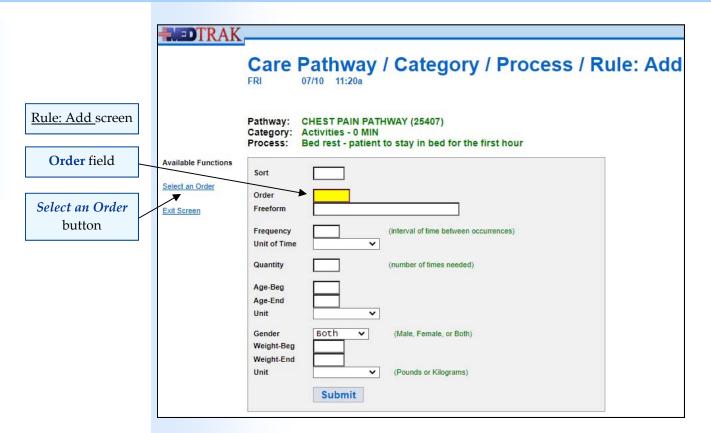
5. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen) (The **Bed Rest** process should appear)

#### Adding rules to processes

Now add the **Bed Rest** rule (patient order) to the **Bed Rest** process. To add a rule to a process, you need place the cursor next to the process and click the *Add Rule* button. The next screen to appear is the <u>Care Pathway / Category / Process / Rule: Add</u> screen (shown on the next page).





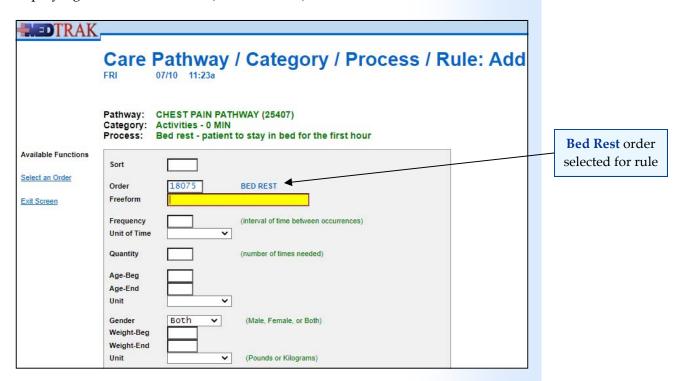
Care pathway rules in MedTrak are patient orders which you select from the CPOE database. You learned about the CPOE database earlier in this book. In this example, the Bed Rest order is located in the Administrative Orders subsection of the CPOE. With the cursor in the Order field (as shown above), click the *Select an Order* button. The next screen to appear is the <u>Orders: Select</u> screen (shown below).



To access the **Administrative Orders**, click the yellow plus sign next to **Administrative Orders**. The next screen to appear is the <u>Orders: Select</u> screen for the **Administrative Orders** subsection of the CPOE database (shown below).

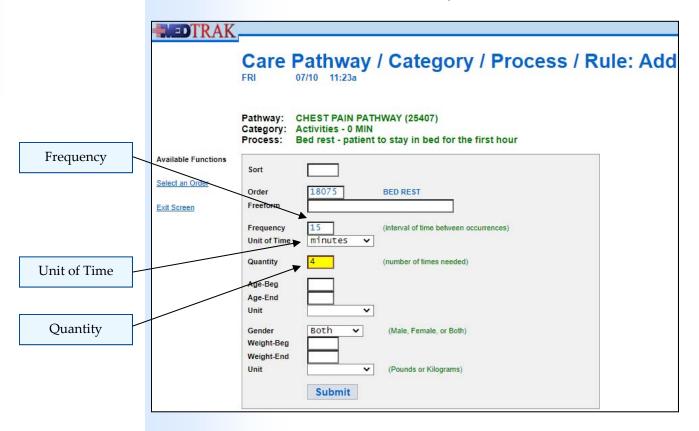


Now select the **Bed Rest** order. To select an order, click the green X next to the order. The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes displaying the **Bed Rest** order (shown below).

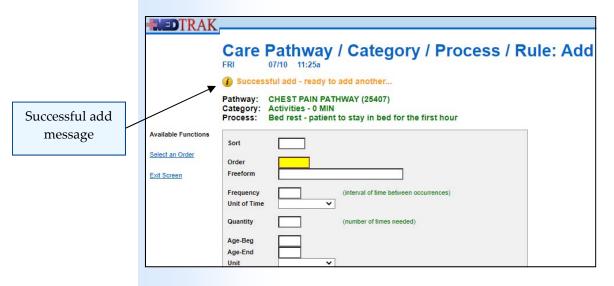




Now build the parameters for the **Bed Rest** rule. The patient is to stay in bed for the first hour, and you want to remind the patient of this every fifteen minutes. So, the **Frequency** (or interval of time between occurrences) is fifteen, the **Unit of Time** is minutes, and the **Quantity** is four (shown below).



For the purposes of building this sample care pathway, the remaining fields on this screen will not be used. After entering the parameters of the **Bed Rest** rule, click the *Submit* button to attach the rule to the **Bed Rest** process. The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes with the message "Successful add - ready to add another..." at the top (shown below).



Now check out how adding the first rule looks. Click the *Exit Screen* button to return to the <u>Care Pathway</u> screen which now displays the **Bed Rest** rule (shown below).



**Bed Rest** rule (patient order)

- 1. Place the cursor next to the Bed rest process
- 2. Click the Add Rule button

(You should be on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

- 3. Be sure the cursor is in the Order field
- **4.** Click the *Select an Order* button (You should be on the <u>Orders: Select</u> screen)
- 5. Click the yellow plus sign next to Administrative Orders

  (You should be on the Orders: Select screen for

  Administrative Orders)
- 6. Click the green X next to the Bed Rest order

(You should be back on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

(The **Bed Rest** order is now attached to the rule)

- 7. Type 15 (fifteen) in the Frequency field
- 8. Select minutes from the Unit of Time drop-down list
- 9. Type 4 (four) in the Quantity field



Do These Steps 6.10 ====>

#### 1. Click the Submit button

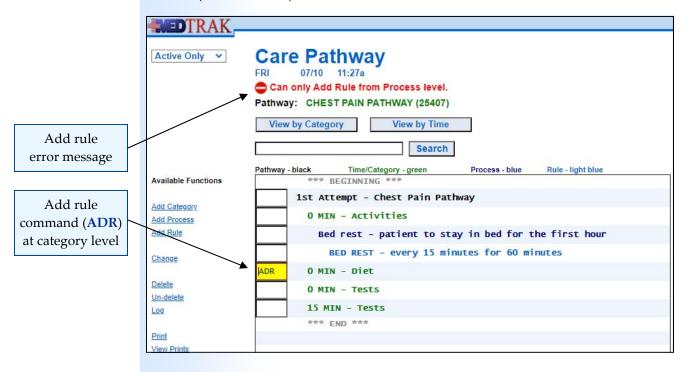
(The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes)

(The message "Successful add - ready to add another..." appears)

#### 2. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen)
(The **Bed Rest** rule is now attached to the **Bed Rest** process)

Now add the **Diet** rule. With the cursor next to the **Diet** category at the **zero minute** mark, click the *Add Rule* button. The <u>Care Pathway</u> screen refreshes with the following error message "Can only Add Rule from Process level." (shown below).



You need to add the NPO (nothing per oral) process to the Diet category before adding the rule (attaching the order). With the cursor in the command field for the Diet category at the zero minute mark, clear the ADR command and then click the *Add Process* button.

The next screen to appear is the <u>Care Pathway / Category / Process: Add</u> screen. On this screen, type "Patient is not to drink or eat during the first hour" in the **Desc** field (shown on the next page).

TRAK	
	Care Pathway / Category / Process: Add
Exit Screen	Pathway: CHEST PAIN PATHWAY (25407) Category: Diet - 0 MIN
	Desc Patient is not to drink or eat during the first hour
	Submit

Process: Add screen

Click the *Submit* button to add this process. The screen refreshes and is ready for you to add another process. Click the Exit Screen button. The Care <u>Pathway</u> screen reappears displaying the new process (shown below).

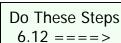


- 1. Place the cursor in the command field next to the Diet category at the zero minute mark
- 2. Click the *Add Rule* button

(The message "Can only Add Rule from Process level." appears)

(The ADR command is in the command field)

3. Clear the ADR command from the command field



1. Click the Add Process button

(You should be on the <u>Care Pathway / Category / Process:</u> <u>Add</u> screen)

- 2. Type "Patient is not to drink or eat during the first hour" in the Desc field
- 3. Click the Submit button

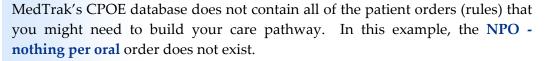
(The <u>Care Pathway / Category / Process: Add</u> screen refreshes)

(The message "Successful add - ready to add another..." appears)

4. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen) (The <u>Diet</u> process should appear)

### **Creating your own rules (patient orders)**

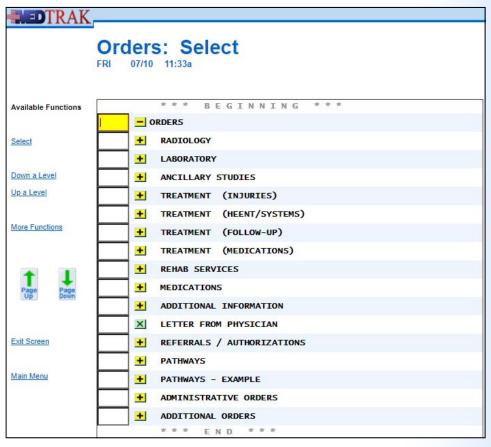


Place the cursor in the command field next to the **Diet** process, click the *Add Rule* button. The next screen to appear is the <u>Care Pathway / Category / Process / Rule: Add</u> screen (shown below).



Rule: Add screen

With the cursor in the **Order** field, click the *Select an Order* button. The next screen to appear is the <u>Orders: Select</u> screen (shown below).



Orders: Select screen

To access the **Administrative Orders**, click the yellow plus sign next to **Administrative Orders**. The next screen to appear is <u>Orders</u>: <u>Select</u> screen for the **Administrative Orders** subsection of the CPOE database (shown below).



Orders: Select screen for Administrative Orders



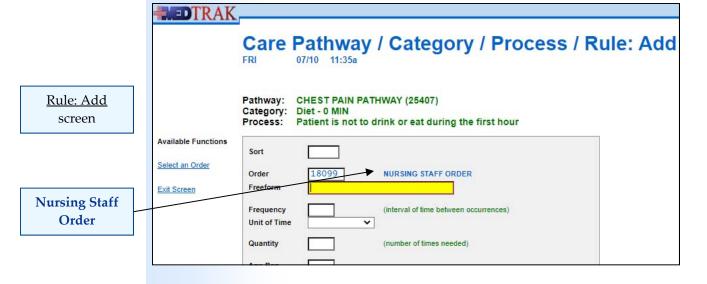
Click the *Page Down* button to view the next screen of <u>Administrative Orders</u>. You will not find the **NPO** order because it does not exist. Now click the *Page Up* button to return to the first screen.

MedTrak created a way for you to build your own orders when you cannot locate them in MedTrak's CPOE database. They are called freeform orders. You will notice a selection called **Freeform Orders** that is located on the first screen of the <u>Orders</u>: <u>Select</u> screen for the <u>Administrative Orders</u> subsection. To access these orders, click the yellow plus sign next to the <u>Freeform Orders</u>. The next screen to appear is the <u>Orders</u>: <u>Select</u> screen for the <u>Freeform Orders</u> subsection (shown below).



Orders: Select screen for Freeform Orders

The NPO order is a nursing staff order. To select the Nursing Staff Order, click the green X next to the order. The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes displaying the Nursing Staff Order (shown below).



1. Place the cursor in the command field next to the Diet process on the <u>Care Pathway</u> screen

Do These Steps <==== 6.13

2. Click the *Add Rule* button

(You should be on the <u>Care Pathway / Category /</u> Process / Rule: Add screen)

- 3. Click the *Select an Order* button (You should be on the <u>Orders: Select</u> screen)
- 4. Click the yellow plus sign next to Administrative Orders
- 5. Click the Page Down button
- 6. Observe that the NPO nothing per oral order does not appear
- 7. Click the *Page Up* button

(You should be back on the first Orders: Select screen)

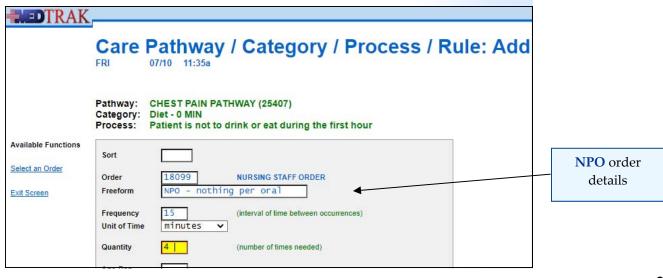
8. Click the yellow plus sign next to Freeform Orders
(You should be on the Orders: Select screen for
Freeform Orders)

9. Click the green X next to the Nursing Staff Order

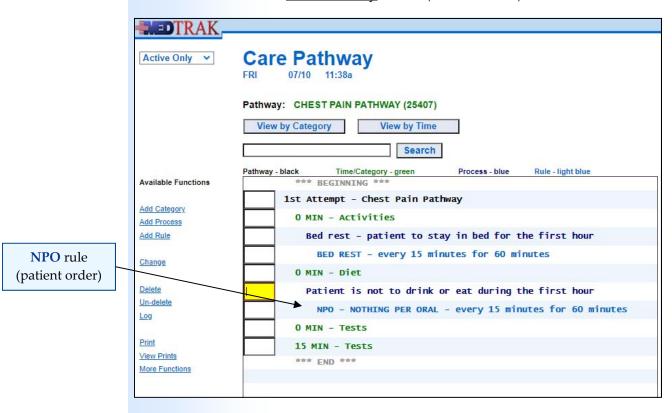
(You should be back on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

(The Nursing Staff Order should appear)

The NPO order is also for the first hour and should be repeated four times like the Bed Rest order. To create this order, type "NPO - nothing per oral" in the Freeform field. The patient is not to drink or eat during the first hour, and you want to remind the patient of this every fifteen minutes. So, the Frequency (or interval of time between occurrences) is fifteen, the Unit of Time is minutes, and the Quantity is four (shown below).



For the purposes of building this sample care pathway, the remaining fields on this screen will not be used. After entering the parameters of the NPO rule, click the *Submit* button to attach the rule to the Diet process. The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes with the message "Successful add - ready to add another..." at the top. Click the *Exit Screen* button to return to the <u>Care Pathway</u> screen (shown below).



Do These Steps 6.14 ====>

- 1. Type "NPO nothing per oral" in the Freeform field
- 2. Type 15 (fifteen) in the Frequency field
- 3. Select minutes from the Unit of Time drop-down list
- 4. Type 4 (four) in the Quantity field
- 5. Click the *Submit* button

(The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes)

(The message "Successful add - ready to add another..." appears)

6. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen) (The **NPO** rule is now attached to the **Diet** process) You learned how to add categories to your care pathway. You also learned how to add processes to a category. Then you learned how to add a rule (patient order) to a process and how to build a freeform order for a rule. These are the basic functions needed for building a care pathway in MedTrak.

Now build the remaining processes and attach the rules to them for this example care pathway.

The next process to build is the first **Tests** process. With the cursor next to the **Tests** category at the **zero minute** mark, click the *Add Process* button. On the <u>Care Pathway / Category / Process: Add</u> screen, type "ECG, pulse oximetry, and CBC with diff" in the Desc field (shown below).

<b>DTRA</b>	AK
Exit Screen	Care Pathway / Category / Process: Add
	Pathway: CHEST PAIN PATHWAY (25407) Category: Tests - 0 MIN
	Desc ECG, pulse oximetry, and CBC with diff
	Submit

Process: Add screen

Click the *Submit* button to add the process, and then click the *Exit Screen* button to return to the <u>Care Pathway</u> screen (shown below).

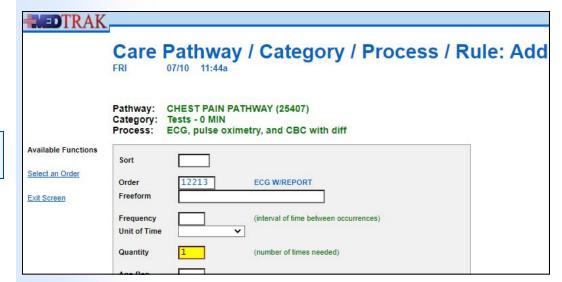
	Care Pathway FRI 07/10 11:42a
	Pathway: CHEST PAIN PATHWAY (25407)  View by Category View by Time  Search
Available Functions	Pathway - black Time/Category - green Process - blue Rule - light blue  *** BEGINNING ***
Allow Keep Committee (1)	1st Attempt - Chest Pain Pathway
dd Category	0 MIN - Activities
dd Process	
add Rule	Bed rest - patient to stay in bed for the first hour
Change	BED REST - every 15 minutes for 60 minutes
<del>Mange</del>	0 MIN - Diet
Delete	Patient is not to drink or eat during the first hour
Jn-delete	NPO - NOTHING PER ORAL - every 15 minutes for 60 minutes
.og	AND PARTIES AND THE CONTROL OF THE PARTIES AND THE CONTROL OF THE
W	0 MIN - Tests
Print	ECG, pulse oximetry, and CBC with diff
iew Prints	15 MIN - Tests
More Functions	

ECG, pulse ox, and CBC process



Now add the ECG with report, Pulse Oximetry, and CBC with differential and with platelets tests (rules) to the new process. Each of these tests will only be ordered once at this time frame.

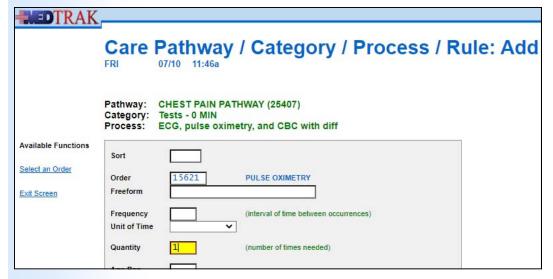
Place the cursor next to the ECG, pulse oximetry, and CBC with diff process and click the *Add Rule* button. Then click the *Select an Order* button to locate the ECG w/report test which is in the ECG subsection of the Ancillary Studies section of MedTrak's CPOE. Select the ECG w/report order and then type a one in the Quantity field (shown below).



ecc w/report order

Click the *Submit* button to add the rule (patient order) to the process.

Now add the **Pulse Oximetry** order to this process. Click the **Select an Order** button to locate the **Pulse Oximetry** test which is in the **Ancillary Studies** section of MedTrak's CPOE. Select the **Pulse Oximetry** order and then type a one in the **Quantity** field (shown below).



Pulse Oximetry order

Click the *Submit* button to add the rule (patient order) to the process.

Now add the CBC with differential and with platelets order to this process. Click the *Select an Order* button to locate the CBC w/diff w/platelet laboratory test which is in the **Hematology** subsection of the **Laboratory** section of MedTrak's CPOE. Select the CBC w/diff w/platelet order and then type a one in the **Quantity** field (shown below).

TRAK	
	Care Pathway / Category / Process / Rule: Add
	Pathway: CHEST PAIN PATHWAY (25407) Category: Tests - 0 MIN Process: ECG, pulse oximetry, and CBC with diff
Available Functions	Sort
Select an Order  Exit Screen	Order 12532 CBC W/DIFF W/PLATELET Freeform
Exit Screen	Frequency (interval of time between occurrences) Unit of Time
	Quantity 1 (number of times needed)
	Age-Beg

CBC w/diff w/platelet order

Click the *Submit* button to add the rule, and then click the *Exit Screen* button to return to the <u>Care Pathway</u> screen (shown below).



3 new rules



Do These Steps 6.15 ====>

- 1. Place the cursor next to the Tests category at zero minutes
- 2. Click the Add Process button

(You should be on the <u>Care Pathway / Category / Process:</u> <u>Add</u> screen)

- 3. Type "ECG, pulse oximetry, and CBC with diff" in the Desc field
- 4. Click the Submit button

(<u>Care Pathway / Category / Process: Add</u> screen refreshes) ("<u>Successful add - ready to add another...</u>" appears)

5. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen) (The **ECG**, **pulse oximetry**, **and CBC with diff** process should appear)

Do These Steps 6.16 ====>

- 1. Place the cursor next to the ECG, pulse oximetry, and CBC with diff process
- 2. Click the Add Rule button

(You should be on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

- 3. Be sure the cursor is in the Order field
- 4. Click the Select an Order button

  (You should be on the Orders: Select s

(You should be on the <u>Orders: Select</u> screen)

- 5. Click the yellow plus sign next to Ancillary Studies
  (You should be on Orders: Select for Ancillary Studies)
- 6. Click the yellow plus sign next to ECG

(You should be on the  $\underline{Orders: Select}$  screen for ECG)

7. Click the green X next to the ECG w/report order

(You should be back on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

(The ECG w/report order is now attached to the rule)

- 8. Type 1 (one) in the Quantity field
- 9. Click the *Submit* button

(The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes)

(The message "Successful add - ready to add another..." appears)

- 1. Be sure the cursor is in the Order field
- 2. Click the Select an Order button

(You should be on the Orders: Select screen)

3. Click the yellow plus sign next to Ancillary Studies
(You should be on Orders: Select for Ancillary Studies)

4. Click the green X next to the Pulse Oximetry order

(You should be back on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

(The **Pulse Oximetry** order is now attached to the rule)

- 5. Type 1 (one) in the Quantity field
- 6. Click the *Submit* button

(The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes)

(The message "Successful add - ready to add another..." appears)

1. Be sure the cursor is in the Order field

2. Click the Select an Order button

(You should be on the Orders: Select screen)

3. Click the yellow plus sign next to Laboratory

(You should be on Orders: Select screen for Laboratory)

4. Click the yellow plus sign next to Hematology

(You should be on the Orders: Select for Hematology)

5. Click the green X next to the CBC w/diff w/platelet order

(You should be back on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

(The CBC w/diff w/platelet order is attached to the rule)

- 6. Type 1 (one) in the Quantity field
- 7. Click the *Submit* button

(The <u>Care Pathway / Category / Process / Rule: Add</u> refreshes)

(The message "Successful add - ready to add another..." appears)

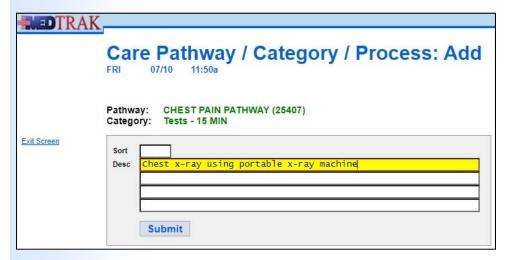
8. Click the *Exit Screen* button

(You should be back on the <u>Care Pathway</u> screen) (The three new rules should appear) Do These Steps <==== 6.17



The next process to build is the second **Tests** process at the **fifteen minute** mark. With the cursor next to the **Tests** category at the **fifteen minute** mark, click the *Add Process* button. On the <u>Care Pathway / Category / Process: Add</u> screen, type "Chest x-ray using portable x-ray machine" in the <u>Desc</u> field (shown below).

Process: Add screen



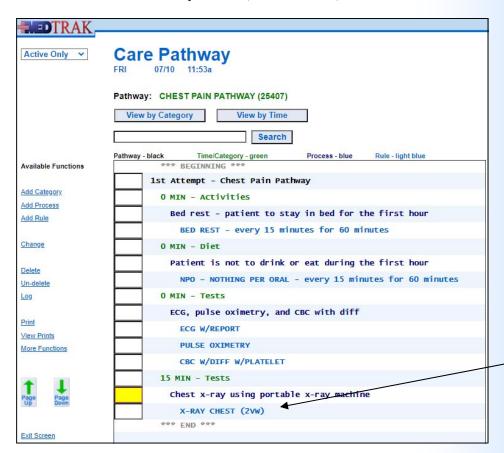
Click the *Submit* button to add the process, and then click the *Exit Screen* button to return to the <u>Care Pathway</u> screen.

With the cursor next to the Chest x-ray using portable x-ray machine process, click the *Add Rule* button. Then click the *Select an Order* button to locate the X-ray Chest (2VW) test which is in the X-ray Chest subsection of the X-ray Trunk subsection of the Radiology section of MedTrak's CPOE. Select the X-ray Chest (2VW) order, and then type a one in the Quantity field (shown below).



X-ray Chest (2VW) order

Click the *Submit* button to add the rule, and then click the *Exit Screen* button to return to the <u>Care Pathway</u> screen (shown below).



New x-ray rule

- 1. Place the cursor next to the Tests category at the fifteen minute mark
- 2. Click the *Add Process* button

(You should be on the <u>Care Pathway / Category / Process:</u> <u>Add</u> screen)

- 3. Type "Chest x-ray using portable x-ray machine" in the Desc field
- 4. Click the *Submit* button

(The <u>Care Pathway / Category / Process: Add</u> screen refreshes)

(The message "Successful add - ready to add another..." appears)

5. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen) (The <u>Chest x-ray using portable x-ray machine</u> process should appear)



Do These Steps 6.20 ====>

- 1. Place the cursor next to the Chest x-ray using portable x-ray machine process
- 2. Click the *Add Rule* button

(You should be on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

- 3. Be sure the cursor is in the field next to the Order field
- **4.** Click the *Select an Order* button (You should be on the <u>Orders: Select</u> screen)
- 5. Click the yellow plus sign next to Radiology
  (You should be on Orders: Select screen for Radiology)
- 6. Click the yellow plus sign next to X-ray Trunk

  (You should be on Orders: Select screen for X-ray

  Trunk)
- 7. Click the yellow plus sign next to X-ray Chest

  (You should be on Orders: Select screen for X-ray
  Chest)
- 8. Click the green X next to the X-ray Chest (2VW) order

  (You should be back on the <u>Care Pathway / Category / Process / Rule: Add</u> screen)

  (The X-ray Chest (2VW) order is now attached to the rule)
- 9. Type 1 (one) in the Quantity field
- 10. Click the Submit button

(The <u>Care Pathway / Category / Process / Rule: Add</u> screen refreshes)
(The message "Successful add - ready to add another..." appears)

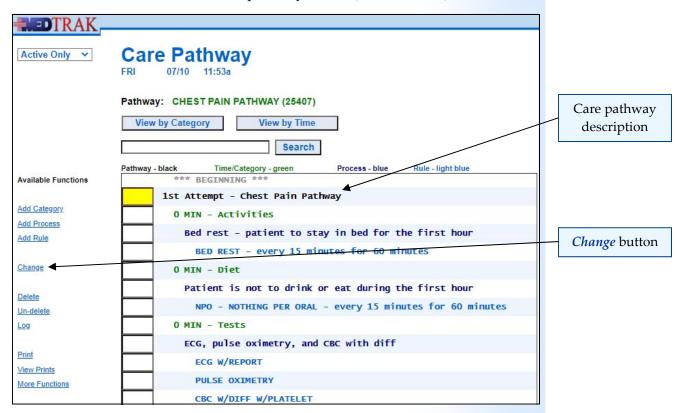
11. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen)
(The new x-ray rule should be added to the <u>Chest x-ray</u>
using portable x-ray machine process)

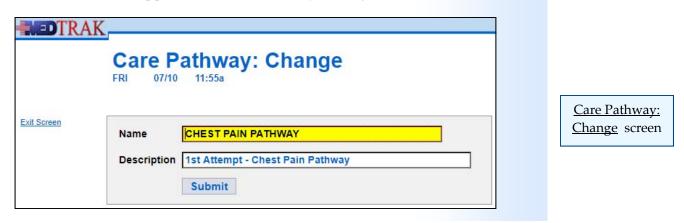
#### What if you make a mistake?

Whenever you build a care pathway, you will probably make mistakes. MedTrak is designed to make corrections to any data in your care pathway straightforward and easy to understand.

Say that you made an error when adding the care pathway name and/or description. What if the description was supposed to say "Book example - Chest Pain Pathway" rather than "1st Attempt - Chest Pain Pathway." To correct this mistake, access the care pathway screen (shown below).

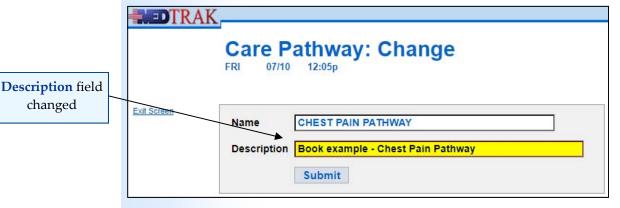


With the cursor next to the care pathway description, click the *Change* button. The next screen to appear is the <u>Care Pathway: Change</u> screen (shown below).

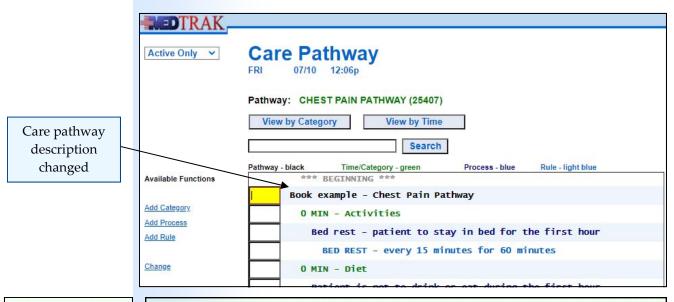




Type "Book example - Chest Pain Pathway" in the Description field (shown below).



Click the *Submit* button. The <u>Care Pathway</u> screen reappears displaying the care pathway description change (shown below).



Do These Steps 6.21 ====>

- 1. Place the cursor next to the care pathway description on the <u>Care Pathway</u> screen
- 2. Click the *Change* button (You should be on the <u>Care Pathway: Change</u> screen)
- 3. Type "Book example Chest Pain Pathway" in the Description" field
- 4. Click the *Submit* button

(You should be back on the <u>Care Pathway</u> screen) (The care pathway description should be changed)

You can use the *Change* button to correct not only the care pathway name and/ or description, but also the categories, processes, and rules.

### Changing the sequence of records .....

What if the sequence of the categories or the processes within a category or the rules within a process are not in the order you would like them to appear? When you built the categories, processes, and rules, MedTrak organized them in the order you built them. If this is not the order that you want, you can change it.

After reviewing the example care pathway, you decide that at the **zero minute** mark you want the **Tests** category to appear first, the **Activities** category to be second, and the **Diet** category to be third. MedTrak organized these with the **Activities** category first, the **Diet** category second, and the **Tests** category third, because this is the order that you built them.

Each category, process, and rule is assigned a sort order number when added into MedTrak. This is automatically done based on the order that you entered the data. The **Activities** category was assigned sort order number **0100**, the **Diet** category was assigned sort order number **0200**, and the **Tests** category was assigned **0300**.

To review the sort order numbers for each of the categories at the **zero minute** mark, use the *Change* button to display the <u>Care Pathway / Category: Change</u> screens.

Place the cursor next to the **Activities** category at the **zero minute** mark and click the **Change** button. The <u>Care Pathway / Category: Change</u> screen appears (shown below).



Notice that the sort order number is **0100**.



Click the *Exit Screen* button to return to the <u>Care Pathway</u> screen. Place the cursor next to the <u>Diet</u> category at the <u>zero minute</u> mark and click the <u>Change</u> button. The <u>Care Pathway: Change</u> screen appears (shown below).



Notice that the sort order number is **0200**.

Click the *Exit Screen* button to return to the <u>Care Pathway</u> screen. Place the cursor next to the <u>Tests</u> category at the <u>zero minute</u> mark and click the *Change* button. The <u>Care Pathway: Change</u> screen appears (shown below).



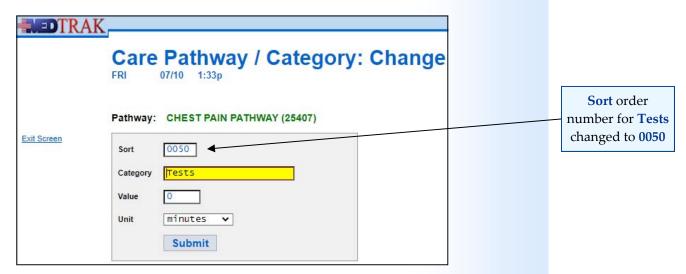
Notice that the sort order number is 0300.

MedTrak automatically numbered the categories when you added them. The **Sort** order field is a four-digit number. MedTrak started numbering at 0100 and added one hundred each time another category was added.

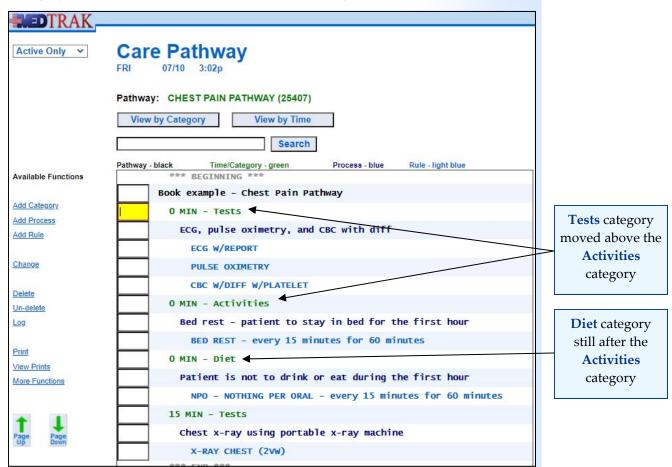
The sort order numbering is inclusive to each tier of data. MedTrak starts the numbering at each new level. For instance, the sort order numbers for the three rules that you added to the ECG, pulse oximetry, CBC with diff process at the zero minute mark also started at 0100.

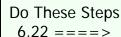
To move the **Tests** category to be the first one in the **zero minute** categories, all you have to do is change the **Sort** order number to a number lower than 0100. You could make it 0099 or 0000 or any number in between.

Type 0050 in the sort order number field on the <u>Care Pathway / Category:</u> <u>Change</u> screen for the <u>Tests</u> category at the <u>zero minute</u> mark (shown below).



Click the *Submit* button. The <u>Care Pathway</u> screen reappears with the <u>Tests</u> category moved above the <u>Activities</u> and <u>Diet</u> categories (shown below).





- 1. Place the cursor next to the Activities category at the zero minute mark
- 2. Click the *Change* button

(You should be on the <u>Care Pathway / Category: Change</u>) (Note that the sort order number is **0100**)

3. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen)

- 4. Place the cursor next to the Diet category at the zero minute mark
- 5. Click the *Change* button

(You should be on the <u>Care Pathway / Category: Change</u>) (Note that the sort order number is **0200**)

6. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen)

- 7. Place the cursor next to the Tests category at the zero minute mark
- 8. Click the *Change* button

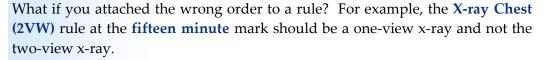
(You should be on the <u>Care Pathway / Category: Change</u>) (Note that the sort order number is **0300**)

- 9. Type 0050 in the Sort field
- 10. Click the Submit button

(You should be back on the <u>Care Pathway</u> screen) (The **Tests** category is now before the **Activities** category)

Categories, processes, and rules all have a **Sort** order field. You can control the order of your care pathway structure using the sort order number.

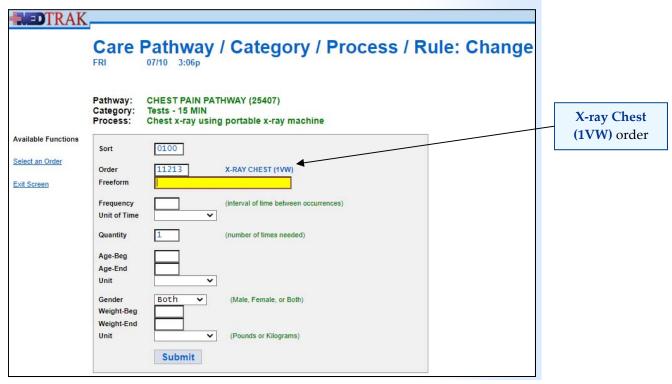
### Changing an order attached to a rule



To correct this error, place the cursor next to the **X-ray Chest (2VW)** rule and click the *Change* button. The <u>Care Pathway / Category / Process / Rule: Change</u> screen appears (shown on the next page).

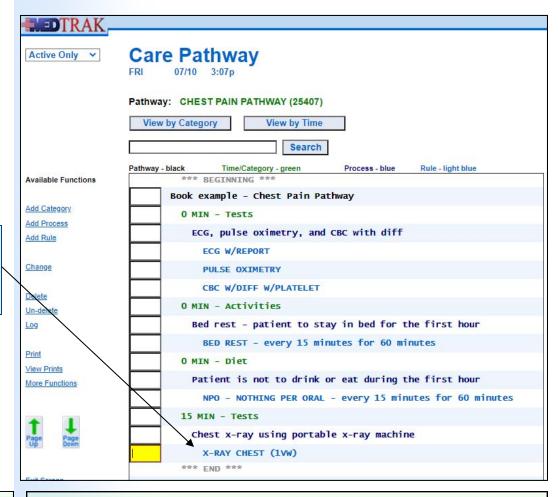
<b>DTRAK</b>							
	Care	Pathway 07/10 3:05p	/ Category	/ Process	Rule: Chang	ge	
	Pathway: Category: Process:	CHEST PAIN PAT Tests - 15 MIN Chest x-ray usin	THWAY (25407) g portable x-ray machi	ine			X-ray rule
Available Functions Select an Order	Sort	0100					
Exit Screen	Order Freeform	11084	X-RAY CHEST (2VW)				X-ray Chest
	Frequency Unit of Time	~	(interval of time between occ	currences)			(2VW) order
	Quantity Age-Beg	1	(number of times needed)				
	Age-End Unit						
	Gender Weight-Beg	Both ✔	(Male, Female, or Both)				
	Weight-End Unit		(Pounds or Kilograms)				
		Submit					

To change the two-view chest x-ray to a one-view chest x-ray, with the cursor in the **Order** field, click the *Select an Order* button. Using the same procedure that you did to select the two-view x-ray, locate and select the one-view x-ray in the **X-ray Chest** subsection of the **X-ray Trunk** subsection of the **Radiology** section. The <u>Care Pathway / Category / Process / Rule: Change</u> screen reappears displaying the **X-ray Chest (1VW)** order (shown below).





Click the *Submit* button. The <u>Care Pathway</u> screen reappears with the x-ray rule now a **X-ray Chest (1VW)** order (shown below).



X-ray Chest (1VW) order now attached to the x-ray rule

Do These Steps 6.23 ====>

- 1. Place the cursor next to the X-ray Chest (2VW) rule
- 2. Click the *Change* button
- 3. Be sure the cursor is in the Order field
- **4.** Click the *Select an Order* button (You should be on the <u>Orders: Select</u> screen)
- 5. Locate and select the X-ray Chest (1VW) order

  (You should be back on the Rule: Change screen)

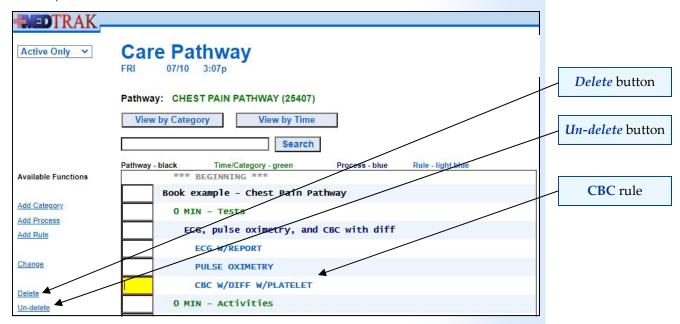
  (The chest x-ray order should now be a one-view)
- 6. Click the *Submit* button

  (You should be back on the <u>Care Pathway</u> screen)

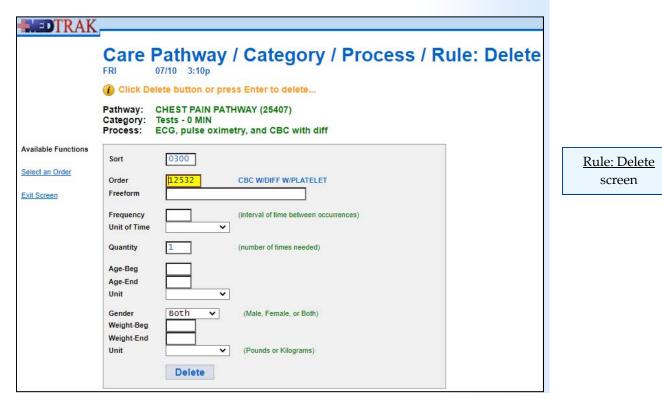
  (The x-ray rule is now X-ray Chest (1VW))

### Deleting or un-deleting a record

What if you have a category or process or rule that is just wrong and cannot be fixed? You need to remove it. You can use the *Delete* button to do so (shown below).



For example, to remove the CBC rule at the **zero minute** mark, place the cursor next to the CBC rule and click the **Delete** button. The <u>Care Pathway / Category / Process / Rule: Delete</u> screen appears (shown below).





To delete the **CBC** rule, click the *Delete* button or press the *ENTER* key. The <u>Care Pathway</u> screen refreshes with the **CBC** rule removed (shown below).



<u>Care Pathway</u> without the **CBC** rule

Do These Steps 6.24 ====>

- 1. Place the cursor next to the CBC w/Diff w/Platelet rule
- 2. Click the Delete button

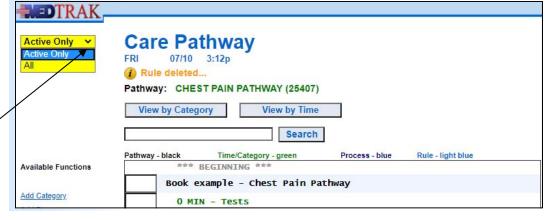
(You should be on the <u>Care Pathway / Category / Process / Rule: Delete</u> screen for the CBC w/Diff w/Platelet rule)

3. Click the *Delete* button or press the *ENTER* key

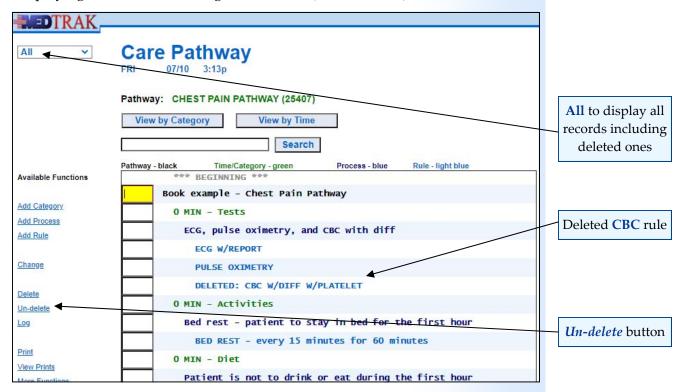
(You should be back on the <u>Care Pathway</u> screen)

(The CBC w/Diff w/Platelet rule does not appear)

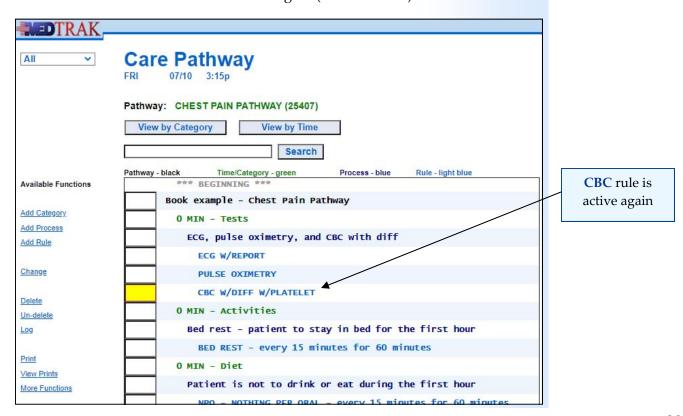
You can see that the delete function is a pretty powerful tool and easy to use (too easy). So, if you make a mistake and delete something that you did not want to delete, MedTrak has an un-delete function. To use the un-delete function, you need to change the <u>Care Pathway</u> screen to display all records including deleted ones. To do this, click the drop-down arrow in the upper left corner of the screen where it currently displays **Active Only** (shown below).



Drop-down arrow Select **All** from the drop-down list. The <u>Care Pathway</u> screen refreshes displaying all records including deleted ones (shown below).



To un-delete the CBC w/Diff w/Platelet rule, place the cursor next to it and click the *Un-delete* button. The <u>Care Pathway</u> screen refreshes with the CBC w/Diff w/Platelet rule now active again (shown below).





To change the <u>Care Pathway</u> screen back to showing only active records, you click the drop-down arrow in the upper left corner of the screen and select the **Active Only** option (shown below).



Do These Steps 6.25 ====>

**Active Only** 

option selected

- 1. Click the drop-down arrow in the upper left corner of the <u>Care Pathway</u> screen where it currently displays Active Only
- 2. Select the All option

(The <u>Care Pathway</u> screen refreshes showing all records, including the deleted ones)

- 3. Place the cursor next to the deleted CBC w/Diff w/Platelet rule
- 4. Click the *Un-delete* button

(The <u>Care Pathway</u> screen refreshes)
(The <u>CBC w/Diff w/Platelet</u> rule is active again)

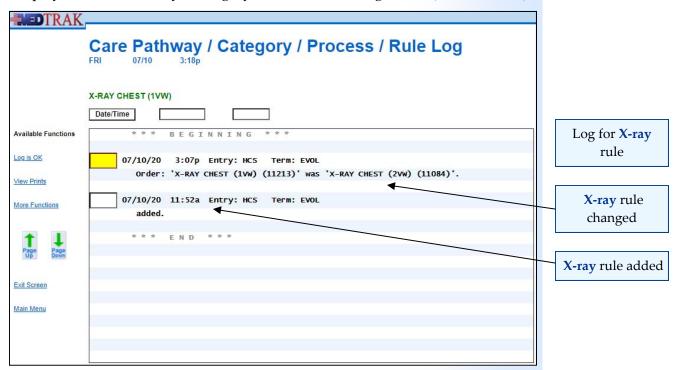
- 5. To reset the <u>Care Pathway</u> screen to showing only active records, click the drop-down arrow in the upper left corner of the <u>Care Pathway</u> screen where it currently displays All
- 6. Select the Active Only option

(The <u>Care Pathway</u> screen refreshes showing only active records)

### Displaying the log of a record

MedTrak keeps a log of every data addition, correction, and deletion action involving the categories, processes, and rules of your care pathway. To view this log, place the cursor next to the category, process, or rule and click the *Log* button. The <u>Log</u> screen for that selection will appear.

Place the cursor next to the **X-ray Chest (1VW)** rule and click the *Log* button to display the <u>Care Pathway / Category / Process / Rule Log</u> screen (shown below).



- 1. Place the cursor next to the X-ray Chest (1VW) rule
- 2. Click the *Log* button

(You should be on the <u>Care Pathway / Category / Process / Rule Log</u> screen)

- 3. Review the log records on this screen
- 4. Click the Exit Screen button

(You should be back on the <u>Care Pathway</u> screen)

Do These Steps <==== 6.26



You can print your care pathway from the <u>Care Pathways</u> screen (shown below).



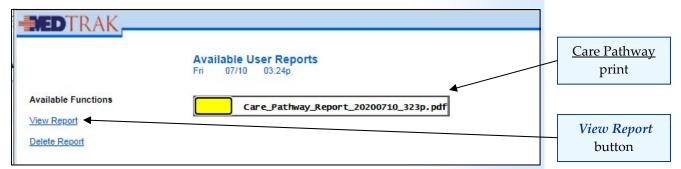
Or, you can print your care pathway from the <u>Care Pathway</u> screen (shown below).



To print your care pathway from either screen, click the *Print* button. The screen refreshes with the message "Report sent to printer/queue - use View Prints link..." at the top (shown below).

TRAK		
	Care Pathways FRI 07/10 3:23p	
	Report sent to printer/queue - use View Prints link  Search	Print message
Available Functions	*** BEGINNING ***	
Select	EXAMPLE OF CHEST PAIN PATHWAY	
Add	CHEST PAIN PATHWAY - Book example - Chest Pain Pathway	

This means that your report, in PDF format, is now in your <u>Available User Reports</u> queue and ready for you to send to a printer or to save on your computer. On either screen, click the *View Prints* button. This will open up the <u>Available User Reports</u> screen in another window (shown below).



With the cursor in command field next to the <u>Pathway Report</u>, click the *View Report* button. The PDF print will open up in another window for you to either print or save (shown below).

```
PAGE - 1
                                  Care Pathway
                                                                          07/10/20
            HCS - Healthcare Student
CHEST PAIN PATHWAY - Book example - Chest Pain Pathway
                                                                              3:23p
0 MIN
      ECG, pulse oximetry, and CBC with diff
         ECG W/REPORT
         PULSE OXIMETRY
         CBC W/DIFF W/PLATELET
   Activities
      Bed rest - patient to stay in bed for the first hour
         BED REST - every 15 minutes for 60 minutes
      Patient is not to drink or eat during the first hour
         NPO - NOTHING PER ORAL - every 15 minutes for 60 minutes
15 MTN
   Tests
      Chest x-ray using portable x-ray machine
         X-RAY CHEST (1VW)
*** END OF PRINT 07/10/20 3:23p - Healthcare Student ***
```



Do These Steps 6.27 ====>

- 1. On either the <u>Care Pathways</u> or the <u>Care Pathway</u> screen
- 2. Click the *Print* button

("Report sent to printer/queue - use View Prints link..." message appears)

- 3. Your care pathway, as a PDF, will be available shortly
- 4. Click the *View Prints* button
  (The <u>Available User Reports</u> window opens)
- 5. Find your report (If it does not appear, click the *Refresh* button)
- 6. Place the cursor next to the Pathway Report print
- 7. Click the *View Print* button
  (The <u>Care Pathway PDF</u> opens in another window)
- 8. Print the report or save / download it to your computer
- 9. Close the PDF window
- **10.** Close the <u>Available User Reports</u> window (You should be back on the original screen)

# **Patient Registration**



## **Learning Outcomes**

► How to register a patient in MedTrak



## **Key Concepts**

- ► Selecting the patient
- ► Choosing patient responsibility as the company
- Adding a new case
- ► Choosing self pay as the payer
- ► Adding a doctor visit
- ► Choosing the presenting problem(s)

### Registering a patient

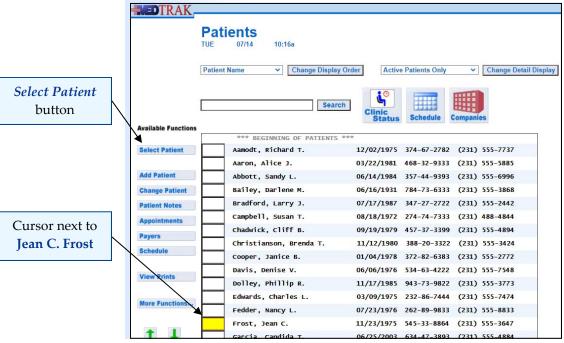
If you already know how to register patients in MedTrak because you completed one of our other books, then this chapter will be just a refresher. If you do not have any previous MedTrak experience, then pay careful attention to the workflow steps involved in registering a patient.

In order to streamline the registration process for the purposes of testing and running your care pathways in MedTrak, use the existing patients that are preloaded in the patient database. Also, choose **Self Pay** as the payer type and **Doctor** as the type of visit. As you can imagine, the patient registration process can include many different options depending on the patient's payer situation, the patient's presenting problem, and the type of provider needed. Using the suggestions above will simplify the registration process.

To register Jean C. Frost, after logging into MedTrak, you land on the <u>MedTrak</u> <u>Main Menu</u> (shown below).



Click the *Patient Registration* button to display the <u>Patients</u> screen. On this screen place the cursor next to Ms. Frost (shown below).



Click the *Select Patient* button to display the <u>Company: Select</u> screen (shown below).

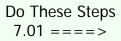


MedTrak manages patient responsibility cases (self pay, guarantor, group health, Medicare, Medicaid, and Tricare), where the patients are responsible for payment of services through their group health coverage or out of their own pocket, and occupational medicine cases (workers' compensation and employee health), where the employer is responsible for payment of services through their workers' compensation insurance or the employer's checkbook.

For the purposes of testing and running patients using your care pathways, choose patient responsibility on the <u>Company: Select</u> screen. Place the cursor next to <u>..Patient Responsibility</u> and click the <u>Select Company</u> button. The next screen to appear is the <u>New Case</u> screen. For the book example, type "<u>Chest pains</u>" in the <u>Complaint field</u> (shown below).

<b>DTRA</b>	IK						
	New Case TUE 07/14 10:25a						
	No cases yet						
	Patient Responsibility (2) Frost, Jean C. (471VRJ)						
	Password state Initials HCS						
Exit Screen	Choose either Complaint Chest pains or						
Tall World	Job Title Injury Date (mm/dd/yy, t, or y)						
	Injury Time (hh:mma or hh:mmp)  Work loc/address of injury  City of Injury						
	County of Injury  Date Last Worked (mm/dd/yy, t, or y)  Auto Accident Ins. Claim Number						
	ER Visit  ER Visit Date  Referred from  (mm/dd/yy, t, or y)						
	New Patient						
	Submit						

New Case screen

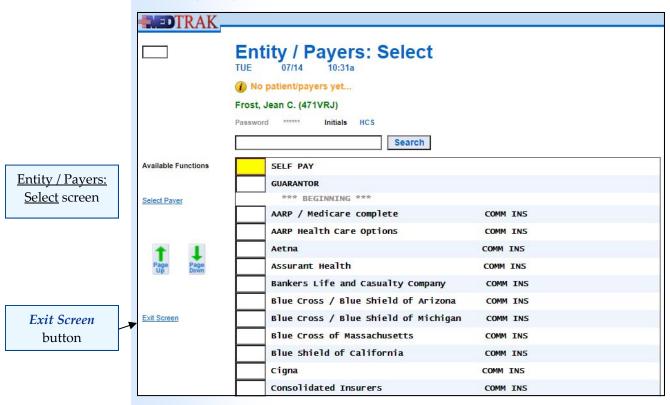


1. Log into MedTrak

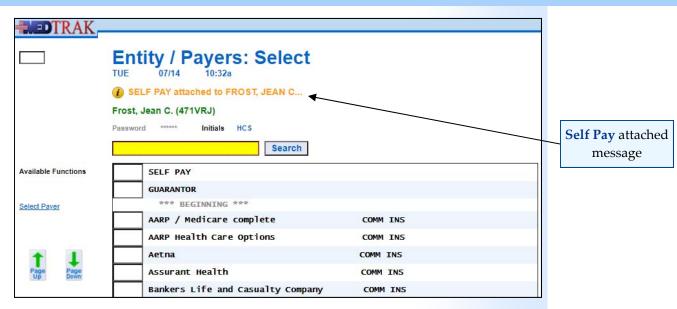
(You should be on the MedTrak Main Menu)

- **2.** Click the *Patient Registration* button (You should be on the <u>Patients</u> screen)
- 3. Place the cursor next to Jean C. Frost
- 4. Click the *Select Patient* button
  (You should be on the <u>Company: Select</u> screen)
- 5. Place the cursor next to .. Patient Responsibility
- **6. Click the** *Select Company* **button** (You should be on the <u>New Case</u> screen)
- 7. Type "Chest pains" in the Complaint field

On the <u>New Case</u> screen, click the *Submit* button. The next screen to display is the <u>Entity / Payers: Select</u> screen (shown below).



This screen lists all of the authorized payers for the entity that owns the healthcare facility. For the purposes of testing and running your care pathways, choose self pay as the payer. Place the cursor in the command field next to **Self Pay** and click the *Select Payer* button. The <a href="Entity/Payers: Select screen refreshes with the message "SELF PAY attached to FROST, JEAN C..." at the top (shown on the next page).



After attaching **Self Pay** to Ms. Frost, click the *Exit Screen* button. The next screen to appear is the <u>Patient / Payers: Confirm</u> screen (shown below).



1. Click the *Submit* button

(You should be on the Entity / Payers: Select screen)

- 2. Place the cursor next to Self Pay
- 3. Click the Select Payer button

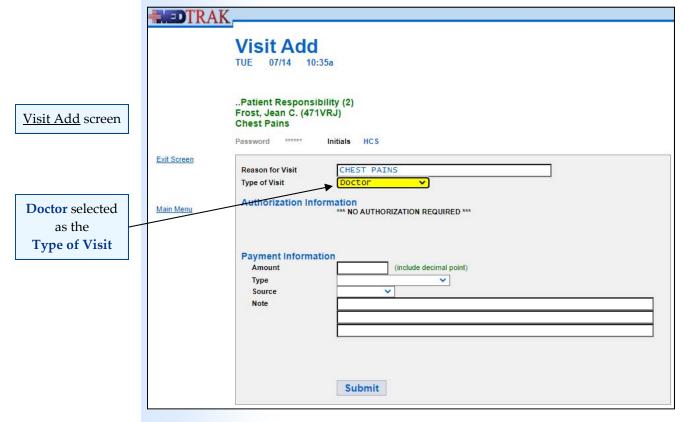
(The Entity / Payers: Select screen refreshes)
(Message "SELF PAY attached to FROST, JEAN C..."
appears)

4. Click the Exit Screen button

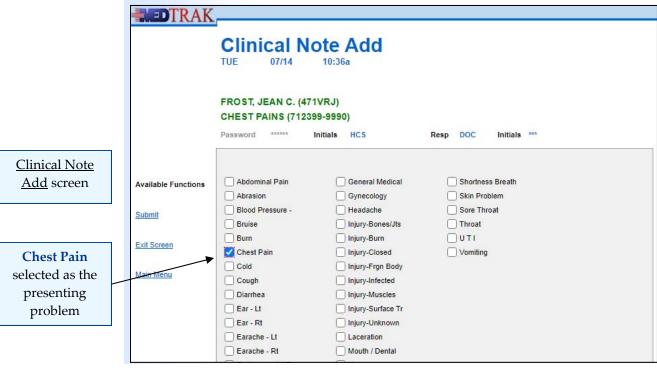
(You should be on the <u>Patient / Payers: Confirm</u> screen)

Do These Steps <==== 7.02

To confirm that self pay is the payer, click the *Confirm Payers* button. The next screen to appear is the <u>Visit Add</u> screen. On this screen, select **Doctor** as the **Type of Visit** using the drop-down list of visit types (shown below).



Click the *Submit* button. The next screen to appear is the <u>Clinical Note Add</u> screen. Select "Chest Pain" as the presenting problem (shown below).



MedTrak is a problem focused system. Select chest pain for the presenting problem for this example, but when you build your care pathway, select the appropriate presenting problem.

After selecting the presenting problem, click the *Submit* button. The <u>Clinical Note Add</u> screen refreshes with the message "Chest pain selected…" at the top. Then click the *Exit Screen* button. Your patient is registered and now appears on the <u>Clinic Status</u> screen. The <u>Patients</u> screen reappears (shown below).



Patients screen

*Clinic Status* icon button

1. Click the Confirm Payers button

(You should be on the Visit Add screen)

- 2. Select Doctor from the Type of Visit drop-down list
- 3. Click the *Submit* button

(You should be on the Clinical Note Add screen)

- 4. Select Chest Pain as the presenting problem
- 5. Click the *Submit* button

(The <u>Clinical Note Add</u> screen refreshes) (The message "Chest Pain selected..." appears)

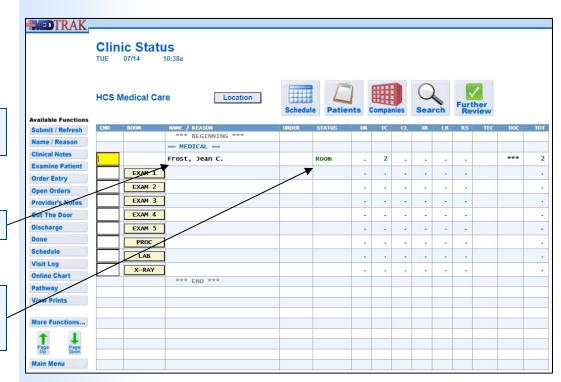
6. Click the Exit Screen button

(You should be back on the <u>Patients</u> screen)
(The patient is registered and now on the <u>Clinic Status</u> screen)

Do These Steps <==== 7.03

The <u>Clinic Status</u> screen provides a real-time workflow view of the medical facility. Each member of the clinical staff, including the provider, uses this screen to access their part of the patient's clinical care documentation in the EHR (electronic health record).

To view the <u>Clinic Status</u> screen from the <u>Patients</u> screen, click the <u>Clinic Status</u> icon located near the top of the screen. The <u>Clinic Status</u> screen for this example appears (shown below).



The <u>Clinic Status</u> screen shows that Jean C. Frost has been waiting for six minutes to be placed in a room by the clinical staff (TC).

Do These Steps 7.04 ====>

Clinic Status

screen

Jean C. Frost

Waiting for a room workflow **Status** (**Room**)

1. Click the *Clinic Status* icon button located near the top of the screen

(You should be on the <u>Clinic Status</u> screen)
(Ms. Frost should appear with a workflow **Status** of **Room**)

## **Patient Intake**





## **Learning Outcomes**

▶ How to perform patient intake



## **Key Concepts**

- ► Reason for visiting the medical facility
- Medical history
- ▶ Medications
- Allergies
- ▶ Body statistics
- Vital signs

#### Patient intake

Again, in order to streamline the patient intake process for the purposes of testing and running your care pathways in MedTrak, you will skip most of the patient intake processing.

Normally, during the patient intake process, you would review the following with the patient:

- Reason(s) for needing medical attention
- History of the chief complaint(s)
- Symptoms
- Previous medical history including similar illnesses or injuries
- Current prescription and over-the-counter medications
- Allergies including medication allergies
- Body statistics including height, weight, and BMI
- Vital signs including blood pressure, heart rate (pulse), respiration, and temperature
- Other clinical observations

As you learned in the previous chapter, your patient is now on the <u>Clinic Status</u> screen. You accessed this screen by clicking the <u>Clinic Status</u> icon button on the <u>Patients</u> screen, but you can also access this screen by clicking the <u>Clinic Status</u> button on the <u>MedTrak Main Menu</u> (shown below).



Patient intake process

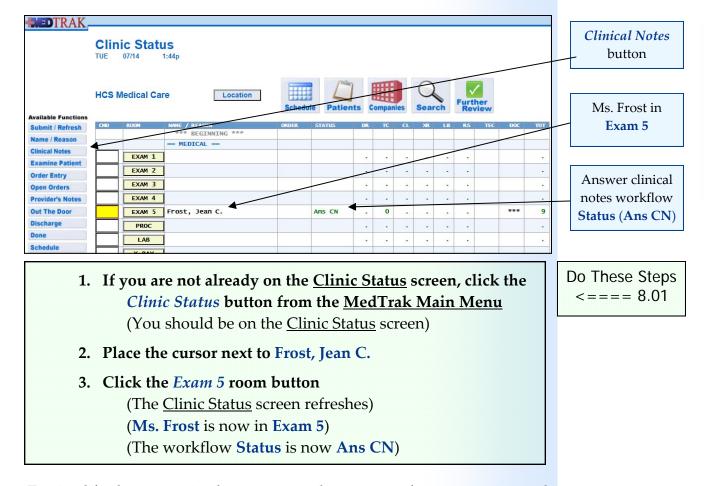
Clinic Status

button

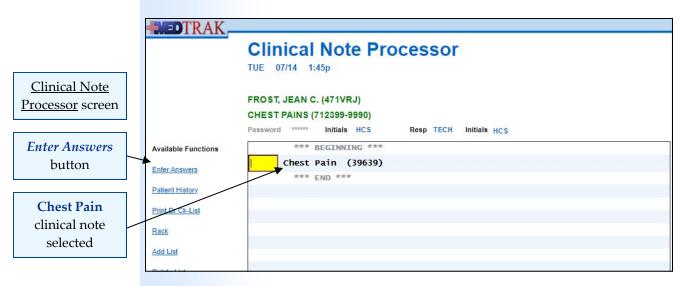
In this example, move Ms. Frost into **Exam 5** from the reception area. To do so, place the cursor next to Ms. Frost (shown below).



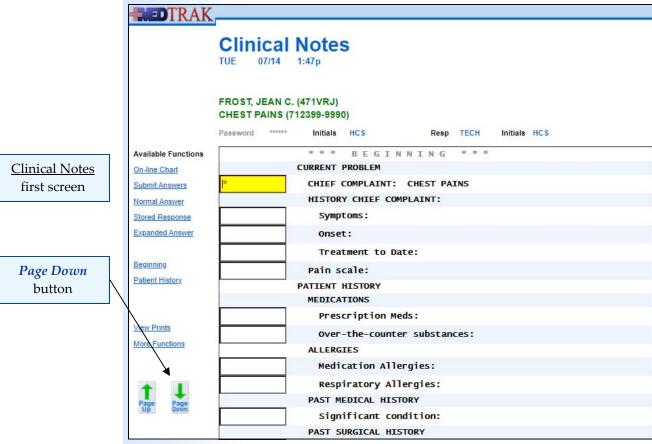
Then click the *Exam* **5** room button. The <u>Clinic Status</u> screen refreshes with Ms. Frost in Exam **5** (shown below).



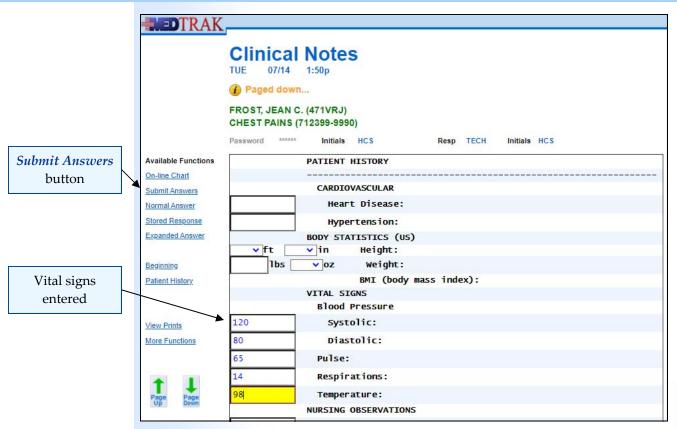
To simplify the patient intake process so that you can focus on testing and running your care pathways, you only need to answer the vital signs. With the cursor next to Ms. Frost, click the *Clinical Notes* button. The next screen to appear is the <u>Clinical Note Processor</u> screen (shown on the next page).



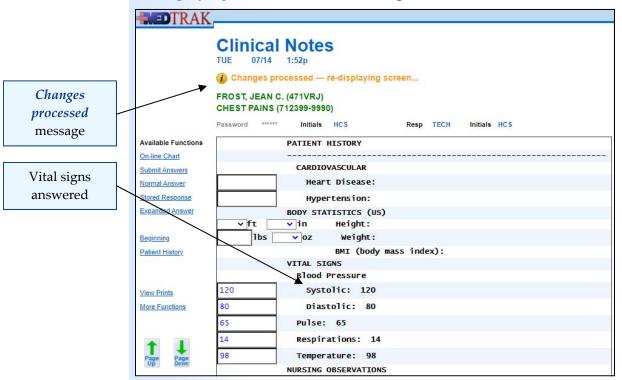
This screen displays the reason(s) that the patient is being seen at your facility. MedTrak is problem-focused so the clinical notes questions for Ms. Frost will be directly related to chest pain. To access the clinical notes, with the cursor next to **Chest Pain**, click the *Enter Answers* button. The first <u>Clinical Notes</u> screen appears (shown below).



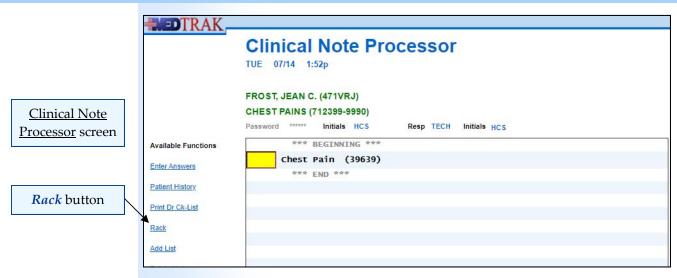
As previously indicated, you will only be answering the vital signs questions which are located on the second screen. To access the next <u>Clinical Notes</u> screen, click the <u>Page Down</u> button. The second <u>Clinical Notes</u> screen appears. On this screen, type Ms. Frost's vital signs (shown on the next page).



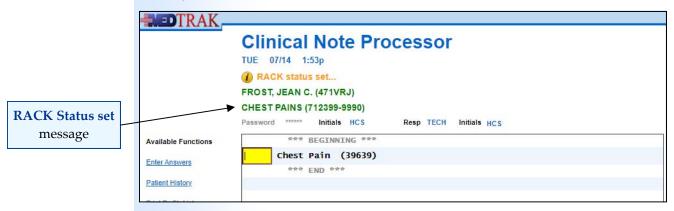
After entering the vital signs (shown above), click the *Submit Answers* button. The <u>Clinical Notes</u> screen refreshes with the message "Changes processed --- re-displaying screen…" and the vital signs answered (shown below).



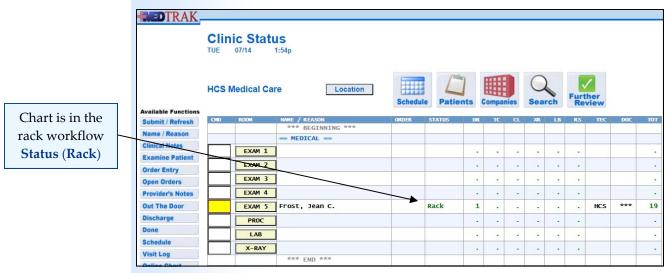
After answering the vital signs, click the *Exit Screen* button to return to the <u>Clinical Notes Processor</u> screen (shown on the next page).



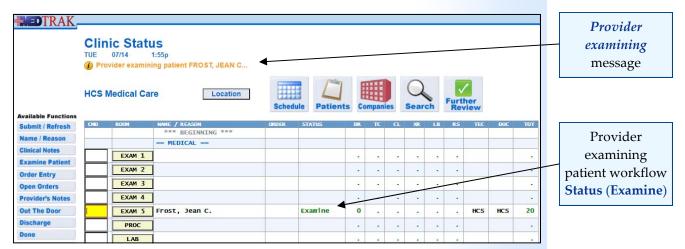
To inform the provider that the patient is ready to be seen, click the *Rack* button. This is a reference to a process before the advent of the EHR when the patient's chart was physically placed in a rack outside the exam room to indicate to the provider that the patient was ready to be examined. The <u>Clinical Note Processor</u> screen refreshes with the message "RACK status set..." (shown below).



Now click the *Exit Screen* button to return to the <u>Clinic Status</u> screen. Ms. Frost chart is now in the **Rack** workflow **Status** (shown below).



To indicate that the provider is now examining the patient, click the *Examine Patient* button. The <u>Clinic Status</u> screen refreshes with the message "Provider examining patient FROST, JEAN C..." message and her workflow **Status** is now Examine (shown below).



- 1. With the cursor next to Ms. Frost on the Clinic Status screen
- 2. Click the *Clinical Notes* button
  (You should be on the <u>Clinical Note Processor</u> screen)
- 3. Click the *Enter Answers* button
  (You should be on the first <u>Clinical Notes</u> screen)
- 4. Click the *Page Down* button (You should be on the second <u>Clinical Notes</u> screen)
- 5. Type 120 in the Systolic blood pressure field
- 6. Type 80 in the Diastolic blood pressure field
- 7. Type 65 in the Pulse field
- 8. Type 14 in the Respirations field
- 9. Type 98 in the Temperature field
- 10. Click the Submit Answers button

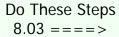
(You should be still on the second <u>Clinical Notes</u> screen) ("Changes processed --- re-displaying screen..." message appears)

11. Click the Exit Screen button

(You should be on the Clinical Note Processor screen)

12. Click the *Rack* button

(The <u>Clinical Note Processor</u> screen refreshes) (The message "RACK status set..." appears) Do These Steps <==== 8.02



1. Click the Exit Screen button

(You should be back on the <u>Clinic Status</u> screen) (The workflow **Status** is now **Rack**)

- 2. With the cursor next to Jean C. Frost
- 3. Click the Examine Patient button

(The <u>Clinical Status</u> screen refreshes)

("Provider examining patient FROST, JEAN C..."

message appears)

(The workflow Status is now Examine)

# Running a Care Pathway



## **Learning Outcomes**

▶ How to run the example care pathway you created on a patient



## **Key Concepts**

- Starting the care pathway
- ► Answering open orders
- ► Pausing the care pathway
- ► Re-starting the care pathway
- ▶ Voiding a patient from the <u>Clinic Status</u> screen

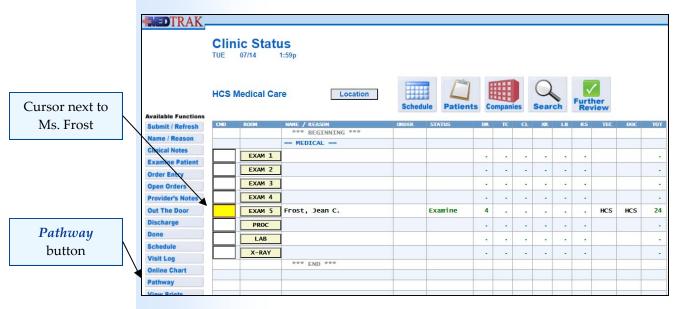
### Running a care pathway

Now you are ready to test the example chest pain care pathway that you built on Jean C. Frost.

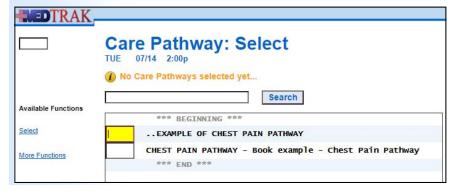
Jean C. Frost is on the Clinic Status screen in Exam 5. You can access this screen by clicking the Clinic Status button on the MedTrak Main Menu (shown below).



The <u>Clinic Status</u> screen appears. Place the cursor next to Ms. Frost (shown below.



Click the Pathway button to access the Care Pathway: Select screen (shown below).



Care Pathway: Select screen

- 1. If you are not already on the <u>Clinic Status</u> screen, click the <u>Clinic Status</u> button from the <u>MedTrak Main Menu</u> (You should be on the <u>Clinic Status</u> screen)
- Do These Steps <==== 9.01

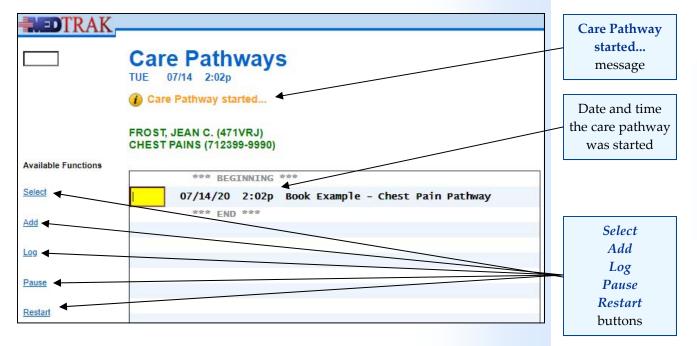
- 2. Place the cursor next to Frost, Jean C.
- 3. Click the *Pathway* button

(You should be on the <u>Care Pathway: Select screen</u>)

Place the cursor next to the chest pain book example care pathway that you built (shown below).



Click the *Select* button. The next screen to appear is the <u>Care Pathways</u> screen. The message "Care Pathway started..." appears at the top (shown below).



The purpose of this screen is to provide control over the care pathways that are running for each patient. In this example, only one care pathway is running. If the patient presented with several problems which had associated care pathways, there could be more than one care pathway running at a time.

Select button

To review the status of all of the orders of a care pathway, use the *Select* button.

Add button

To start another care pathway, use the *Add* button and select it from the <u>Care Pathway</u>: <u>Select screen</u>.

Log button

To review the activity log of a care pathway that you started, use the *Log* button to review the entries.

Pause button

To pause a care pathway due to a change in the patient's condition that requires a medical intervention, use the *Pause* button. This suspends all of the future orders of the care pathway.

**Restart** button

If you did pause a care pathway and now want to start it again, use the *Restart* button. The timer starts again for all future orders.

You will use the *Select, Log, Pause,* and *Restart* buttons in this chapter.

Do These Steps 9.02 ===>

#### 1. Place the cursor next to the

**Chest Pain Pathway - Book Example** 

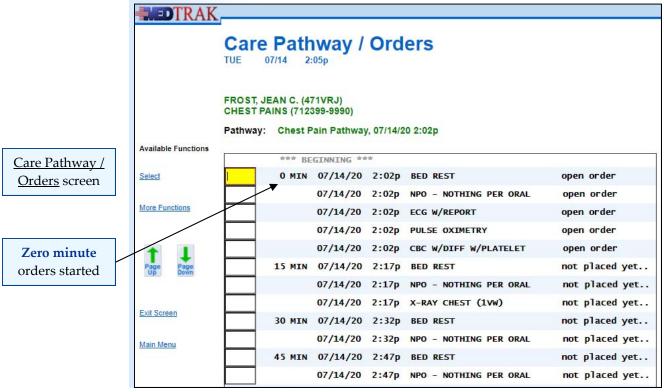
2. Click the Select button

(You should be on the <u>Care Pathways</u> screen)

(The message "Care Pathway started..." appears)

(The start date and time of the care pathway display)

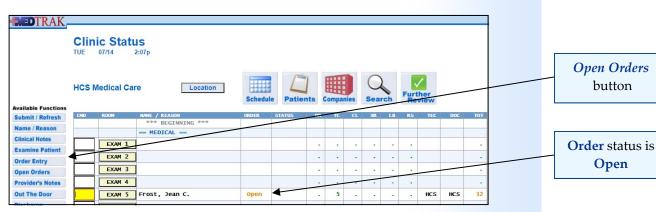
With the cursor next to the care pathway, click the *Select* button. The next screen to appear is the <u>Care Pathway / Orders</u> screen (shown below).



The <u>Care Pathway / Orders</u> screen displays the current status of all of the orders associated with the care pathway. When the care pathway starts, all of the orders at the **zero minute** mark are placed and become open orders. Future orders become open orders when the elapsed time reaches their start time. They have the "**not placed yet..**" status next to them.

- 1. Be sure the cursor is next to the care pathway
- 2. Click the *Select* button
  (You should be on the <u>Care Pathway / Orders</u> screen)
- 3. Review the status of the orders on this screen
- 4. When you build your care pathways, you will probably need to use the *Page Down* and *Page Up* buttons to review all of the orders

To review what these open orders look like on the <u>Open Orders</u> screen, click the <u>Exit Screen</u> button to return to the <u>Care Pathways</u> screen. Then click the <u>Exit Screen</u> button again to return to the <u>Clinic Status</u> screen (shown below).



To review the open orders, be sure the cursor is next to Ms. Frost and click the *Open Orders* button. The next screen to appear is the <u>Open Orders</u> screen for Ms. Frost's showing all of the orders placed at the **zero minute** mark (shown below).

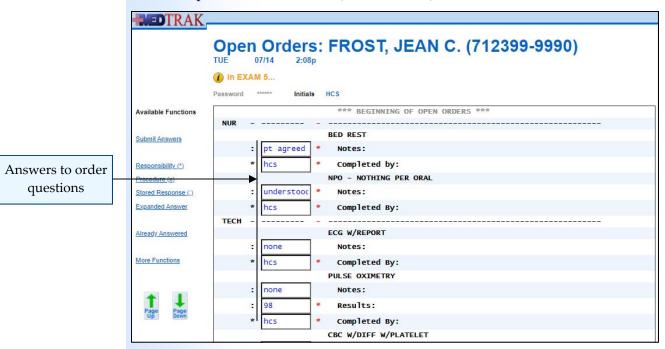


Open Orders for Ms. Frost

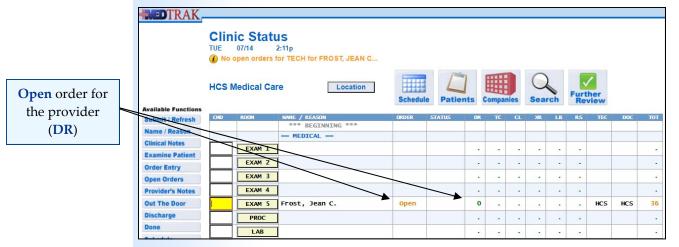
Do These Steps

<==== 9.03

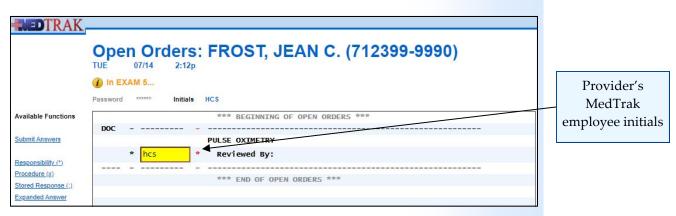
From this screen, the clinical and administrative staff members read the orders placed by the care pathway. In this example, the nursing staff is to instruct the patient to stay in bed and not drink or eat anything. The technical staff is to do an ECG with report, a pulse oximetry, and a blood draw for a CBC laboratory test. After completing these orders, the person performing the order documents their completion on this screen (shown below).



After answering the questions on the <u>Open Orders</u> screen, click the *Submit Answers* button. The <u>Clinic Status</u> screen reappears showing that there is now an open order for the provider (**DR**) (shown below).



Be sure the cursor is next to Ms. Frost and click the *Open Orders* button. The <u>Open Orders</u> screen appears showing that the provider needs to review the results of the pulse oximetry test. The provider enters their MedTrak employee initials indicating that they reviewed the pulse oximetry test results (shown on the next page).



Then the provider clicks the *Submit Answers* button. The <u>Clinic Status</u> screen reappears showing an **Order** status of **Done** which indicates that there are now no open orders (shown below).



1. Click the Exit Screen button

(You should be back on the <u>Care Pathways</u> screen)

2. Click the *Exit Screen* button again
(You should be back on the <u>Clinic Status</u> screen)

- 3. Be sure the cursor is next to Ms. Frost
- Click the Open Orders button
   (You should be on the Open Orders screen for Ms. Frost)
- 5. Type "pt agreed" in the Bed Rest / Notes field
- 6. Type your MedTrak employee initials in the Bed Rest / Completed by field
- 7. Type "understood" in the NPO / Notes field
- 8. Type your MedTrak employee initials in the NPO / Completed By field
- 9. Type "none" in the ECG / Notes field

Do These Steps <==== 9.04

Do These Steps 9.05 ====>

- 1. Type your MedTrak employee initials in the ECG / Completed By field
- 2. Type "none" in the Pulse Oximetry / Notes field
- 3. Type 98 in the Pulse Oximetry / Results field
- 4. Type your MedTrak employee initials in the Pulse Oximetry / Completed By field
- 5. Type "none" in the CBC / Notes field
- 6. Type your MedTrak employee initials in the CBC / Collected By field
- 7. Click the *Submit Answers* button
  (You should be back on the <u>Clinic Status</u> screen)

(There should be open orders for the provider (**DR**))

- 8. Click the *Open Orders* button
  (You should be on the <u>Open Orders</u> screen for Ms. Frost)
- 9. Type your MedTrak employee initials in the Pulse Oximetry / Reviewed By field
- 10. Click the Submit Answers button (You should be back on the Clinic Status screen) (The Order status should be Done)

To review the current status of the care pathway orders, be sure the cursor is next to Ms. Frost on the <u>Clinic Status</u> screen and click the <u>Pathway</u> button. The next screen to appear is the <u>Care Pathways</u> screen. On this screen, click the <u>Select</u> button to display the <u>Care Pathway / Orders</u> screen (shown below).



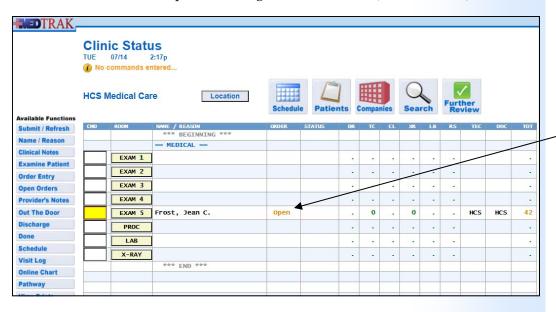
Current status of care pathway orders

As you can see on this screen, several of the orders are completed, a couple are pending results, and the rest still need to be placed. After reviewing this screen, click the *Exit Screen* button to return to the <u>Care Pathways</u> screen, then click the *Exit Screen* button again to return to the <u>Clinic Status</u> screen.

- 1. Be sure the cursor is next to Ms. Frost on the <u>Clinic Status</u> screen
- 2. Click the *Pathway* button
  (You should be on the <u>Care Pathways</u> screen)
- 3. Be sure the cursor is next to the care pathway
- 4. Click the *Select* button
  (You should be on the <u>Care Pathway / Orders</u> screen)
- 5. Review the status of the orders on this screen
- 6. Click the *Exit Screen* button
  (You should be back on the <u>Care Pathways</u> screen)
- 7. Click the *Exit Screen* button again

  (You should be back on the Clinic Status screen)

Fifteen minutes after the start of the care pathway, MedTrak automatically places the orders for the **fifteen minute** mark. The <u>Clinic Status</u> screen now indicates that there are open orders again for Ms. Frost (shown below).



There are now open orders for both the nursing (TC) and radiology (XR) staffs. To view the open orders, be sure the cursor is next to Ms. Frost and click the *Open Orders* button. The next screen to appear is the <u>Open Orders</u> screen for you to review the open orders for Ms. Frost (shown on the next page).

Do These Steps <==== 9.06

Order status is now Open

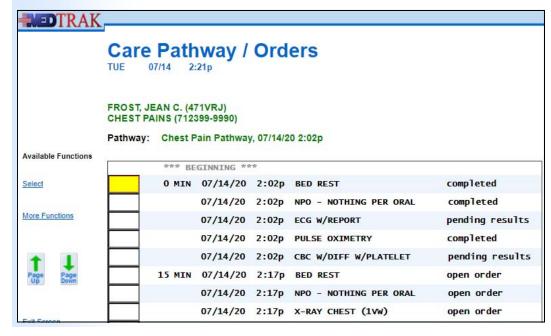


Open orders for nursing and radiology

Do These Steps 9.07 ====>

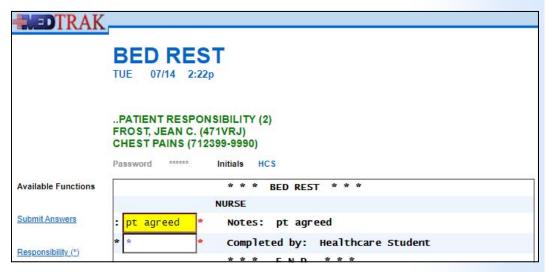
- 1. Be sure the cursor is next to Ms. Frost
- **2.** Click the *Open Orders* button (You should be on Ms. Frost's <u>Open Orders</u> screen)
- 3. Review the open orders on this screen
- **4.** Click the *Exit Screen* button (You should be back on the <u>Clinic Status</u> screen)

The <u>Care Pathway / Orders</u> screen is also updated with the current status of the patient's orders. To view this screen, be sure the cursor is next to Ms. Frost on the <u>Clinic Status</u> screen and click the <u>Pathway</u> button. On the <u>Care Pathways</u> screen, be sure the cursor is next to the care pathway and click the <u>Select</u> button. The <u>Care Pathway / Orders</u> screen appears (shown below).



Current status of care pathway orders

You can review the details of any order. To view the order details of the **Bed Rest** order at the **zero minute** mark, place the cursor next to the order and click the *Select* button. The **Bed Rest** order details screen appears (shown below).



Bed Rest order details screen

After reviewing this order, click the *Exit Screen* button to return to the <u>Care Pathway / Orders</u> screen. Then click the *Exit Screen* button again to return to the <u>Care Pathways</u> screen.

- 1. Be sure the cursor is next to Ms. Frost on the <u>Clinic Status</u> screen
- 2. Click the Pathway button

(You should be on the **Care Pathways** screen)

- 3. Be sure the cursor is next to the care pathway
- 4. Click the Select button

(You should be on the <u>Care Pathway / Orders</u> screen)

- 5. Review the status of the orders on this screen
- 6. Place the cursor next to the Bed Rest order at the zero minute mark
- 7. Click the *Select* button

(You should be on the **Bed Rest** order details screen)

- 8. Review the details of this order
- 9. Click the *Exit Screen* button

(You should be back on the <u>Care Pathway / Orders</u> screen)

10. Click the Exit Screen button again

(You should be back on the <u>Care Pathways</u> screen)

Do These Steps <==== 9.08

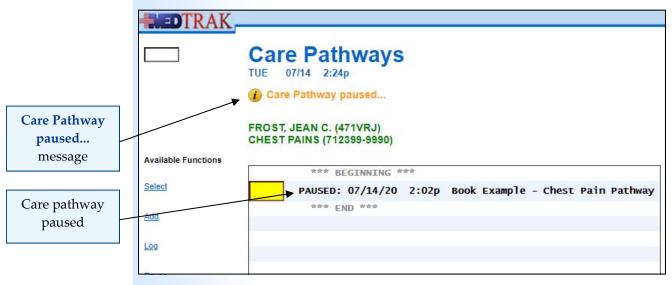
#### Pausing and restarting a care pathway



Because there are so many variables involved in patient care, sometimes it is necessary to pause a running care pathway. This temporary stop in the care pathway could be due to the patient developing a secondary condition that needs to be stabilized before proceeding with the care pathway. You pause a care pathway on the <u>Care Pathways</u> screen (shown below).

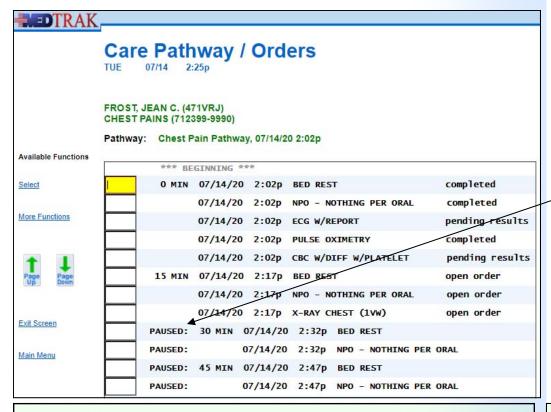


To pause a care pathway, place the cursor next to it on the <u>Care Pathways</u> screen and click the <u>Pause</u> button. The <u>Care Pathways</u> screen refreshes with the care pathway paused (shown below).



Pausing the care pathway suspends all of the orders yet to be placed. The timer for placing the orders is put on hold until the care pathway is restarted.

Be sure the cursor is next to the care pathway and click the *Select* button to display the <u>Care Pathway / Orders</u> screen (shown below).



Care pathway orders paused

1. Be sure the cursor is next to the care pathway on the <u>Care Pathways</u> screen

2. Click the Pause button

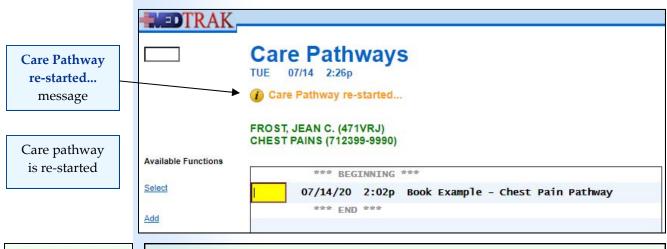
(The <u>Care Pathways</u> screen refreshes) (The message "Care Pathway paused..." appears) (The care pathway is paused)

- 3. Click the Select button
  - (You should be on the <u>Care Pathway / Orders</u> screen)
- 4. Review the status of the orders on this screen
- 5. Click the Exit Screen button

(You should be back on the <u>Care Pathways</u> screen)

Restarting the care pathway reactivates the timer for the orders yet to be placed. To restart a care pathway, be sure the cursor is next to the care pathway on the <u>Care Pathways</u> screen and click the *Restart* button. The <u>Care Pathways</u> screen refreshes with the message "Care pathway re-started..." and the care pathway is active again (shown on the next page).

Do These Steps <==== 9.09



Do These Steps 9.10 ====>

- 1. Be sure the cursor is next to the care pathway on the <u>Care Pathways</u> screen
- 2. Click the Restart button

(The <u>Care Pathways</u> screen refreshes)
(The message "Care Pathway re-started..." appears)
(The care pathway is active again)

The pause and re-start of the care pathway is also recorded in the log. To view the log, be sure the cursor is next to the care pathway on the <u>Care Pathways</u> screen and click the <u>Log</u> button. The <u>Care Pathway Log</u> screen appears (shown below).



<u>Care Pathway</u> <u>Log</u> showing the start, pause, and re-start

To exit the <u>Care Pathway Log</u> screen, click the *Exit Screen* button.

Do These Steps

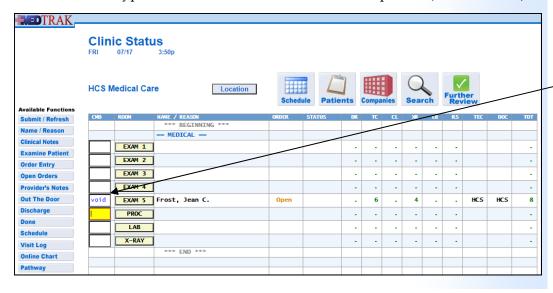
- 1. Be sure the cursor is next to the care pathway on the Care Pathways screen
  - <==== 9.11
- 2. Click the *Log* button (You should be on the <u>Care Pathway Log</u> screen)
- 3. Review the log entries on this screen
- 4. Click the Exit Screen button (You should be back on the <u>Care Pathways</u> screen)

#### Voiding patients from the <u>Clinic Status</u> screen

You will most likely not build your care pathway's categories, processes, and rules exactly the way that you want them to work the first time that you test them. It will be a process of improvement. This will necessitate the testing of your care pathways with multiple patients from the Patients database. Once you start a care pathway with one patient, you will not want to use that patient to test the next iteration of your care pathway. To remove a test patient from the <u>Clinic Status</u> screen, follow this procedure.

- 1. **Pause** the care pathway with the test patient.
- **Void** the test patient from the <u>Clinic Status</u> screen.

Be sure the cursor is next to the test patient that you want to remove from the <u>Clinic Status</u> screen. Click the <u>Pathway</u> button to access the <u>Care Pathways</u> screen. Pause the care pathway by clicking the *Pause* button with the cursor next to the care pathway. Click the Exit Screen button to return to the Clinic <u>Status</u> screen. Type "**void**" in the command next to the patient (shown below).



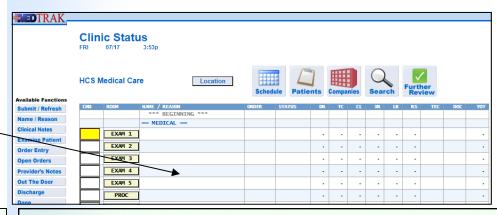
void command

After pausing the care pathway for the patient

Press the *ENTER* key. The next screen to appear is the <u>Void Visit</u>. On this screen, type "Testing" or any other reason in the Reason field (shown below).



Click the *Submit* button. The <u>Clinic Status</u> screen reappears with the test patient removed (shown below).



Ms. Frost's visit is voided and she no longer appears

Do These Steps 9.12 ====>

- 1. Place the cursor next to the patient on the Clinic Status
- 2. Click the *Pathway* button

(You should be on the **Care Pathways** screen)

3. Click the *Pause* button

(The care pathway is paused)

4. Click the Exit Screen button

(You should be back on the <u>Clinic Status</u> screen)

- 5. Type "void" in the command field next to the patient
- 6. Press the *ENTER* key

(You should be on the <u>Void Visit</u> screen)

- 7. Type "Testing" or any other reason in the Reason field
- 8. Click the Submit button

(You should be back on the <u>Clinic Status</u> screen) (The patient no longer appears on the screen)

# Building and Running Your Own Care Pathway



### **Learning Outcomes**

How to build and run your own care pathway



## **Key Concepts**

- ► How to build your care pathway
- ▶ How to locate patient orders in a CPOE
- How to print your care pathway
- ► How to register patients
- How to process patient intake
- ► How to run your care pathway
- ► How to pause your care pathway
- ► How to restart your care pathway



## Assignment

Your instructor will provide you with your assignment

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