Anticoagulation Management Tool

Installation/Implementation Guide

(Patch OR*3.0*307)

Initial Release

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Department of Veterans Affairs

Office of Enterprise Development

Revision History

Date	Description of Change	Author Information
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Introduction

This tool was developed at the Portland VA Medical Center to help simplify the complex, time consuming processes required to manage outpatients on anticoagulation medication.

The tool enables the user to enter, review, and continuously update all information connected with patient anticoagulation management. With the Anticoagulation Tracking, one can order lab tests, enter outside lab results and graphically review lab data, enter notes, complete encounter data, complete the consults if consults are used to initiate entry into the Anticoagulation clinic, and print a variety of patient letters. Upon exiting the program all activities within the program are viewable on an Anticoagulation flow sheet located on the Computerized Patient Record System (CPRS) Reports tab. The Anticoagulation Tracking provides clinic staff a mechanism of ensuring continuous patient monitoring *with a built-in mechanism that alerts staff when patients haven't been monitored in a timely period.* A Lost to Follow-up list is maintained to insure that staff knows of patients who need attention.

Scope

The scope of this manual covers the installation steps performed by a Pharmacy Service Automated Data Processing Application Coordinator (ADPAC) or Clinical Application Coordinator (CAC). Other steps, such as performing the Kernel Installation and Distribution System (KIDS) install and downloading the ZIP file from the anonymous server used for software distribution are performed by members of the Information Technology (IT) or Information Resources Management (IRM) staff, depending on the size and organization of your medical center. These steps are covered in the Patch Description that accompanies the server side (M) code of this application.

Screen Capture Conventions

In this manual, user responses are shown in bold type. In most cases, you need only enter the first few letters to increase speed and accuracy. Pressing the Return or Enter key, which is indicated by the symbol <RET>, must follow every response you enter. This symbol is not shown, but is implied, following bold type entries.

Enter a caret, indicated by the symbol (^), at almost any prompt to terminate the line of questioning and return to the previous level in the routine. Continue entering up-arrows to exit the system.

Online Help

Online help is available at almost any prompt in the software by entering a single question mark (?). This will provide information to help you answer the prompt. In some instances, entering double (??) or triple (???) question marks will provide more detailed information.

Installation

The authority for installation of OR*3*307 Anticoagulation Management Tool (AMT) is the patch description attached to the the KIDS build

Pre-Conditions

Before the AMT can be installed, the following packages and patches must be installed and *fully* patched in your accounts.

Application Name	Version
Authorization/Subscription Utility (ASU)	V 1.0
Consult/Request Tracking	V 2.5
Kernel	V. 8.0
Laboratory	V. 5.2
Order Entry/Results Reporting (OE/RR)	V. 3.0 patch OR*3*243
Patient Care Encounter (PCE)	V. 1.0
RPC Broker	V 1.1
Text Integration Utilities (TIU)	V 1.0
ToolKit	V. 7.3
VA FileMan	V. 21.0
Visit Tracking	V 2.0

Server Side Installation

The M routines for this patch are included on FORUM in the released patch on an attached packman. To perform the server install of the OR*3*307 released patch follow the these steps:

1. **To Access the Packman menu, at the end of the message Enter "X". This will drop the user into the Packman menu:**

```
     Enter message action (in IN basket): Ignore//  Xtract KIDS

     Select PackMan function: ?
         Answer with PackMan function NUMBER, or NAME
     Choose from:
     1          ROUTINE LOAD
     2          GLOBAL LOAD
     3          PACKAGE LOAD
     4          SUMMARIZE MESSAGE
     5          PRINT MESSAGE
```

```
      6              INSTALL/CHECK MESSAGE
      7              INSTALL SELECTED ROUTINE(S)
      8              TEXT PRINT/DISPLA
      9              COMPARE MESSAGE

Select the INSTALL/CHECK MESSAGE option (#6) on the Packman Menu:


Select PackMan function: 6  INSTALL/CHECK MESSAGE
Line 749  Message #387571    Unloading KIDS Distribution   OR*3.0*307
   OR*3.0*307

Want to Continue with Load? YES// <Enter>
Loading Distribution...

   OR*3.0*307

Select PackMan function:
```

2. **Once the packman is loaded the Kennel Installation and Distribution (KIDS) menu will install the application.**

```
Select OPTION NAME: XPD MAIN        Kernel Installation & Distribution System

         Edits and Distribution ...
         Utilities ...
         Installation ...
         Patch Monitor Main Menu ...

Select Kernel Installation & Distribution System Option: Installation


   1      Load a Distribution
   2      Verify Checksums in Transport Global
   3      Print Transport Global
   4      Compare Transport Global to Current System
   5      Backup a Transport Global
   6      Install Package(s)
          Restart Install of Package(s)
          Unload a Distribution
```

3. **Packman installations must have the checksum values of the routines checked. Do this by exercising option #2 Verify Checksums in Transport Global.**

```
   Select Installation Option: 2  Verify Checksums in Transport Global
   Select INSTALL NAME:    OR*3.0*307     Loaded from Distribution
2/11/10@06:50:30
        => OR*3*307

   This Distribution was loaded on Feb 11, 2010@06:50:30 with header of
      OR*3*307
      It consisted of the following Install(s):
        OR*3.0*307

   Want each Routine Listed with Checksums: Yes// <Enter>  YES
   DEVICE: HOME// <Enter>  TELNET PORT

   PACKAGE: OR*3.0*307     Feb 11, 2010 7:11 am                      PAGE 1
```

```
      ----------------------------------------------------------------------------
      ORAM      Calculated   73547514
      ORAM1     Calculated  159543113
      ORAM2     Calculated  120270114
      ORAM3     Calculated   38571379
      ORAMSET   Calculated   40743224
      ORAMTTR   Calculated   84948729
      ORAMX     Calculated  147643525
      ORAMY     Calculated   23662959
      ORWOR     Calculated   36027702

         9 Routines checked, 0 failed.
```

4. The option PRINT TRANSPORT GLOBAL is an optional function for the installation of this patch. It can provide printed documentation of the components contained in the KIDS build, but again it is optional.

   The option COMPARE TRANSPORT GLOBAL TO CURRENT SYSTEM can be run because there is a routine included in this patch that is already on your system. All other routines in the patch are new routines.

   The option to BACKUP A TRANSPORT GLOBAL should be run also because there is one routine already on your system, but all the other routines installed are new to the system.

5. To install the patch Select option #6 INSTALL PACKAG(S)

```
      Select Installation Option: 6  Install Package(s)
      Select INSTALL NAME:    OR*3.0*307    Loaded from Distribution
2/11/10@06:47:46
         => OR*3*307

      This Distribution was loaded on Feb 11, 2010@06:47:46 with header of
         OR*3*307
         It consisted of the following Install(s):
           OR*3.0*307
      Checking Install for Package OR*3.0*307


      Install Questions for OR*3.0*307


      Incoming Files:

        101.24    OE/RR REPORT  (including data)
      Note:  You already have the 'OE/RR REPORT' File.
      I will OVERWRITE your data with mine.

        103       ORAM FLOWSHEET
      Note:  You already have the 'ORAM FLOWSHEET' File.

      Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//

      Want KIDS to INHIBIT LOGONs during the install? NO// N
      Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//Y
      << Disable OR* options and Protocols >>
      Delay Install (Minutes):  (0-60): [ respond with 0]

      DEVICE: HOME//
```

The install process will show on your screen as follows:

```
                              OR*3.0*307

 Installing Valve-Tissue = V42.2

 Installing Valve-Mech = V43.3

 Installing L/T (Current) Anticoag Use = V58.61

 Installing Enctr for Tx Drug Monitoring = V58.83

 Updating Routine file...

 Updating KIDS files...

 OR*3.0*307 Installed.
                Feb 11, 2010@07:07:39

 Not a production UCI

 NO Install Message sent


   100%                 25            50            75
 Complete
```
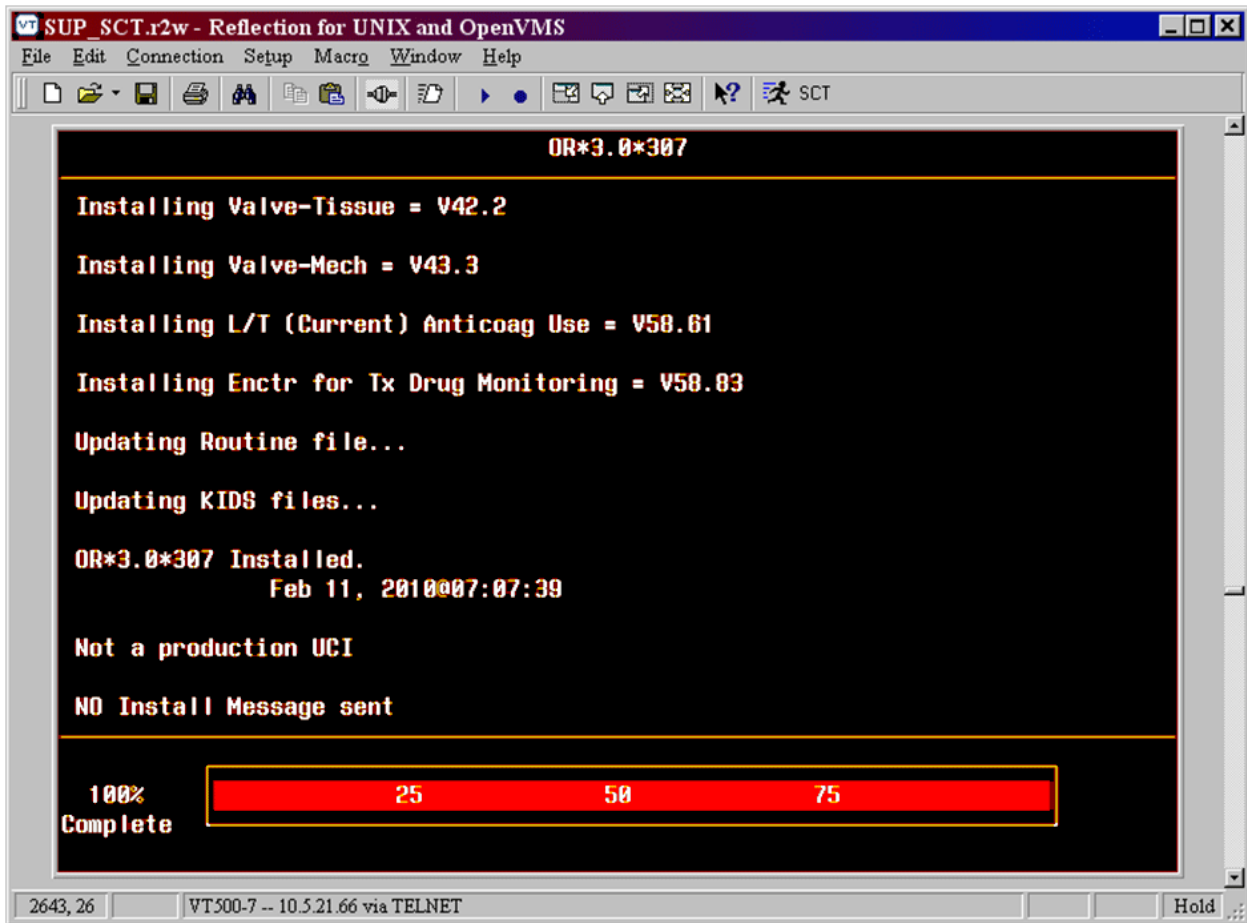
Client Installation Instructions:

The software distribution also includes the file OR_30_307.zip . This file is a bundled .ZIP archive and includes the following files:

- ANTICOAG HELP FILE.cnt – the help table of contents file
- ANTICOAG_HELP_FILE.HLP – the Windows help file
- ANTICOAGULATE.EXE – the Windows executable file
- CVISIT.RAV – the template file for missed visits
- MAPPT.RAV – the template file for new dosages
- MAPPT NO FAX LABS.RAV – alternate template file for new dosages
- ORAMIG.PDF – Acrobat version of this manual
- ORAMIG.DOC – Microsoft Word version of this manual
- ORAMTM.PDF – Acrobat version of the Technical Manual
- ORAMTM.DOC – Microsoft Word version of the Technical manual
- ORAMUM.PDF – Acrobat version of the User Manual
- ORAMUM.DOC – Microsoft Word version of the User Manual

UnZIP file OR_30_307.ZIP to a temporary location either on a server or on your workstation depending upon local policies for software installation.

As with all software releases, the .PDF versions of the documentation it the official version and the one you should rely on for further distribution of the entire manual. The .DOC files are a courtesy to medical centers who want to divide out parts of the manuals, optionally with local.

Placement of Client Software: Local vs. Network

ANTCOAGULATE .EXE and the help files: ANTICOAG HELP FILE.CNT, and ANTICOAG_HELP_FILE.HLP need to be copied to a common directory on each workstation used by AMT Clinicians (e.g., C:\Program Files\VistA\Anticoagulate), or placed on a shared network directory (e.g., \\vhaislmul2\Anticoagulate), at the site's discretion. Network latency may result in longer launch times, if a network directory is chosen. However, this cost may be offset by increased ease of applying software updates.

You may wish to consider the following rule of thumb:

> If the number of workstations on which the client software would need to be installed and updated exceeds ten, then you may wish to place the client software on a shared network directory. Otherwise, place the software locally, to optimize for performance.

Regardless of your decision, the ANTICOAGULATE.EXE, ANTICOAG HELP FILE.CNT, and ANTICOAG_HELP_FILE.HLP files must always be installed together in the same directory, if the online help feature is to function properly.

Also, please note that the Tools Menu execution of the program does not work unless the .exe is in the same directory on each workstation.

Other File Placement

It is against VA security policy to use FAXed results from an outside laboratory

The CVISIT.RAV, MAPPT.RAV, and MAPPT NO FAX LABS.RAV files should be placed in a shared network directory on a file server. These are Rave Reports Template files, which define the format for Letters that your clinicians will send to patients enrolled in the Anticoagulation Management Clinic.

VA Security Policy does NOT allow FAXed results from outside laboratories. Therefore your letters must not reference faxed results from outside laboratories. To remove that reference in the letters you must rename the file MAPPT.RAV to some other name, for example:MAPPT0.RAV, then rename the file MAPPT NO FAX LABS.RAV to MAPPT.RAV. The path to this directory will be identified for the application when you set the Division-wide Parameters, as described in the Installation/ Implementation Guide.

The directory where the .RAV files are located is specified in the parameter setup. In the case of the ANTICOAGULATE.EXE file an example of the parameter setup is given in the Set up Tools Menu Option for Anticoagulation Management section. By default, the .CNT and .HLP files must be in the same directory. In the case of the two .RAV files an example of the parameter setup is given in the Set up the Anticoagulation Parameters per Division section.

Reports

The KIDS install places menu options for reports on the server but does not place them into your menu structure. These are:

- Anticoagulation Complication Report [ORAM COMPLICATIONS REPORT]
- All Anticoagulation Patients [ORAM PATIENT LIST ALL]
- Complex Anticoagulation Patients [ORAM PATIENT LIST COMPLEX]
- Next Lab Patient List [ORAM PATIENT LIST NEXT LAB]
- Single Patient TTR [ORAM ROSENDAAL SINGLE PT TTR]
- Calculate TTR (Rosendaal Method) [ORAM ROSENDAAL TTR REPORT]

TTR stands for Time in Therapeutic Range.

The installation also provides two umbrella menu options that provide access to these reports:

- Anticoagulation Management Reports   [ORAM REPORTS MENU]

      This option includes the commands:
      C   Anticoagulation Complication Report
      R   Calculate TTR (Rosendaal Method)
      S   Single Patient TTR
      P   Anticoagulation Patient Lists ...

- Anticoagulation Patient Lists ORAM PATIENT LIST MENU

      This includes the commands:
      A   All Anticoagulation Patients
      C   Complex Anticoagulation Patients

These reports must be assigned to the clinic personnel who need them in the performance of their duties.

To have access to the reports on the menu, users must have them assigned to their menu tree.

Auto Sign-on

The Anticoagulation Management Tool (AMT) can work more effectively if a site allows users to have Auto Sign-on enabled. If a site desires to enable Auto Sign-on the following steps can be employed.

- IRM will decide to turn on Auto sign On for your site by editing the KERNEL SYSTEMS PARAMETERS file (#8989.3). Within 8989.3 set the fields DEFAULT AUTO SIGN-ON to Yes (or 1) and the field DEFAULT MULTIPLE SIGN-ON LIMIT to 2 or greater.

- In the NEW PERSON File (#200) each clinic worker using the Anticoagulator GUI needs to have the field MULTIPLE SIGN-ON set to ALLOWED. This field is accessed through the EVE editing program.

- The RPC client broker (ClAgent.exe) must be installed and running on each clinic workstation.

Auto Sign-on is different from Single Sign-on, which relies on Clinical Context Object Workgroup (CCOW) to work and is not supported by AMT.

Steps for Implementation

1. Assign Menus

2. Check for or Create:

    A. Team Lists

    B. TIU Document Definitions

    C. Clinic Locations

    D. Consult Service

    E. DSS Unit

3. Option ORMGR - CPRS Manager Menu

    Set up the Anticoagulation Parameters per Division

    Set up the Anticoagulation Parameters per Clinic

1. Set up Tools Menu Option for Anticoagulation Management

5. Set Daily Tasks

    Run ORAM SET TEAMS

1. Assign Menus

ORAM ANTICOAGULATION CONTEXT is the option used by this application to communicate with the Kernel Broker. You cannot run AntiCoagulate.exe on a workstation unless you have this menu option or you have programmer access mode. All users of this application must have this menu assigned to them as a secondary menu or as part of their primary menu tree.

Users with administrative duties should also have the one or more of the following menus assigned:

- Anticoagulation Management Reports [ORAM REPORTS MENU]
- Anticoagulation Patient Lists [ORAM PATIENT LIST MENU]

2. Check for or Create the following:

Before entering the parameter values that determine the behavior of the application, you'll want to check your system to see whether there are Team Lists, TIU Document Titles, Hospital Locations, Consult Service, and DSS ID entries that can be used for the Anticoagulation Management Tool (AMT) with little or no modifications.

Note:

1. *Be sure to make note of the results of this step for use in step 3,* Option ORMGR - CPRS Manager Menu.

A. Team Lists

Use the Team List Mgmt Menu option [ORLP TEAM MENU] to check whether existing team lists may suffice. In most cases you must create two new team lists:

1. Anticoagulation Team (All)

The Anticoagulation Team (ALL) list, shows all patients scheduled for that team for that day AND any patients NOT completed on previous days. Patients drop off this list as they are completed in the Anticoagulation Management Tool (AMT).

2. Anticoagulation Team (Complex)

The Anticoagulation Team (COMPLEX) patient list pulls out the complex patients so that they are not lost on the larger list (they appear on both lists).

Patients drop off these lists as they are completed in AMT.

This is a FileMan listing for the two team lists that are used for AMT.

```
NAME: ANTICOAGULATION TEAM (ALL)        TYPE: TEAM PATIENT MANUAL
  UPPER CASE: ANTICOAG ALL              CREATOR: CPRSPROVIDER,SEVEN
  CREATION D/T: MAY 20, 2003
USER: CPRSPROVIDER,SIX
MEMBER: CP. . .
. . .

NAME: ANTICOAGULATION TEAM (COMPLEX)    TYPE: MANUAL REMOVAL/AUTOLINK ADDITION
  UPPER CASE: ANTICOAG COMPLEX          CREATOR: CPRSPROVIDER,SEVEN
  SUBSCRIBE: YES                        CREATION D/T: SEP 05, 2003
USER: CPRSPROVIDER,SIX
USER: CPRSPROVIDER,ONE
USER: CPRSPROVIDER,SEVEN
MEMBER: CP. . .
```

Please note that it is not necessary to use exactly these same team names because the link between these teams and AMT is explicitly set in the GUI Anticoagulation Parameters.

B. TIU Document Definitions

The Anticoagulation Management Tool (AMT) uses three (3) parameters to store TIU note titles that document an initial visit, an interim or routine visit, and the discharge visit. Use the Edit Document Definitions [TIUF EDIT DDEFS MGR] option to check whether adequate titles are already defined to support these, or create a new Document Class for Anticoagulation, along with these Titles:

(1) Anticoagulation Initial Note

This is the TIU Document Title that identifies the Anticoagulation Initial Assessment Note, which is entered for the patient's first visit upon enrollment in the Clinic.

(2) Anticoagulation Interim Note

This is the TIU Document Title that identifies the Anticoagulation Interim Note, which is entered during the patient's ongoing treatment by the Anticoagulation clinic.

(3) Anticoagulation Discharge Note

This is the TIU Document Title that identifies the Anticoagulation Discharge Note, which is entered upon the patient's discharge from the Anticoagulation clinic.

Note:

If your do not use the VHA ENTEPRISE STANDARD TITLEs as shown in the screen capture, then you must use the Title Mapping Utilities … [TIU MAP TITLES MENU] to map the titles you use to VHA ENTRPRISE STANDARD TITLEs.

Make a note of the titles for use in the parameter setup outlined below. Here is a FileMan inquiry from the TIU Document Definition file (8925.1) covering documents needed for Anticoagulation Management:

```
NAME: ANTICOAG INITIAL NOTE ELECTRONIC
  PRINT NAME: ANTICOAG INITIAL NOTE
  TYPE: TITLE                          CLASS OWNER: CLINICAL COORDINATOR
  STATUS: ACTIVE                       SUPPRESS VISIT SELECTION: YES
  VHA ENTERPRISE STANDARD TITLE: INITIAL EVALUATION NOTE
  MAP ATTEMPTED: DEC 07, 2006@14:58:44  MAP ATTEMPTED BY: BRENK,THOMAS M
  TIMESTAMP: 59372,53350


NAME: ANTICOAG DISCHARGE                PRINT NAME: ANTICOAG DISCHARGE
  TYPE: TITLE                          CLASS OWNER: CLINICAL COORDINATOR
  STATUS: ACTIVE
  VHA ENTERPRISE STANDARD TITLE: PHARMACY COUNSELING DISCHARGE NOTE
  MAP ATTEMPTED: DEC 07, 2006@13:35:43  MAP ATTEMPTED BY: BRENK,THOMAS M
  TIMESTAMP: 59457,48152


NAME: ANTICOAGULATION                   PRINT NAME: ANTICOAGULATION
  TYPE: TITLE                          CLASS OWNER: CLINICAL COORDINATOR
  STATUS: ACTIVE                       SUPPRESS VISIT SELECTION: YES
  VHA ENTERPRISE STANDARD TITLE: PHARMACY NOTE
  MAP ATTEMPTED: DEC 07, 2006@13:37:03  MAP ATTEMPTED BY: BRENK,THOMAS M
  TIMESTAMP: 58834,55125
```

C. Clinic Locations

Use the Set up a Clinic [SDBUILD] option to check whether Clinics exist that you can use in place of these, or to create new Clinic Locations:

1. **Anticoagulation VISIT Clinic Location**

   This should be a Clinic for FACE to FACE visits. The program does not care if **you use the same clinic for both the phone and face to face, but for PCE credit** they must be COUNT CLINICS.

2. **Anticoagulation PHONE Clinic Location**

   This should be a Clinic for Telephone visits. The program does not care if you use the same clinic for both the phone and face to face, but for PCE credit they must be COUNT CLINICS.

3. **Anticoagulation NON-COUNT Clinic**

   This is a NON-COUNT clinic location, which will be used for notes only, when no PCE data is recorded.

If you have only one physical anticoagulation clinic, we strongly urge that you use these names.

The following is a FileMan list showing an example of a typical set of hospital locations that can be used for Anticoagulation Management:

```
FILE 44: HOSPITAL LOCATION

INDEX: 8005                           NAME: EC ANTICOAGULATION
  ABBREVIATION: COAG                  TYPE: CLINIC
  INSTITUTION: PORTLAND (OR) VAMC
  STOP CODE NUMBER: ANTI-COAGULATION CLINIC
  SERVICE: MEDICINE                   PHYSICAL LOCATION: ANTICOAG
  DIVISION: PORTLAND                  NON-COUNT CLINIC? (Y OR N): NO
  CREDIT STOP CODE: CLINICAL PHARMACY   CLINIC MEETS AT THIS FACILITY?: YES
  TYPE EXTENSION: CLINIC              WORKLOAD VALIDATION AT CHK OUT: YES
SYNONYM: EANTI
  PRINT ACTION PROFILE: YES           DEFAULT APPOINTMENT TYPE: REGULAR
PROVIDER: ORPROVIDER,EIGHT
PROVIDER: m
PROVIDER: n
PROVIDER: h             DEFAULT PROVIDER: YES
  REQUIRE ACTION PROFILES?: YES       ALLOWABLE CONSECUTIVE NO-SHOWS: 2
  MAX # DAYS FOR FUTURE BOOKING: 390  MAX # DAYS FOR AUTO-REBOOK: 1
PRIVILEGED USER: MA
PRIVILEGED USER: SC
  PROHIBIT ACCESS TO CLINIC?: YES     LENGTH OF APP'T: 15
  DISPLAY INCREMENTS PER HOUR: 15-MIN  OVERBOOKS/DAY MAXIMUM: 25


INDEX: 9727                           NAME: EC ANTICOAG PHONE
  ABBREVIATION: COAG                  TYPE: CLINIC
  INSTITUTION: PORTLAND (OR) VAMC     STOP CODE NUMBER: TELEPHONE/ANCILLARY
  SERVICE: MEDICINE                   DIVISION: PORTLAND
  COLLATERAL VISITS? (Y OR N): NO     NON-COUNT CLINIC? (Y OR N): NO
  CREDIT STOP CODE: ANTI-COAGULATION CLINIC
  CLINIC MEETS AT THIS FACILITY?: YES   TREATING SPECIALTY: GENERAL MEDICINE
  TYPE EXTENSION: CLINIC
```

```
   EXTENDED SPECIAL INSTRUCTIONS:   Clinic used for the capture of anti-coag
   telephone visits - Event Capture creates appointments in this clinic
   automatically.

  Created to separate telephone from provider contact calls, so that patients
  will not be billed as if they saw a provider when in fact they received a
  telephone call only.
   DATE/TIME CLINIC BUILT: NOV 21, 2003@12:14:10
   DEFAULT APPOINTMENT TYPE: REGULAR
PROVIDER: ORPROVIDER,EIGHT
   REQUIRE ACTION PROFILES?: NO          ALLOWABLE CONSECUTIVE NO-SHOWS: 0
   MAX # DAYS FOR FUTURE BOOKING: 11     MAX # DAYS FOR AUTO-REBOOK: 1
   LENGTH OF APP'T: 15                   DISPLAY INCREMENTS PER HOUR: 15-MIN
   OVERBOOKS/DAY MAXIMUM: 0
PATTERN DATE: JAN 19, 2004
....(MANY PATTERN DATES)


  NonCount example:

INDEX: 7007                            NAME: ANTICOAGULATION LAB +
  ABBREVIATION: COAG                   TYPE: CLINIC
  INSTITUTION: PORTLAND (OR) VAMC      STOP CODE NUMBER: LABORATORY
  SERVICE: MEDICINE                    PHYSICAL LOCATION: COAG
  DIVISION: PORTLAND                   NON-COUNT CLINIC? (Y OR N): YES
  CLINIC MEETS AT THIS FACILITY?: YES  INCLUDE ON FILE ROOM LISTS?: YES
  TYPE EXTENSION: CLINIC               WORKLOAD VALIDATION AT CHK OUT: YES
SYNONYM: COAGLAB
  TELEPHONE: 5460                      OMNICELL INTERFACE: OMNICELL
  PRINT ACTION PROFILE: YES            CONFIRMATION LETTER: ANTICOAG
  EXCLUDE ON INELIGIBLE SCREEN?: Y
 EXTENDED SPECIAL INSTRUCTIONS:   DO NOT schedule, reschedule or cancel in this
 clinic, contact Anticoag at ext 52496.

   ***  PLEASE NOTE ****

   If patient requests sooner or delayed appt than ordered, please send
 priority email to "G.Anticoag".


   Always verify current home telephone!!!
  PROGRAM: AREA A COAG
  DATE/TIME CLINIC BUILT: MAR 03, 1995@11:14:01
  DEFAULT APPOINTMENT TYPE: REGULAR
  MAF CONFIRM VET APPT: YES, ON MAF 'CONFIRM LIST'
```

D.   Consult Service

It is highly recommended that you use a consult request to move new patients into this program. If you opt to not use consults, you can skip this step and mark Consult Enabled to No in the parameter setup. However, the only other feature of VistA that might be useful to is the Additional Signers feature of Progress Notes. If you describe a patient's condition, then specify a key member of the Anticoagulation Team, that member will get an alert and be able to read the progress not. All-in-all, using a consult is a much more straight-forward procedure.

Use the Set up Consult Services option [GMRC SETUP REQUEST SERVICES] to determine whether there's already an Anticoagulation Consult Request Service. If you have only one clinic, then it should be called:

Anticoagulation Management

This is the name to the Consult Request Service with which Consult data will be associated for the Anticoagulation clinic. It is used only if the linkage with the Consult Package is enabled.

If there is more than one anticoagulation clinic, then you need a consult service for each of them—appropriately named.

If you are using consults to start anticoagulation management of patients now, you may already have a consult service set up. The pharmacists who use the system (that is, close the consult) need to be users in the Request Service file. To easily allow for coverage and changes to personnel, the whole user class can be assigned. Here is an example of using the Set up Consult Services option [CMRC SETUP REQUEST SERVICES] for Anticoagulation Management:

```
        Select OPTION NAME: gmrc mgr       Consult Management


        RPT    Consult Tracking Reports ...
        SS     Set up Consult Services
        SU     Service User Management
        CS     Consult Service Tracking
        RX     Pharmacy TPN Consults
        GU     Group update of consult/procedure requests
        UA     Determine users' update authority
        UN     Determine if user is notification recipient
        NR     Determine notification recipients for a service
        TD     Test Default Reason for Request
        LH     List Consult Service Hierarchy
        PR     Setup procedures
        CP     Copy Prosthetics services
        DS     Duplicate Sub-Service
        IFC    IFC Management Menu ...
        TP     Print Test Page


    Select Consult Management Option: SS  Set up Consult Services
    Select Service/Specialty:ANTICOAGULATION MANAGEMENT
    SERVICE NAME: ANTICOAGULATION MANAGEMENT  Replace
    ABBREVIATED PRINT NAME (Optional): Anticoa        Anticoa
    INTERNAL NAME: ANTICOAGULATION    ANTICOAGULATION
    Select SYNONYM: Coumadin      Coumadin
    SERVICE USAGE:
    SERVICE PRINTER: Pharm01
```

```
     NOTIFY SERVICE ON DC: ALWAYS    ALWAYS
     REPRINT 513 ON DC: NEVER    NEVER
     PREREQUISITE:
       1>Please be aware that this consult service has required
       2>questions which must be answered in order for your consult to be properly
       3>addressed.
       4>
       5>Anticoagulation Program (ACP) will assume management once patient is
       6>enrolled into program by attending first orientation class, or *if* other
       7>arrangements *are* made directly with clinic. PCP or designee *must* assume
       8>management until pt is enrolled into ACP.
       9>  <Enter>
     EDIT Option:
     PROVISIONAL DX PROMPT: OPTIONAL    OPTIONAL
     PROVISIONAL DX INPUT: FREE TEXT  FREE TEXT
     DEFAULT REASON FOR REQUEST:
       1> (Template Not Complete)
       2> <Enter>
     RESTRICT DEFAULT REASON EDIT: NO EDITING  NO EDITING

     Inter-facility information
     IFC ROUTING SITE: <Enter>
     IFC REMOTE NAME: <Enter>
     Select IFC SENDING FACILITY: <Enter>


     SERVICE INDIVIDUAL TO NOTIFY: CPRSPROVIDER,SEVEN    CPRSPROVIDER,SEVEN
     Select SERVICE TEAM TO NOTIFY: ANTICOAGULATION – ALL    ANTICOAGULATION – ALL
     Select NOTIFICATION BY PT LOCATION: <Enter>
     PROCESS PARENTS FOR NOTIFS: <Enter>
     Select UPDATE USERS W/O NOTIFICATIONS: <Enter>
     Select UPDATE TEAMS W/O NOTIFICATIONS: <Enter>
     Select UPDATE USER CLASS W/O NOTIFS: PHARMACIST
       Are you adding 'PHARMACIST' as a new UPDATE USER CLASSES W/O NOTIFS (the 1ST
       for this REQUEST SERVICES)? No//   (No) ??
     Select UPDATE USER CLASS W/O NOTIFS: CLINICAL PHARMACIST
       Are you adding 'CLINICAL PHARMACIST' as a new UPDATE USER CLASSES W/O NOTIFS
      (the 1ST for this REQUEST SERVICES)? No// Y  (Yes)
     Select UPDATE USER CLASS W/O NOTIFS: PHARMACIST
       Are you adding 'PHARMACIST' as a new UPDATE USER CLASSES W/O NOTIFS (the 2ND
       for this REQUEST SERVICES)? No// Y  (Yes)
     Select UPDATE USER CLASS W/O NOTIFS: PHARMACY STUDENT
       Are you adding 'PHARMACY STUDENT' as a new UPDATE USER CLASSES W/O NOTIFS
      (the 3RD for this REQUEST SERVICES)? No// Y  (Yes)
     Select UPDATE USER CLASS W/O NOTIFS: <Enter>
     Select ADMINISTRATIVE UPDATE USER: CPRSPROVIDER,SEVEN    CPRSPROVIDER,SEVEN
     SRC         Pharmacy        Staff Pharmacist
       Are you adding 'CPRSPROVIDER,SEVEN' as a new ADMINISTRATIVE UPDATE USERS (the
       2ND for this REQUEST SERVICES)? No// Y  (Yes)
       NOTIFICATION RECIPIENT: Y  YES
     Select ADMINISTRATIVE UPDATE USER:
     Select ADMINISTRATIVE UPDATE TEAM:
     PROCESS PARENTS FOR UPDATES:

     SPECIAL UPDATES INDIVIDUAL: CPRSPROVIDER,SEVEN
     RESULT MGMT USER CLASS: <Enter>
     UNRESTRICTED ACCESS: <Enter>
     Select SUB-SERVICE/SPECIALTY: <Enter>
     ADMINISTRATIVE: <Enter>

     Add/Edit Another Service? NO//
```

Decision Support System Unit

Decision Support System Extracts (DSS) V. 3.0 provides a means of exporting data from selected Veterans Health Information Systems and Technology Architecture (VistA) modules to a Decision Support System (DSS) resident in the VA Austin Information Technology Center (AITC). This system is the VA's only means of complying with the Congressional mandate for the use of a management system that can assign costs to the product level. DSS unit codes were installed with the DSS application and can be checked both here and in the parameter setup to insure the values are correct.

DSS Unit: This is the name to the DSS Unit to which the anticoagulation data will be associated.   Use VA FileMan to inquire to the DSS UNIT File to determine whether a DSS Unit for Anticoagulation already exists, and to create a new DSS Unit if an adequate substitute doesn't exist.

Note:

This file must not be directly modified using FileMan! Please contact your local DSS coordinator if a DSS unit needs to be added.

Here is a FileMan printout from the DSS UNIT file (#754):

```
    NAME: ANTICOAG                       SERVICE: MEDICINE
      MEDICAL SPECIALTY: AMBULATORY CARE    COST CENTER: 820100 Medical
      UNIT NUMBER: MMG1                     INACTIVE (Y/N): NO
      USE FOR EVENT CAPTURE: YES            CATEGORY (Y/N): NO
      DATA ENTRY DATE/TIME DEFAULT: NOW     SEND TO PCE: Send All Records


    DSS ID from the clinic stop file (40.7)


    NAME: ANTI-COAGULATION CLINIC         AMIS REPORTING STOP CODE: 317
      COST DISTRIBUTION CENTER: 2110.00    RESTRICTION TYPE: Either
```

3. Set Parameters

Parameters are set on the division and clinic level. Any parameter that is on both levels can be inherited; if not set for clinic the division value is used. The division corresponds to the medical center. One or more clinics can be established in each division—at least one clinic must be defined. (Look in Appendix A: Alternate Workflow at Clinic Setup for a discussion of division/clinic structure.)

Before starting the parameter setup, gather the information you need. Review the screen captures below and make sure you have the correct information for your medical clinic and medical center. Included on the next page is a worksheet that could be used to assist you in this process. Make a copy of it for each Division you are responsible for.

Anticoagulation Management Division Parameter Worksheet:

Parameter	Value (Division)
Your Medical Center Name	
Complete path to network folder where .RAV files are accessible	
The local names for International Normalization Ratio (INR) quick order	
The local names for Complete Blood Count (CBC) quick order	
Track Hematocrit (HCT) or Hemoglobin (Hgb) HGB	
The note titles used for anticoagulation at your site: Anticoagulation Initial Note Title: Anticoagulation Interim Note Title: Anticoagulation Discharge Note Title:	
The Current Procedural Terminology (CPT) codes for Simple telephone Visit: Complex Telephone Visit: Letter to the Patient: Orientation Class: Initial Office Visit: Subsequent Office Visit:	
The Decision Support System (DSS) unit	
DSS ID	

Set up the Anticoagulation Parameters per Division

Starting from the ORMGR option, follow the CPRS Configuration | GUI Parameters | GUI Anticoagulation Parameters menu path, to set up the parameters for each division defined on your VistA system.

```
DEV5A3:CPRS27>D ^XUP

Setting up programmer environment
This is a TEST account.

Terminal Type set to: C-VT320

Select OPTION NAME: ORMGR        CPRS Manager Menu

    CL     Clinician Menu ...
    NM     Nurse Menu ...
    WC     Ward Clerk Menu ...
    PE     CPRS Configuration (Clin Coord) ...
    IR     CPRS Configuration (IRM) ...

Select CPRS Manager Menu Option: PE  CPRS Configuration (Clin Coord)

    AL     Allocate OE/RR Security Keys
    KK     Check for Multiple Keys
    DC     Edit DC Reasons
    GP     GUI Parameters ...
    GA     GUI Access - Tabs, RPL
    MI     Miscellaneous Parameters
    NO     Notification Mgmt Menu ...
    OC     Order Checking Mgmt Menu ...
    MM     Order Menu Management ...
    LI     Patient List Mgmt Menu ...
    FP     Print Formats
    PR     Print/Report Parameters ...
    RE     Release/Cancel Delayed Orders
    US     Unsigned orders search
    EX     Set Unsigned Orders View on Exit
    NA     Search orders by Nature or Status
    DO     Event Delayed Orders Menu ...
    LO     Lapsed Orders search
    PM     Performance Monitor Report

Select CPRS Configuration (Clin Coord) Option: GP  GUI Parameters

    CS     GUI Cover Sheet Display Parameters ...
    HS     GUI Health Summary Types
    TM     GUI Tool Menu Items
    MP     GUI Parameters - Miscellaneous
    UC     GUI Clear Size & Position Settings for User
    RE     GUI Report Parameters ...
    NV     GUI Non-VA Med Statements/Reasons
    EX     GUI Expired Orders Search Hours
    RM     GUI Remove Button Enabled
    NON    GUI Remove Button Enabled for Non-OR Alerts
    CLOZ   GUI Edit Inpatient Clozapine Message
    COAG   GUI Anticoagulation Parameters ...
    EIE    GUI Mark Allergy Entered in Error

Select GUI Parameters Option: COAG  GUI Anticoagulation Parameters

    D      Division-wide Anticoagulation Parameters
    C      Anticoagulation Clinic Parameters
```

```
        Select GUI Anticoagulation Parameters Option: d  Division-wide
        Anticoagulation Parameters


        Enter Anticoagulation Management Parameters by Division:

        Select INSTITUTION NAME: salt lake city hCS     UT  VAMC  660


        Anticoagulation Site Params for Division: SALT LAKE CITY HCS
        ---------------------------------------------------------------------------
        Medical Center Name                            Salt Lake City VAHCS
        Complete path to network folder \\VHAISLMul1\OfficeCommon\Anticoagulation Flow
        Sheet\
        INR Quick Order                                LRTZ PT WITH INR OP
        CBC Quick Order                                LRTZ CBC SP ONCE
        Hematocrit (HCT) or Hemoglobin (Hgb)           HGB
        Anticoagulation Initial Note                   ANTICOAGULATION INITIAL ASSESS
        MENT NOTE
        Anticoagulation Interim Note                   ANTICOAGULATION E&M NOTE
        Anticoagulation Discharge Note                 ANTICOAGULATION DISCHARGE NOTE
        Simple Phone Visit (CPT)                       99364
        Complex Phone Visit (CPT)                      99363
        Letter To Patient (CPT)                        99364
        Orientation Class (CPT)                        99078
        Initial Office Visit (CPT)                     99363
        Subsequent Visit (CPT)                         99364
        DSS Unit                                       ANTICOAG CLINIC (317/160
        DSS ID                                         ANTI-COAGULATION CLINIC
        ---------------------------------------------------------------------------
        Medical Center Name: Salt Lake City VAHCS  Replace <Enter>
        Complete path to network folder: \\VHAISLMul1\OfficeCommon\Anticoagulation
        Sheet\  Replace <Enter>
        INR Quick Order: INR// <Enter>  LRTZ PT WITH INR OP  LRTZ PT WITH INR OP
        CBC Quick Order: CBC// <Enter>  LRTZ CBC SP ONCE  LRTZ CBC SP ONCE
```

> This is the network share directory where RAV template files were placed.

> These two orderable items are quick orders set up for the Anticoagulation Clinic. They must have all values populated.

> These are the note titles that the tool uses. Your site may have existing note titles or you may need to set some up for this use.

```
        Hematocrit (HCT) or Hemoglobin (Hgb): HCT// <Enter>  HCT  HCT
        Initial Note Title: ANTICOAGULATION INITIAL ASSESSMENT NOTE// <Enter>
ANTICOAGULATION INITIAL ASSESSMENT NOTE     TITLE
            Std Title: PHARMACY E & M OF ANTICOAGULATION NOTE  ANTICOAGULATION INITIAL
     ASSESSMENT NOTE     TITLE
            Std Title: PHARMACY E & M OF ANTICOAGULATION NOTE
        Interim Note Title: ANTICOAGULATION E&M NOTE// <Enter>  ANTICOAGULATION E&M NOTE
TITLE
            Std Title: PHARMACY OUTPATIENT E & M OF ANTICOAGULATION NOTE  ANTICOAGULAT
     ION E&M NOTE     TITLE
            Std Title: PHARMACY OUTPATIENT E & M OF ANTICOAGULATION NOTE
        Discharge Note Title: ANTICOAGULATION DISCHARGE NOTE// <Enter>  ANTICOAGULATION
DISCHARGE NOTE     TITLE
            Std Title: E & M OF ANTICOAGULATION REPORT  ANTICOAGULATION DISCHARGE NOTE
         TITLE
            Std Title: E & M OF ANTICOAGULATION REPORT
```

> These are Current Procedural Terminology (CPT) codes. You should look them up in the current American Medical Association's Coding guidelines.

```
      Simple Telephone Visit (CPT): 99364// <Enter>  99364    ANTICOAG MGMT, SUBSEQ
99364   ANTICOAG MGMT, SUBSEQ
      Complex Phone Visit (CPT): 99363// <Enter>  99363    ANTICOAG MGMT, INIT
99363   ANTICOAG MGMT, INIT
      Letter to Patient (CPT): 99364// <Enter>  99364    ANTICOAG MGMT, SUBSEQ
99364   ANTICOAG MGMT, SUBSEQ
      Orientation Class (CPT): 99078// <Enter>  99078    GROUP HEALTH EDUCATION
99078   GROUP HEALTH EDUCATION
      Initial Office Visit (CPT): 99363// <Enter>  99363    ANTICOAG MGMT, INIT
99363   ANTICOAG MGMT, INIT
      Subsequent Office Visit (CPT): 99364// <Enter>  99364    ANTICOAG MGMT, SUBSEQ
99364    ANTICOAG MGMT, SUBSEQ
      DSS Unit: ANTICOAG CLINIC (317/160)// ?
          Answer with DSS UNIT NAME, or UNIT NUMBER
        Choose from:
        ADMISSION        2
        ANTICOAG CLINIC (147)         MMG#
        ANTICOAG CLINIC (317/160)        MMG#
        ANTICOAGULATION CLINIC (317)        MMG#
        RADIOLOGY ONCOLOGY        1

      DSS Unit: ANTICOAG CLINIC (317/160)// <Enter>  ANTICOAG CLINIC (317/160)      MMG#
ANTICOAG CLINIC (317/160)     MMG#
      DSS ID: ANTI-COAGULATION CLINIC// <Enter>  ANTI-COAGULATION CLINIC    317  ANTI-
COAGULATION CLINIC    317

      Anticoagulation Site Params for Division: SALT LAKE CITY HCS is now:
      ----------------------------------------------------------------------------
      Medical Center Name                          Salt Lake City VAHCS
      Complete path to network folder \\VHAISLMul1\OfficeCommon\Anticoagulation Flow
      INR Orderable Item                           LRTZ PT WITH INR OP
      CBC Orderable Item                           LRTZ CBC SP ONCE
      Hematocrit (HCT) or Hemoglobin (Hgb)         HGB
      Anticoagulation Initial Note                 ANTICOAGULATION INITIAL ASSESS
      MENT NOTE
      Anticoagulation Interim Note                 ANTICOAGULATION E&M NOTE
      Anticoagulation Discharge Note               ANTICOAGULATION DISCHARGE NOTE
      Simple Phone Visit (CPT)                     99364
      Complex Phone Visit (CPT)                    99363
      Letter To Patient (CPT)                      99364
      Orientation Class (CPT)                      99078
      Initial Office Visit (CPT)                   99363
      Subsequent Visit (CPT)                       99364
      DSS Unit                                     ANTICOAG CLINIC (317/160)
      DSS ID                                       ANTI-COAGULATION CLINIC
      ----------------------------------------------------------------------------
      Enter RETURN to continue or '^' to exit: <Enter>


        D      Division-wide Anticoagulation Parameters
        C      Anticoagulation Clinic Parameters

      Select GUI Anticoagulation Parameters Option:
```

> Here parameters needs the VistA Descision Support System (DSS) unit.

> And here it's looking for the corresponding DSS ID.

Set up the Anticoagulation Parameters per Clinic

Next, you'll need to set parameters for one or more clinic locations, using the same Anticoagulation Clinic Parameters option:

Note:

All that's required to use the Anticoagulation Management Tool (AMT) for more than one clinic is to repeat the following parameter setup for each clinic.

Before starting the clinic parameter setup, gather the information you need. The following page contains a worksheet is for gathering clinic-specific information. Any parameters left blank on this level inherit the Division parameter.

One major addition to the clinic parameters are the CPT codes AMT uses for different kinds of contacts. These codes may are sensitive to variables such as Inpatient or Outpatient as well as the qualifications of the provider. On close examination you may find that a clinic that is offered daily is staffed by a PharmD on Monday, Tuesday, and Friday and an MD on Wednesday and Thursday. On close examination you actually have two clinics here with a need for different CPT codes. Consult with the coding experts in your facility for guidance. (Both clinics should share the same team lists and the team lists will be processes as if there were only one clinic.)

Make a copy of it for each clinic you are setting up:

Anticoagulation Management Clinic Parameter Worksheet:

Parameter	Value (Clinic)
Clinic Name	
Anticoagulation Team (All)	
Anticoagulation Team (Complex)	
Address Line 1	
Address Line 2	
Address Line 3	
Clinic Phone Number	
Clinic FAX Number	
Toll Free Phone Number	
Point of Contact Name	
Signature Block Name or Clinic	
Signature Block Title	
Consult Link Enabled (Y or N)	
Consult Request Service Name	
PCE Link Enabled (Y or N)	
Automatic Indication for Care (ICD9)	
Simple Phone Visit (CPT)	
Complex Phone Visit (CPT)	
Letter To Patient (CPT)	
Orientation Class (CPT)	
Initial Office Visit (CPT)	
Subsequent Visit (CPT)	
Anticoagulation VISIT Clinic Location	
Anticoagulation PHONE Clinic Location	
Anticoagulation NON-COUNT Clinic	
Default Pill Strength	
Include Time with Next INR Date (Y or 0)	
Look-back Days for Appointment Matching	
Look-ahead Days for Appointment Matching	

This is a screen capture of the clinic parameter setup:

```
        Select GUI Parameters Option: COAG  GUI Anticoagulation Parameters

    D       Division-wide Anticoagulation Parameters
    C       Anticoagulation Clinic Parameters

Select GUI Anticoagulation Parameters Option: C  Anticoagulation Clinic Parameters
Select CLINIC: SLC - ANTICOAGULATION        CPRSPROVIDER,SEVEN

Anticoagulation Clinic Params for Location: SLC - ANTICOAGULATION
------------------------------------------------------------------------
Clinic Name
Anticoagulation Team (All)
Anticoagulation Team (Complex)
Address Line 1
Address Line 2
Address Line 3
Clinic Phone Number
Clinic FAX Number
Toll Free Phone Number
Point of Contact Name
Signature Block Name or Clinic
Signature Block Title
Consult Link Enabled
Consult Request Service Name
PCE Link Enabled
Automatic Indication for Care
Simple Phone Visit (CPT)
Complex Phone Visit (CPT)
Letter To Patient (CPT)
Orientation Class (CPT)
Initial Office Visit (CPT)
Subsequent Visit (CPT)
Anticoagulation VISIT Clinic Location
Anticoagulation PHONE Clinic Location
Anticoagulation NON-COUNT Clinic
Default Pill Strength
Include Time with Next INR Date
Look-back Days for Appointment Matching
Look-ahead Days for Appointment Matching
------------------------------------------------------------------------
Clinic Name: SLC - Anticoagulation
Anticoagulation Team (All): SLC - Anticoagulation  Replace <Enter>
Anticoagulation Team (Complex): SLC
     1   SLC-ANTICOAGULATION (ALL)
     2   SLC-ANTICOAGULATION (COMPLEX)
CHOOSE 1-2: 2  SLC-ANTICOAGULATION (COMPLEX)  SLC-ANTICOAGULATION (COMPLEX)
Address Line 1: George E. Wahlen VA Medical Center
Address Line 2: 500 Foothill Drive
Address Line 3: Salt Lake City, UT 84148
Clinic Phone Number: (801)582-1565x2222
Clinic FAX Number: (801)582-1566
Toll Free Phone Number: 1-(800)613-4012
Point of Contact Name: SLC Anticoagulation Clinic
Signature Block Name or Clinic: Clinical Pharmacist
Signature Block Title: SLC Anticoagulation Clinic
Consult Link Enabled: YES
Consult Request Service Name: ANTICOAGULATION MANAGEMENT          ANTICOAGULATION
 MANAGEMENT
PCE Link Enabled: YES
Automatic Indication for Care : V85.83
Simple Phone Visit (CPT) : <Enter>
Complex Phone Visit (CPT) : <Enter>
Letter To Patient (CPT) : <Enter>
```

CPT codes entered for the clinic override the codes entered for the division. Leave these blank if the division level codes work.

```
      Orientation Class (CPT) : <Enter>
      Initial Office Visit (CPT) : <Enter>
      Subsequent Visit (CPT) : <Enter>
      Anticoagulation VISIT Clinic Location: SLC
          1   SLC - ANTICOAG (NON-COUNT)        CPRSPROVIDER,SEVEN
          2   SLC - ANTICOAGULATION        CPRSPROVIDER,SEVEN
      CHOOSE 1-2: 2  SLC - ANTICOAGULATION       CPRSPROVIDER,SEVEN   SLC - ANTICOAGULATION
        CPRSPROVIDER,SEVEN
      Anticoagulation PHONE Clinic Location: SLC
          1   SLC - ANTICOAG (NON-COUNT)        CPRSPROVIDER,SEVEN
          2   SLC - ANTICOAGULATION        CPRSPROVIDER,SEVEN
      CHOOSE 1-2: 2  SLC - ANTICOAGULATION       CPRSPROVIDER,SEVEN   SLC - ANTICOAGULATION
        CPRSPROVIDER,SEVEN
      Anticoagulation NON-COUNT Clinic: SLC
          1   SLC - ANTICOAG (NON-COUNT)        CPRSPROVIDER,SEVEN
          2   SLC - ANTICOAGULATION        CPRSPROVIDER,SEVEN
      CHOOSE 1-2: 1  SLC - ANTICOAG (NON-COUNT)       CPRSPROVIDER,SEVEN  SLC - ANTICOAG (NO
      N-COUNT)       CPRSPROVIDER,SEVEN
      Default Pill Strength: 5
      Include Time with Next INR: YES
      Look-back Days for Appointment Matching: <Enter>
      Look-ahead Days for Appointment Matching: <Enter>


      Anticoagulation Clinic Params for Location: SLC - ANTICOAGULATION is now:
      ------------------------------------------------------------------------
      Clinic Name                              SLC - Anticoagulation
      Anticoagulation Team (All)               SLC-ANTICOAGULATION (ALL)
      Anticoagulation Team (Complex)           SLC-ANTICOAGULATION (COMPLEX)
      Address Line 1                           George E. Wahlen VA Medical Ce
      nter
      Address Line 2                           500 Foothill Drive
      Address Line 3                           Salt Lake City, UT 84148
      Clinic Phone Number                      (801)582-1565x2222
      Clinic FAX Number                        (801)582-1565x2232
      Toll Free Phone Number                   1-(800)613-4012
      Point of Contact Name                    SLC Anticoagulation Clinic
      Signature Block Name or Clinic           Clinical Pharmacist
      Signature Block Title                    SLC Anticoagulation Clinic
      Consult Link Enabled                     YES
      Consult Request Service Name             ANTICOAGULATION MANAGEMENT
      PCE Link Enabled                         YES
      Automatic Indication for Care            V58.83
      Simple Phone Visit (CPT)
      Complex Phone Visit (CPT)
      Letter To Patient (CPT)
      Orientation Class (CPT)
      Initial Office Visit (CPT)
      Subsequent Visit (CPT)
      Anticoagulation VISIT Clinic Location    SLC - ANTICOAGULATION
      Anticoagulation PHONE Clinic Location    SLC - ANTICOAGULATION
      Anticoagulation NON-COUNT Clinic         SLC - ANTICOAG (NON-COUNT)
      Default Pill Strength                    5
      Include Time with Next INR Date          Time of Day
      Look-back Days for Appointment Matching
      Look-ahead Days for Appointment Matching
      ------------------------------------------------------------------------
      Enter RETURN to continue or '^' to exit:

          D      Division-wide Anticoagulation Parameters
          C      Anticoagulation Clinic Parameters

      Select GUI Anticoagulation Parameters Option:
```

4. Set up Tools Menu Option for Anticoagulation Management

First, the Anticoagulate.exe file to a reasonable location in your Windows directory structure (e.g., **C:\Program Files\VistA\CPRS**)

or a network location (e.g., **\\vhaislmul2\Anticoagulate**). This is a local a decision and placement on a network location may increase response times due to network traffic.

Next, use the GUI Tool Menu Items [ORW TOOL MENU ITEMS] option to create a link to the Executable for specific users who need to access the Anticoagulation Management application:

```
        Select GUI Parameters Option: TM  GUI Tool Menu Items

        CPRS GUI Tools Menu may be set for the following:

             1   User         USR    [choose from NEW PERSON]
             2   Location     LOC    [choose from HOSPITAL LOCATION]
             2.5 Service      SRV    [choose from SERVICE/SECTION]
             3   Division     DIV    [choose from INSTITUTION]
             4   System       SYS    [CPRS27.FO-SLC.MED.VA.GOV]

        Enter selection: 1  User   NEW PERSON
        Select NEW PERSON NAME: CPRSPROVIDER,SIX  CPRSPROVIDER,SIX  CHIEF, MEDICAL
        SERVICE

        ------------ Setting CPRS GUI Tools Menu for User: IRM
        Select Sequence: 1
        Are you adding 1 as a new Sequence? Yes//   YES

        Sequence: 1// <Enter>   1
        Name=Command: &Anticoagulation=c:\progra~1\vista\cprs\anticoagulate.exe s=%SRV
        p=%PORT d=%DFN u=%DUZ
        Select Sequence: <Enter>
```

> The ampersand (&) allows disabled users to access the program with the keyboard shortcut Alt T then A.

Remember, access to this application for specific users is controlled by assigning the option ORAM ANTICOAGULATION CONTEXT to the secondary menu or menu tree of the assigned users.

Note:

It is important to not only install the M portion of this application, but provide for execution of the Windows component. The VA does not use a setup program to do this. Each local VA facility has their own procedures for handling GUI application distribution. It is important that you utilize this procedure to get the executable into appropriate hands.

5. Set Daily Tasks

Run ORAM SET TEAMS

Team lists are created daily by a task job (option: ORAM SET TEAMS) that needs to be set to run every morning prior to the start of the work day. Local site needs to set this. No team lists forms if this does not run.

To set this up use the option Schedule/Unschedule Options [XUTM SCHEDULE] in the Taskman Management [XUTM MGR] menu as in this example:

```
Select Taskman Management Option:  SCHEDULE/UNSCHEDULE OPTIONS

Select OPTION to schedule or reschedule: ORAM SET TEAMS        Anticoagulation Background
Job

  Are you adding 'ORAM SET TEAMS' as a new OPTION SCHEDULING (the 134TH)? No// Y (Yes)
```

```
                    Edit Option Schedule
    Option Name: ORAM SET TEAMS
    Menu Text: Anticoagulation Background Job             TASK ID:
_____

  QUEUED TO RUN AT WHAT TIME: FEB 13,2010@01:00

DEVICE FOR QUEUED JOB OUTPUT:

 QUEUED TO RUN ON VOLUME SET:

      RESCHEDULING FREQUENCY: 1d

            TASK PARAMETERS:

            SPECIAL QUEUEING:

_____
Exit     Save     Next Page      Refresh

Enter a command or '^' followed by a caption to jump to a specific field.


COMMAND:                                    Press <PF1>H for help     Insert
```

Troubleshooting

Team Lists

PROBLEM: Patients with INRs scheduled do not show up on the team list.

SOLUTION: There are several things that can interfere with patients showing up on the team list. They are:

1. The nightly job is not running. The nightly job finds each patient scheduled for an INR the next day and places them on either the ALL team list or the COMPLEX team list. Patients stay on the team list until explicitly removed by the tool.

2. You've set as your default Patient List the Clinic and not the Team. Often there are clinics with identical names as the teams. In the CPRS Patient Selection dialog, select the radio button next to Team/Personal, then select the correct team name. Click the Save Patient List Settings to make this selection permanent.

Lab Quick Orders

PROBLEM: Lab tests missing some parameters.

While using a quick order in the Anticoagulation Management Tool (AMT), not all the order parameters are being filled out correctly. For example, if a quick order does not have the URGENCY populated, an error occurs when VistA tries to process the order.

SOLUTION: Develop quick *orders as completely as possible* for use in conjunction with this AMT application. This may entail building a unique quick order that will only be used by the Anticoagulation application.

Ordering a lab test is triggered by checking a box. There is no prompt to change any order parameters after this, and there really doesn't need to be a prompt if the order is built as needed. Be sure to populate all fields with values appropriate for the clinic that will use them.

Appendix A: Alternate Workflow

Team Lists

Overview

The Anticoagulation Management Tool (AMT) was designed with certain assumptions about the best way to do things. Unfortunately, not every medical center is run the same way. Here are some of the main assumptions used in putting together this tool:

1. Most contacts through the Anticoagulation Clinic correspond to a lab order. The visits are brief and often conducted over the telephone. So appointments are set according to the timing of lab orders, not with the VistA Scheduling application.

2. It is essential that patients not be lost from the system, so AMT uses two mechanisms to keep this from happening:

   a. All patients are put on a team list corresponding to their lab appointment. The patient persists on the team list until a visit has been achieved.

   b. Missed visits are always followed up with a reminder letter to the patient.

3. Dosing schedules are easy to mess up. So the tool does several things to simplify dosing:

   a. Patients are given only one strength of pill. The pill strength is kept track of in the tool.

   b. Any change in dosing schedule is followed up with a letter to the patient, thus the patient always has written instructions.

4. Most pertinent patient information is kept in the tool for easy access and reference. Progress notes are only used for initial and final visits.

The requirement is that each VA medical facility that dispenses anticoagulation drugs (specifically Warfarin) have a method in place to track patients on these drugs. You do not have to use the VistA Anticoagulation Management Tool to accomplish this, but you must have something as comprehensive as this tool. This tool does not fit perfectly into every business model, but it can be adapted.

Here are some ways AMT can be adapted to local conditions:

Multiple Anticoagulation Clinics

Some medical centers with multiple anticoagulation clinics don't consider the team list approach to be comprehensive enough. They schedule all patients in to their clinics with the VistA Scheduling application. They can then use the reporting features of scheduling to print out Microsoft Exel® spreadsheets of the schedules. This gives a high degree of confidence that clinicians and patients are not being double booked, and provides a visual overview of each day's schedule.

Scheduling

Some clinics use scheduling because they have more confidence in the scheduling application to help manage appointments, because they need better control over workflow reporting, or because medical center policy dictates that they do. To use scheduling with the Anticoagulation Management Tool (AMT) you must go back and forth between the tool and CPRS. Also you must take care to keep CPRS on the same patient as in AMT.

When the scheduling package is the main tool for tracking schedules, AMT is still useful to template interview questions, format progress notes, track INRs, and compare no-shows between the tool and the scheduling package. Most important, the tool tracks and displays all INRs throughout the time the patient is in the program, regardless of who ordered the INR or who the patient met with.

Clinic Setup

When you set up clinic parameters some of the values are inherited from the division. The relationship of division and clinic varies from institution to institution. Here is a representation of some of the possibilities:
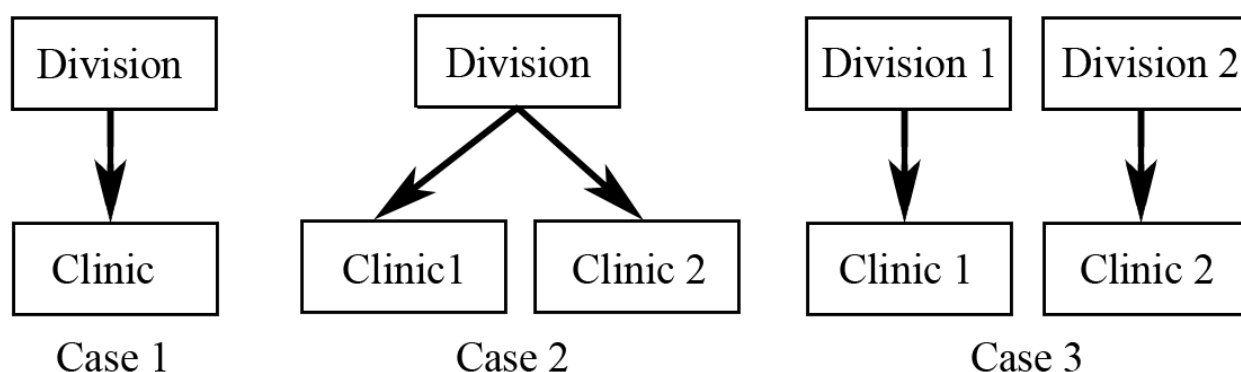
Case 1 is the default where there is only one clinic assigned to one division. In this case setting parameters for the division and clinic are sufficient. See the Set Parameters section of this manual.

Case 2 is what one would expect in a medical center with several Community Based Outpatient Clinics (CBOCs). In this case you must set parameters for the division and for each of the clinics under it. Any parameters that are missing from the clinic setup are filled in from the corresponding parameter at the division level.

Case 3 is as common as case 2 for integrated medical centers. Before you set up a clinic you need to know what division it is assigned to. Information about clinic division assignments is available from your Medical Administration Systems (MAS) sometimes referred to as Patient Information Management System (PIMS) or Hospital Information Management System (HIMS).

However your medical center is organized you need to set up both the clinic and the division as in the Set Parameters section of this manual.