D-ATM DEMO:
Screen Shots Used in Training, Annotated

[Reference Material, “D-ATM: ONE TOOL FOR ENSURING CONTINUITY OF CARE IN DISASTER SITUATIONS FOR PATIENTS IN TREATMENT FOR OPIOID DEPENDENCE”]

Government Health IT 2007
Health Crisis Planning Session (Track 2) – June 15, 2007
Brief Background

- D-ATM (Digital Access to Medication) is a pilot system being developed by the Center for Substance Abuse Treatment (CSAT), which is part of the Substance Abuse and Mental Health Services Administration (SAMHSA).
- D-ATM provides a means by which opioid treatment programs (OTPs) will be able, in the event of disaster, to access the information needed to verify that a person is a patient and then, to provide a safe, accurate dose.
- More information can be found at: http://datm.samhsa.gov.
Main Menu

The guest clinic, Pre Pilot OTP2, logs on to D-ATM and runs a D-ATM Patient Report to see the guest’s recent dosing history.
D-ATM Patient Report Retrieval

The guest patient’s finger is scanned to identify the patient to D-ATM. Alternately, the guest’s D-ATM Patient ID can be entered, or the patient’s PIN in combination with the patient’s home clinic.

Recent Change – All instances of ‘Scan Fingerprint’ with ‘Scan Finger’.
D-ATM Patient Report Retrieval

Recent Changes:
- Grid to help patient center finger;
- Scanning threshold automatically set to 20 to broaden search.
D-ATM Patient Report Retrieval
D-ATM Patient Report Retrieval

If the system recognizes the patient, the online D-ATM Patient Report appears. First you see the patient’s 7 most recent scheduled dosing events, but only if this patient has a current medicine order. This is followed by a list of all the OTPs at which the patient is enrolled (one Home OTP and one or more Guest OTPs). To see the patient’s medicine orders at an enrollment OTP, click the enrollment row.
D-ATM Patient Report Retrieval

You can now view enrollment details by clicking <View Document> while an enrollment row is selected (highlighted). When you click on an enrollment row, a list of recent medicine orders for that patient at the enrollment OTP appears below.
D-ATM Patient Report Retrieval

Recent Change:
- A formatted Enrollment Document report can be viewed and printed.
D-ATM Patient Report Retrieval

You can now view medicine order details by clicking <View Document> while a medicine order row is selected (highlighted). When you click on a medicine order row, a list of dosing events that were dispensed under that medicine order appear below. To view the details of a dosing event, click <View Document> while a dosing event row is selected.
D-ATM Patient Report Retrieval

- A formatted Enrollment Document report can be viewed and printed.
D-ATM Patient Report Retrieval
A formatted Dosing Event Document report can be viewed and printed.
- The dosing event document will show both date dispensed and dosing dates, which are different for take homes. For a take home, the dispensing date is the date the patient received the take home. The dosing date is the date that the take home is intended to be administered by the patient.
D-ATM Patient Report Retrieval

### Most Recent 7 Scheduled Dosing Events

<table>
<thead>
<tr>
<th>Scheduled Dosing Date</th>
<th>Medicine</th>
<th>Clin or TH</th>
<th>Dosage</th>
<th>Status</th>
<th>2/TH Approved</th>
<th>TH Dose</th>
<th>Disp OTP Name</th>
<th>Disp OTP ID</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/25/2007</td>
<td>Methadone</td>
<td>Clinic</td>
<td>120.00</td>
<td>Unacknowledged</td>
<td>0</td>
<td>0</td>
<td>Pre-Pilot OTP1</td>
<td>NY60001M</td>
<td></td>
</tr>
<tr>
<td>4/26/2007</td>
<td>Methadone</td>
<td>Clinic</td>
<td>120.00</td>
<td>Unacknowledged</td>
<td>0</td>
<td>0</td>
<td>Pre-Pilot OTP1</td>
<td>NY60001M</td>
<td></td>
</tr>
<tr>
<td>4/27/2007</td>
<td>Methadone</td>
<td>Clinic</td>
<td>120.00</td>
<td>Unacknowledged</td>
<td>0</td>
<td>0</td>
<td>Pre-Pilot OTP1</td>
<td>NY60001M</td>
<td></td>
</tr>
<tr>
<td>4/28/2007</td>
<td>Methadone</td>
<td>Clinic</td>
<td>120.00</td>
<td>Unacknowledged</td>
<td>0</td>
<td>0</td>
<td>Pre-Pilot OTP1</td>
<td>NY60001M</td>
<td></td>
</tr>
<tr>
<td>4/29/2007</td>
<td>Methadone</td>
<td>Clinic</td>
<td>120.00</td>
<td>Unacknowledged</td>
<td>0</td>
<td>0</td>
<td>Pre-Pilot OTP1</td>
<td>NY60001M</td>
<td></td>
</tr>
<tr>
<td>4/30/2007</td>
<td>Methadone</td>
<td>Clinic</td>
<td>120.00</td>
<td>Unacknowledged</td>
<td>0</td>
<td>0</td>
<td>Pre-Pilot OTP1</td>
<td>NY60001M</td>
<td></td>
</tr>
</tbody>
</table>

### Recent Enrollments

<table>
<thead>
<tr>
<th>Date of Enrollment</th>
<th>Home or Guest Enrollment</th>
<th>Enrollment OTP Name</th>
<th>Enrollment OTP ID</th>
<th>Enrollment Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/23/2007</td>
<td>Home</td>
<td>Pre-Pilot OTP1</td>
<td>NY60001M</td>
<td></td>
</tr>
</tbody>
</table>

### Recent Medicine Orders

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Expiration Date</th>
<th>Next Appl. Date</th>
<th>Dosage</th>
<th>Reason for Dose</th>
<th>OTP ID/Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/27/2007</td>
<td>2/27/2007</td>
<td>2/27/2007</td>
<td>77.00</td>
<td></td>
<td>NY60001M-Pilot OTP1</td>
</tr>
</tbody>
</table>

### Recent Doses Dispensed

<table>
<thead>
<tr>
<th>Dosing Date</th>
<th>Medicine</th>
<th>Clin or TH</th>
<th>Dosage</th>
<th>Status</th>
<th>No of TH Provided</th>
<th>Comments</th>
<th>Dispensing OTP ID</th>
<th>Dispensing Dose</th>
<th>Dispensing Dose ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/24/2007</td>
<td>Methadone</td>
<td>Clinic</td>
<td>120.00</td>
<td>Dispensed</td>
<td>0</td>
<td></td>
<td>NY60001M-Pilot OTP1</td>
<td>120.00</td>
<td>NY60001M-Pilot OTP1</td>
</tr>
<tr>
<td>4/23/2007</td>
<td>Methadone</td>
<td>Clinic</td>
<td>120.00</td>
<td>Dispensed</td>
<td>0</td>
<td></td>
<td>NY60001M-Pilot OTP1</td>
<td>120.00</td>
<td>NY60001M-Pilot OTP1</td>
</tr>
</tbody>
</table>
Recent Change - The D-ATM Patient Report is now automatically paginated for ease of use.
D-ATM Patient Report Retrieval

Whenever D-ATM detects that an OTP retrieved dosing information for a guest who was not enrolled as a guest patient, the following actions are automatically performed:

- An email is sent alerting the Home OTP that a another OTP retrieved dosing information on one of its home patients
- The Home OTP’s Queue of Patient Visit Events Occurring at Other OTP is updated with the specifics (more on this queue later)
Before a Guest clinic can record a guest patient’s medicine order and doses in D-ATM, the patient must first be enrolled at the Guest OTP as a guest patient. An important difference between a home and guest enrollment is that with a home enrollment, the patient is assigned a D-ATM Patient ID and selects a PIN. With a guest enrollment, the guest patient keeps the same D-ATM ID and PIN from the home enrollment.
The enroller is prompted to verify that the patient has formally consented to the retrieval of his recent dosing information by the guest clinic. The 'Scan Patient’s Finger' button is enabled only after the enroller click’s ‘Yes’.
Enroll Guest Patient

D-ATM contains NO personal information for a patient. Instead, the patient is identified by the data points (minutiae) from his scanned finger (note that the fingerprint itself is not saved). Scan the patient’s right index finger, if possible.

Recent Changes:
- Grid for centering finger;
- Require selection of finger scanned;
- Detailed help;
- Scanning threshold set automatically at 20 to broaden search (Need a way to handle multiple hits for single scan).
Enroll Guest Patient

If the image quality is not acceptable, repeat the scan on the same or different finger until image quality says "Good" or "Medium". Indicate the scanned finger in the diagram labeled "Select Finger to Scan".

Recent Changes:
- Good or Medium are now considered acceptable scans (before only Good was accepted).
Enroll Guest Patient
Enroll Guest Patient

A second scan is taken of the same finger. After both scans are successful, a message appears confirming that you are about to create a new enrollment. If you continue with the new enrollment (instead of cancelling), the Create PIN screen appears.
Enroll Guest Patient

Scan the guest patient’s finger to identify the patient to the system. If D-ATM recognizes that the patient is already enrolled at a different Home OTP, a message is raised. You can then view the D-ATM Patient Report to see the patient’s recent medicine order and dosing event history.
Enroll Guest Patient

To continue to enroll the guest patient, clicking ‘Enroll Patient’.
The Enrollment screen appears with the patient type set to ‘Guest’. Enter comments if desired and then click <Approve Enrollment>. Remember to enter the patient’s D-ATM ID in your local clinical system record for this patient.
Enroll Guest Patient

A message appears with the new patient’s D-ATM Patient ID. This ID should be recorded and entered in your OTP clinical system record for this patient to create a link between the clinical system and D-ATM for that patient. Now return to the Main Menu to create the new patient’s medicine order.

Recent Changes:
- All messages are bigger with larger font.
Create Guest Patient Medicine Order

After enrolling a guest patient, you need to create a guest medicine order. From the Main Menu, click <Maintain Medicine Order>. You will be prompted to identify the patient to the system by either scanning the guest patient’s finger or entering the guest patient’s D-ATM ID.

Recent Change – Reworded menu option ‘Maintain Medicine Order’ to ‘Manage Medicine Order’.
Create Guest Patient Medicine Order

Manage Medicine Order

Scan and Search

OR

Enter Patient’s D-ATM ID:

[Input fields]

CANCEL MEDICINE ORDER SESSION

[Screen capture of a D-ATM interface for managing medicine orders]
Create Guest Patient Medicine Order

Since the guest is already enrolled at a Home OTP, the patient will have existing medicine orders. The Patient Medicine Order History screen appears with a list of the patient’s existing medicine orders. To view a medicine order, click on the row and then click ‘View Selected Medicine Order’.
Create Guest Patient Medicine Order

You can create a new medicine order for the guest patient in one of 2 ways:

1) Close the medicine order you are viewing and then click <Create New Medicine Order> from the Patient Medicine Order History screen
2) If your OTP doesn’t already have a current medicine order for this patient, you can copy portions of the medicine order being viewed to a new medicine order.
Create Guest Patient Medicine Order

When a medicine order is copied, certain data is not copied, namely:
- Effective Date
- Next Scheduled Appointment
- Expiration date
- Approver name
- Approval date and time

Now complete the guest medicine order the same as for a new patient and then click <Approve>.
You are now ready to record the guest patient’s dosing events. Click <Record Dosing Event> from the Main Menu.

The same as with a home patient, you’ll be asked to identify the guest patient by scanning his finger. The process continues almost the same as for a home patient.
Record Guest Patient Dosing Events
Record Guest Patient Dosing Events

This patient has a current medicine order at other OTP(s). To dose this patient despite the warning, click the button 'OVERRIDE AND ACKNOWLEDGE'. To bypass recording the dosing event for this patient, either click the button 'CANCEL' or return to the main menu. To view other medicine orders and dosing history for this patient, select the queries and reports menu option 'Retrieve Patient Dosing Information'.
Record Guest Patient Dosing Events

D-ATM
Digital Access to Medication

Record Dosing Event

- **D-ATM Patient ID:** 582-149-3619
  - **Dosing Event Status:** Unacknowledged
  - **Patient's Home:** OTP
    - **OTP Name:** Pre Pilot OTP
    - **OTP ID:** NY60026M
  - **Dose:** OTP:
    - **OTP Name:** Pre Pilot OTP
    - **OTP ID:** NY60026M

**Medicine**
- **Clinic or Take Home Dose:** Clinic
- **Medicine Name:** Methadone
- **Dosage:** 60 mgs
- **Number of Take Homes for visit:** 0
- **Date Next Medical Appointment:** 04/25/2007

**Date of Dosing Event:**

- [OVERRIDE WARNING AND ACKNOWLEDGE]
- [PRINT]
- [CANCEL]

**Date of Dosing Event:**

**Recorder:** Mary Smith

Record Guest Patient Dosing Events

When D-ATM detects that a dose was recorded for a patient who is enrolled at a different OTP (home or guest) that has a current medicine order for this patient, D-ATM automatically sends an email saying that an OTP has dosed one its patients and to view its Queue of Patient Visit Events Occurring at Other OTPs.

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From: D-ATM Administrator [kbks@z-techcorp.com]
To: Zucker, Sherry
Cc: D-ATM Notification
Subject: D-ATM Notification

A patient with a current medicine order at your OTP, Pre Pilot OTP1 [NY60001M], has received a dose from Pre Pilot OTP2 [NY60002M].

View your queue of patient visit events for details.

Thank you!
Digital Access To Medication (D-ATM)
Queue of Patient Visit Events Occurring at Other OTPs

Because Internet emails are not secure, these emails contain no specific clinical information. Each OTP has a **Queue of Patient Visit Events Occurring at Other OTPs**. This queue is a table or list with information on two kinds of events of interest to the OTP:

- Doses dispensed by another OTP to a patient for whom your OTP has a current medicine order
- Retrieval by a Guest OTP of a home patient’s dosing information.

Authorized staff member(s) can view the details securely using the D-ATM online system. To access your OTP’s queue, select <Queue of Patient Visit Events…> from the Reports and Data Management menu.
The Queue Search Parameters screen appears. Use this screen to customize the queue’s appearance. You can filter the queue by event status (acknowledged or all events), event date and event type (dosing and/or retrieval events). You can sort your queue by D-ATM Patient ID and event date (most recent first or last), or by event date and D-ATM Patient ID.
Queue of Patient Visit Events Occurring at Other OTPs

The queue has some simple workflow features to help you keep track of events and to suppress events already seen. These workflow features include the ability to:

- Acknowledge events already seen with a visible indicator
- Hide the display of acknowledged events
- Display only events on or after a specified date
Enrollment - Reproducible PIN prompts

The end result of enrollment is to assign a D-ATM Patient ID that is associated with the patient’s finger scan data points. If a patient has to seek treatment at a guest OTP that can’t scan the patient’s finger, the Patient’s PIN can be used with the patient’s Home clinic name to retrieve the patient’s dosing history.

Recent Changes:
- Guide for patient to create a PIN that can be reproduced if forgotten.
Split dose proportions are entered by medicine recorder. A 50/50 split is no longer assumed. If a split dose is selected, the following screen is displayed.
Manage Medicine Order - Specify split dose proportions

The medicine recorder enters the proportions, in percent, for the split dose.

Enter Split Dose Proportions:

Split Dose Notes:
1. If a split dose is selected on the main medicine order screen, then 2 daily doses will be provided each day using the proportion indicated.
2. If the first dose of a split dose is a clinic dose, then the second dose will also be a clinic dose. If you need to change the second split dose to a take home dose, then when you dispense the first dose, add one take home dose on the Record Dosing Event screen.

To Define Split Dose Proportions:
1. Enter the proportions in percent for Dose 1 and Dose 2.
2. Click ‘Calculate’. The amount for dose 1 and dose 1 in mgs. will be displayed. To modify these amounts, change the values in the 2 proportions fields, then click ‘Calculate’ again.

Daily Split Dose Proportion:
- Dose 1: 60% Mgs.
- Dose 2: 40% Mgs.

100% Total Starting Amount 120 Mgs

SAVE CANCEL
Manage Medicine Order - Specify split dose proportions

When ‘Calculate’ is pressed, starting doses 1 and 2 are displayed in milligrams.
Manage Medicine Order - Specify split dose proportions

After the split dose proportions are entered and saved, the main medicine order screen is returned with the starting doses displayed in milligrams.
Manage Medicine Order – Define Custom Schedule

If Custom schedule is selected, display the following screen.
Manage Medicine Order – Define Custom Schedule

To set up a custom schedule:

- **Define a period** by entering the number of days in a period. Note that on the first day of the period, the patient receives a clinic dose and picks up take home doses for the remaining days in the period. For example, a period of 28 days results in 1 clinic dose and 27 take home doses.

- Then **enter the number of times the period can be repeated in this medicine order**. For example, a period of 28 days repeated 6 times results in the patient receiving a clinic dose every 28 days. With each clinic dose, the patient is given 27 take homes. With 6 periods, this results in $28 \times 6 = 168$ days duration of the medicine order. The medicine order expiration date will be automatically calculated.

- **Click 'Calculate'**. A description of your custom order will be displayed. To modify this schedule, change the values in the 2 fields, then click 'Calculate' again.

Days in Period \( \times \) 1 Periods covered by Medicine Order

Custom Schedule Definition:

Save  Cancel
Manage Medicine Order – Define Custom Schedule

Define Custom Schedule

To set up a custom schedule:

- **Define a period** by entering the number of days in a period. Note that on the first day of the period, the patient receives a clinic dose and picks up take home doses for the remaining days in the period. For example, a period of 28 days results in 1 clinic dose and 27 take home doses.

- Then **enter the number of times the period can be repeated in this medicine order**. For example, a period of 28 days repeated 6 times results in the patient receiving a clinic dose every 28 days. With each clinic dose, the patient is given 27 take homes. With 6 periods, this results in 28 x 6 days, or 168 days duration of the medicine order. The medicine order expiration date will be automatically calculated.

- **Click 'Calculate'**. A description of your custom order will be displayed. To modify this schedule, change the values in the 2 fields, then click 'Calculate' again.

Enter number of days in period and number of periods covered by the medicine order, then press 'Calculate' to see custom schedule definition.
A clear description appears of how the system interprets the period length and number of periods using a single or split dose order, as appropriate. The medicine recorder verifies the description. If the description is not what was intended, the custom schedule fields are changed and recalculated. Press ‘Save’.
Manage Medicine Order – Define Custom Schedule

After the custom schedule is defined and saved, the main medicine order is returned, the custom schedule is displayed, and the weekly schedule fields are hidden.
For More Information:

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