

Introduction

The Dawn CF Interface enables information such as:

1. Test results to be added and then marked as 'Tested'/'Completed' (or 'Authorised'/'Closed' if the auto-authorisation option is installed)
2. Patient demographic information to be added / updated
3. Doctor information to be added / updated
4. Appointment information to be created/updated
5. Patients to be flagged as admitted to hospital (or discharged from hospital)
6. Patient medication information to be added

An analysis of possible hazards of this process has resulted in a list of safety points. Your procedures should incorporate and address these safety points. This list is not intended as a complete and exhaustive list. Each site must determine their own safety procedures and ensure that they are operated correctly and consistently.

Initial set up and subsequent changes to any part of setup

- Use at least 2 fields for the patient matching criteria, for example Unit No. and Date of Birth. If this is not possible, ensure that 4S have provided an extra list view to show patients who have never received a message via the interface.
- Use a second set of matching criteria if your PAS/lab system cannot filter out messages for patients who are not on the Dawn CF system and your system is thus configured to discard messages for non-matching patients. For example, attempt to match on Unit No. and Date of Birth and if this is unsuccessful, attempt to match on National No. and Date of Birth.
- Fully test the setup on a test system that is as similar as possible to the live system before the interface is used on a live system or after any changes are made to any part of the setup. If it is not possible to setup a full test system then use test patients on the live system and ensure that during testing the interface is sent messages for those test patients only.
- If you create a test database by copying data from your live database, we recommend that the patients within it are updated such that output from the test database cannot be inadvertently interpreted as live data, for example if it is accidentally sent to a live system or a patient letter is printed. 4S can assist you with this by providing a suitable update script.
- If you make a change that may affect the input to the Dawn interface, please notify 4S in order that 4S can assist in confirming that the changes are valid and are forewarned in case of subsequent problems that may require their support.
- Double-check every imported test result / medication / patient demographic / doctor update / appointment / admission / discharge etc against the actual lab/PAS system data for that patient until you are confident that the system is applying the correct details to the correct patient.

- Manually check data imported via the interface for correctness and completeness. This should be performed on a regular basis.
- Ensure laboratory results are sent to DAWN in the correct date order for all relevant patients / tests.
- Ensure the list views have been configured to your specific needs e.g. request a list of all patients with "no next test date" if you wish to identify those patients whose treatment plan details need completing before they can be dosed
- If you have a medications interface, ensure that all drugs in the DAWN database have the correct local code entered. The medications interface uses these codes for matching the received information to the correct drug in DAWN. Remember that this matching is NOT case-sensitive i.e. for the interface, the code 'drugcode' is the same as 'DRUGCODE'.

Day to Day Running

Ensure that the fields used for matching are correctly typed into Dawn CF when the patient is added or amended if your site does not have a PAS link for obtaining demographic data.

Regular checks (daily):

- front screen tallies show that the expected numbers of messages (results / demographics / medication / other messages) have been received.
- list views and reports permit regular monitoring of imports to the DAWN CF database.
- If the volume of messages falls suddenly or stops, report this to your System Administrator urgently.

If you have an Anticoagulation INR-only interface, also:

- When a result is added to a patient, it may cause the INR and/or the INR date to be flagged. Check all flagged fields to ensure they are reasonable. Verify them against the original lab result if you are unsure.
- Regularly check the Hold Monitor (see below), at least once every day and, in particular, check it before the day's non-attenders are rescheduled in case the missing result has been put on hold.
- Ensure there is an alternative procedure in place for the lab to report on significantly low/high or deleted INRs that does not rely on the DAWN interface.

If the Anticoagulation INR interface is configured to auto-authorise doses:

- When manually adding Treatment Notes (which will prevent an INR being auto-authorized) it is advised that all related changes are also made against the patient details. For example, if you update the treatment notes to indicate the

patient started an interacting drug, you should also add the drug to the patient's drug list on the drugs tab.

- It is also advised that a list view is created within Dawn CF to show records that have been auto-authorised by the interface. Regularly check some of the listed patients on a regular basis to ensure that auto-authorisation is operating correctly.

If you have a multiple test result interface (e.g. Rheumatology, Anaemia), also:

- Regularly check the Hold Monitor (see below), at least once every day and, in particular, check it before non-attenders are contacted in case the missing result has been put on hold.

If you have a Demographic / Next Appointment interface, also:

- If the interface is not being supplied with a patient diagnosis when creating treatment plans, then it is important to regularly filter on “undefined” diagnosis in the clinic lists to find any patients for whom a diagnosis has not been added. (NOTE: It is not necessary to filter on patients with an “undefined” target range as without a valid target range the patient cannot be dosed and hence these patients will be highlighted.)
- Resolve Hold messages before creating dosage instructions. This will prevent dose instructions being sent to incorrect contact details where the correct, updated, details have been put on hold for some reason.

If you have an ADT interface, also:

- Resolve Hold messages before creating dosage instructions. This will ensure dose instructions are sent to patients that have been discharged from hospital and prevent dose instructions being sent to patients that have been admitted to hospital where the discharge / admission message has been put on hold for some reason.

If you have medications interface, also:

- Routinely check the medication details against the prescription for the patient to ensure accuracy and completeness.

Managing the Hold Monitor

The Hold Monitor stores messages that have been put on hold instead of being successfully processed. The main reasons that a message may be put on hold are as follows:

- Invalid data in the message, for example a zero INR, an invalid appointment date
- No matching patient within Dawn CF
- More than one matching patient within Dawn CF
- The patient does not have an active treatment plan

If you have an Anticoagulation INR-only interface, also:

- The result sample date is not in the recent past, for example it is more than 14 days before today. (The exact number of days is configurable within Dawn CF)
- Different result sent for same day for same patient
- Patient has a more recent result already
- Patient has a previous test that has not yet been authorised
- Result date is before the treatment plan start date

If you have a multiple test result interface, also:

- Result date is more than N days in the past (where N is the Sample Date Warning Threshold for the relevant Test definition in Dawn CF)
- Unrecognised test name
- Result date is in the future

If you have a Demographic Next Appointment interface, also:

- The appointment date is too far in the past or future.
- The patient has an existing appointment with a status of 'Tested' or 'DoseSet' and so their next appointment cannot be set
- The patient is deceased.
- The diagnosis does not exist in Dawn CF.
- An attempt was made to update a doctor to belong to a different organisation.
- Multiple matches were found when identifying a doctor.
- The Health Authority has not been set when adding a new organisation

If you have an ADT interface, also:

- The patient is deceased.
- The patient has a Stopped treatment plan (and the interface is configured to place ADT messages on hold in this situation)
- The patient's treatment plan has a status that is incompatible with the ADT message (for example, an admission message is received for a patient who is already flagged as admitted)
- An invalid admission / discharge date/time has been supplied

If there are any Hold messages whose reason is not self-explanatory, or you have any other queries, contact 4S Support for assistance.

Use the Hold Monitor to resolve the rejected messages. Depending on the reason for the rejection, different actions are necessary, for example:

- Resolve the patient data within Dawn CF and reprocess the Hold message if it has been rejected due to more than one matching patient.
- Authorise the previous test and reprocess the Hold message if it has been rejected due to the previous test being unauthorised.

Write a procedure to specify what to do for each possible Hold reason. In particular, if you have an Anticoagulation INR-only interface, specify what to do when a patient has two different test results in one day. Dawn CF is designed to handle one result per patient per day. If a patient has more than one result, it is likely to be due to an urgent problem such as a very high INR and therefore needs to be handled very carefully. For example, update the test result with the second INR and re-dose the patient but add the first INR result to the comments for future reference.

Promptly delete redundant Hold messages to ensure the Hold Monitor checking does not become too onerous and that important rejected messages are not missed.