HEP –
Hepatitis B and C sentinel surveillance

HelicsWin.Net
User Manual

Software version 4.8.1

August 2025

Edition notice

This document applies to the HEP – Hepatitis B and C sentinel surveillance module of the HelicsWin.Net (HWN) version 4.8.1

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Document control

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Document's intended audience and purpose

The document is intended for hospital staff that use HelicsWin.Net to collect or administer data collected participating in ECDC's Hepatitis B and C sentinel surveillance.

This document describes the HelicsWin.Net v4.8.1 user interface, and provides users with step-by-step instructions in its use, and conceptual information about data storage.

This document focusses only on the HEP – Hepatitis B and C sentinel surveillance module of the HelicsWin software.

About HelicsWin.Net

HelicsWin.Net is a software application developed for the manual entry of data from healthcare settings.

The current version includes six surveillance modules:

- HAI-Net PPS: point prevalence survey (PPS) of healthcare-associated infections and antimicrobial use in European acute care hospitals (Protocol version 5.0), and

- HAI-Net ICU: surveillance of healthcare-associated infections in European intensive care units (ICUs) (Protocol version 2.0), and

- HAI-Net CDI: surveillance of *Clostridium difficile* infections (CDI) in the EU (pilot protocol version 2.2).

- HAI-Net SSI: surveillance of surgical site infections (SSIs) (Protocol version 2.2)

- HAI-Net HALT: point prevalence surveys of healthcare-associated infections and antimicrobial use in European long-term care facilities (Protocol version 2.1),

- **HEP – Hepatitis B and C sentinel surveillance: Protocol for sentinel surveillance of chronic hepatitis B and C treatment and outcomes in European Union and European Economic Area countries (Protocol version 1.0)**

HelicsWin.Net enables local users, typically in a hospital, to collect surveillance data at the hospital and ward levels; these data are stored internally by HelicsWin.Net, but the data can be exported to other applications in a variety of formats, including formats compatible with Microsoft Access (.mdb).

Background

The name *HelicsWin.Net* originates from the Microsoft Access application *HelicsWin* developed by the former European HELICS (Hospitals in Europe for Infection Control through Surveillance) network for the surveillance of HAI. HelicsWin was originally developed as part of an ECDC contract for further Hospital Software Support for the European Surveillance of HAI, which included *HelicsWin for the surveillance protocols Surveillance of healthcare-associated infections in Intensive Care Units (ICU) and Surveillance of surgical site infections (SSI).*

HelicsWin.Net was originally developed by the ICT department of the Scientific Institute of Public Health, Brussels, Belgium under contract ECD.2218 and its amendment ECD.2764 until September 2011. In September 2011, development of HelicsWin.Net was transferred to ECDC.

Technology

HelicWin.Net is a standalone application developed in Microsoft .Net framework. Data are stored in an .mdb file that is in Microsoft Access format. This file is stored on the computer on which HelicsWin.Net is installed.

Users should also note that:

- HelicsWin.Net is supplied free of charge and can be freely distributed to participating hospitals.

- The text displayed on the data entry forms can be translated to meet language requirements of the participating hospitals.

- HelicsWin.Net can be installed and run from a server, but simultaneous users are not supported, i.e. only one user can run the software at any one time.

- The current version does not require Microsoft Access to be installed on the computer on which it runs.

- Microsoft .Net Framework version 3.5 SP1 or later (available free of charge from Microsoft) is required.

HelicsWin.Net versions

HelicsWin.Net has been published in incremental versions from 1.0 to the current version 4.8.1.

What's new in HelicsWin.Net version 4.8.1

Version 4.8.1 is a release with the following features:

✓   Revision of the automatic sequence of numbering causing shift of case data

Related documents

For information about how to complete the forms in this application, please refer to the following documents:

> HEP – Hepatitis B and C sentinel surveillance: Hepatitis B and C sentinel surveillance: Protocol for sentinel surveillance of chronic hepatitis B and C treatment and outcomes in European Union and European Economic Area countries (Protocol version 1.0).

HelpDesk

For any questions, please refer to your National HEP B and C sentinel surveillance coordinating centre that may refer questions to *mailto: STIHIVHEP@ecdc.europa.eu*

Feedback

ECDC welcomes any feedback from users to help us to improve future versions of this software and documentation. Please send your comments to the HelpDesk.

Installation

This section describes the installation requirements and procedures for HelicsWin.Net.

Installation Requirements

The following requirements must be met on the PC on which you are installing the HelicsWin.Net software:

- **Windows XP or later** - Personal computer running Windows XP or later.
- **Administrator rights** - You must have administrator rights on your PC.

    Note: If you do not have administration rights on your computer, contact your system administration for further help.

- **Microsoft .NET Framework 3.5 SP1** or later (.NET 3.5) must be installed on the PC on which HelicsWin.Net runs. The installation program checks for the presence of this software component and cannot complete without it.

    If you were able to run the previous version of HelicsWin.Net 1.3 on the same machine, you will be able to install the new version.

    If your PC does not already have .NET 3.5, it is installed automatically during HelicsWin.Net installation, providing the PC is connected to the internet and downloads are allowed.

    If your PC does not have internet access...

    Check whether.NET 3.5 or later is already installed (see *below*).

    Alternatively, if your PC is not connected to the internet, and you don't have .NET, you can download the .NET software to another PC (that does have internet access) and copy the .NET installation files to portable memory device, such as a USB stick, transfer the device to your PC, and install .NET from there. You can download this software from this URL:

    http://www.microsoft.com/en-us/download/details.aspx?id=22

Runtime Requirements

Access permissions

You do not need administrator rights to your PC to run the application once it is installed, but you must have full access (read/write/execute permission) to the installation folder, which by default is C:\HWN2.

If you install HelicsWin.Net in a different folder, you will need full access to that folder.

Microsoft Access

Although the application database HelicsWinNet.mdb is in Microsoft Access format, you do not need Microsoft Access installed on your computer to run HelicsWin.Net.

You can open the database files in Microsoft Access, but you could also use other compatible software such as Microsoft Excel.

.NET

To check whether .NET 3.5 SP1 or later is installed on your PC

In **Windows 7**, do the following:

1. Click **Start > Control panel**

    The control panel opens.

2. Click **Programs**.

3. Click **Programs and Features** and wait until the installed programs list is populated.

4. Scroll down the list to the Microsoft entries.

    If **Microsoft .NET Framework** is in the list, it is installed. If the version is **3.5 SP1** or higher, you have the correct version, and you can install HelicsWin.Net.

    If the correct version of .NET is not installed, the included setup.exe file installs it for you, although you must have administration rights on your computer (see below).

    Alternatively, to install .NET Framework 3.5 SP 1 or later manually, go to this link and follow the on-screen instructions:

    http://www.microsoft.com/en-us/download/details.aspx?id=22

In **Windows 10**, do the following:

1. Click **Settings**

    The Windows settings window opens.

2. Click **Apps**.

3. See step 4 above.

In **Windows XP**, do the following:

1. Click **Start > Settings > Control panel**

    The control panel opens.

2. Click **Add or remove programs** and wait until the installed programs list is populated.

3. See step 4 above.

Installing HelicsWin.Net

The application comes as two files, one of which is an .msi file that contains the full application. To install HelicsWin.Net 4.8.1, you must have administration rights to your PC.

HelicWin.Net.msi	Installation files *Administration rights required*
setup.exe	Installer program

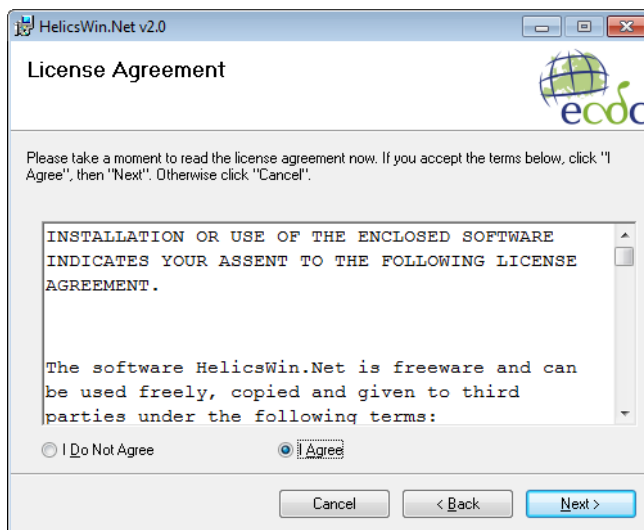To install HelicsWin.Net 4.8.1:

1. Download the HelicsWin.Net zip file to your PC from the ECDC website at:

    http://ecdc.europa.eu/en/activities/surveillance/hai/about_hai-net/pages/helicswinnet-download-page-hwn.aspx
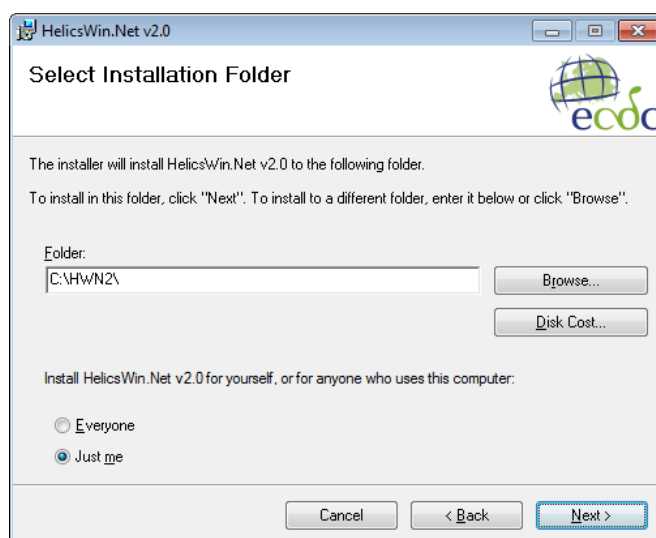
2. Open the zip file and extract the installation files to a folder to which you have full access.

3. Make sure that after extracting the files, both installation files are in the same folder.

4. Click **setup.exe**.

The installer opens.
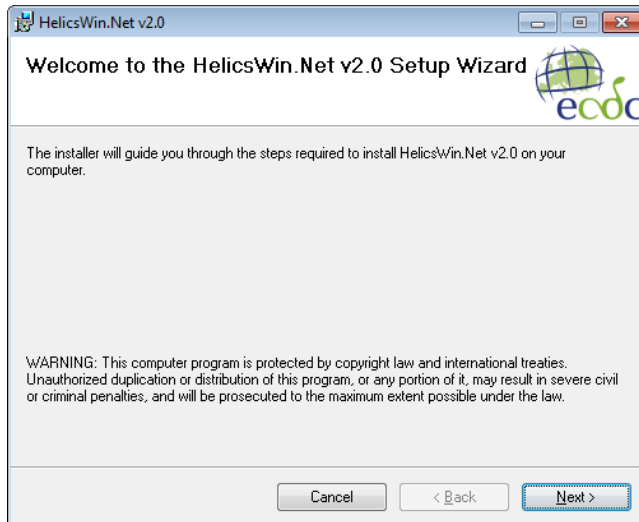
5. Follow the on-screen instructions.

6. By default, the installer creates a shortcut to HelicsWin.Net on your desktop. Simply click the shortcut icon to open the HWN application. The icon also appears in your taskbar when HelicsWin.Net is running.

The application files are installed, by default, in the folder C:\HWN3. Table below describes the purpose of each file.

File or folder	Contents
DatabaseBackups	Database backup file, for example, files saved by a merge operation. This folder is not visible immediately after installation, but is created automatically by the application when needed.
Documentation	User guide; HAI-Net PPS and ICU main protocols and forms.
Log	Log files: level of detail depends on user's specification.
Res	Documents enabling view of antimicrobial resistance markers and codes and ECDC's Privacy Policy from within the software.
HelicsWin.Net.Common.dll HelicsWin.Net.Components.Log.dll HelicsWin.Net.Helpers.dll	Application extension files – needed for HelicsWin.Net to work.
HelicsWin.Net.exe	Executable for HelicsWin.Net.
HelicsWin.Net.exe.config	Configuration file
license.rtf license_3rd_party_notices.rtf	License files
HelicsWinNetCDI.mdb HelicsWinNetICU.mdb HelicsWinNetPPS.mdb	Database file: *HelicsWinNetXXX.mdb*: is initially the empty database (Microsoft Access format) for this application, where XXX represents the module name (CDI, ICU, or PPS). These files are the most important in the application, because they contain all the survey data entered to date. **Recommendation:** make regular backups of these files.
Reference.mdb	Database file containing values and labels (Microsoft Access format).
Translation.mdb	Database file containing translation data (Microsoft Access format).

Warning:	Manually changing the structure, or the data, in any of the .mdb databases — for example, within MS Access — may cause the programme to stop working.
	If you do decide to make manual changes to the database files, **always** make a backup copy of the database first.
Important:	The software must be installed in a path (folder) where the user has write rights/access (for example, C:\HWN2), otherwise save errors may occur.
	Any existing data will be overwritten when copying new .mdb files! If applicable, make a backup of your existing data first (HelicsWinNet.mdb for the PPS database, Traduction.mdb for translations).

Network installation

You can also install HelicsWin.Net on a network drive in the hospital and then users can run the application from there. Users must have write access to the installation folders.

Network installation can be used when data needs to be entered from different wards; this may be preferred to having to work with multiple local ward copies (and databases); however, with the merge facility, it is relatively easy to merge these data into a single database for the hospital as a whole (see *Merging data*).

It is not possible to enter data from two or more computers simultaneously into the same database.

Getting started

To launch the software, open installation folder (default is HWN2) and run the file *HelicsWin.Net.exe*.
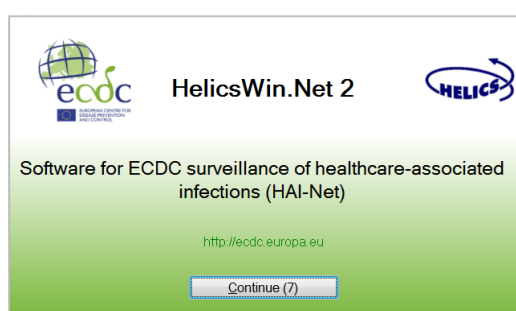
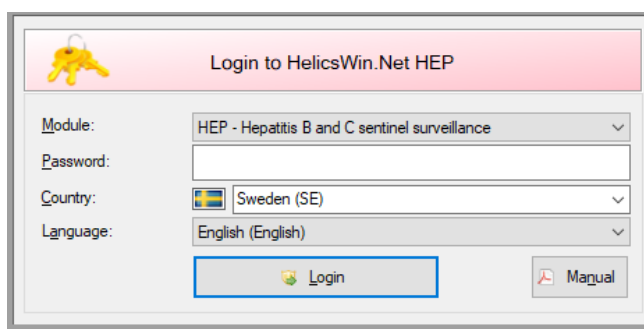1. From your desktop, click the HWN2 icon on your desktop.

   or

   1. Select **Start** > **My Computer** > **System** (C:) > **HWN2**> **HelicsWin.Net.exe**.

   The splash screen appears:

2. Click **Continue** to go to the first (login) form.

3. Select the surveillance module (HEP – Hepatitis B and C sentinel surveillance) from the **Module** drop-down list.

4. Select your country and language. You can add a language by translating the software.

   The first time anyone uses this installation, the default password is *helics*. You will be prompted to change this the next time you log in. You can change your password in **Settings** later on.

   Caution If you change your password, make sure you can remember it because there is no easy way to access your database files without that password.

   The default language on installation is English. If you change to another language while logging in, HelicsWin.net will be remember your change for subsequent logins.

5. In case want to read the user manual click on the **manual** button that exist on the buttom right of the screen.

6. Click **Login**.

   If you have not already defined any hospitals, you must define one now.

7. Click the **Add item** icon .

   The fields in the upper part of the form open for editing.

8. Enter the hospital code—as provided by your National HAI Surveillance/PPS Coordinating Centre—and the hospital name.

9. Click the **Save** icon or press **Ctrl+S** to save the data **as a record in the database**.

10. Click **Select this hospital** to make changes to or view/enter data on this hospital.

Working with HelicsWin.Net forms

In HelicsWin.Net you enter your data in a series of forms. These forms have standard features, such as labelled text boxes, drop-down lists, and option buttons, to help you become familiar with the user interface so that you can enter your data quickly and accurately.

General guidelines

> **Caution**: Each time you log in, the software opens the first record in the database. Therefore, if you start entering data without creating a new empty record, the first record will be overwritten when data are saved!

You use the toolbar's functions to perform basic tasks:
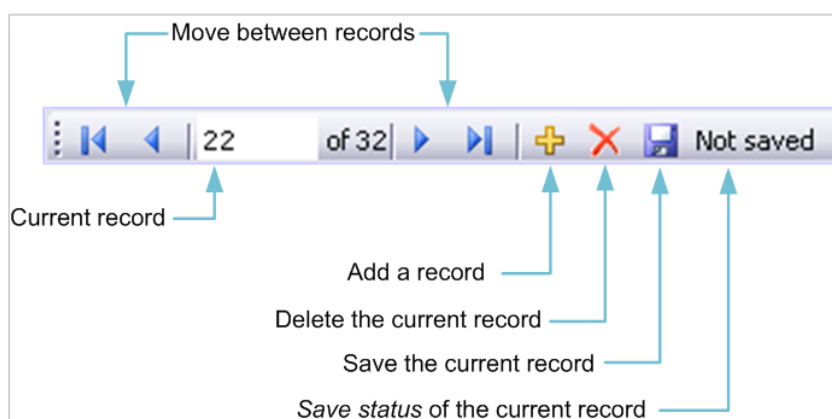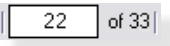
Table below describes these functions.

Toolbar functions

Icon	Function	Description
22 of 33	Current record	Indicates which record is currently open for editing.
◀ ▶	Move between records	Use the **Backwards**◀ and **Forwards** ▶ buttons on the toolbar to move one record at a time; alternatively, press **Ctrl + left and right arrow** or use **Back** I◀ and **Forward** ▶I to go the start or end record respectively.
✚	Add a record	On all data entry forms, first click the yellow **Add item** ✚ icon to activate the relevant input fields. Click to add a new record. Make sure the current record is saved first, before creating a new record. Alternatively, press **Ctrl+N** to create a new record.

Icon	Function	Description
✗	Delete the current record	Most deletions are preceded by a warning.
		Note that if you delete a record (e.g. a ward), with dependent records (e.g. patient records), all the dependent records will be deleted.
		However, if you deleted a record by mistake, exit the programme without saving and re-start HWN to undo the deletion. Click the **Save** icon to confirm the permanent deletion of the record.
Not saved	*Save status* of the current record	The **Not saved** indicator text appears whenever you have changed data in a data record but not saved it. This indicator disappears as soon as you save the record, and reappears if you make any changes.
💾	Save the current record	Alternatively, press **Ctrl+S** to save the current record.

Keyboard shortcuts

Keyboard shortcut	Action
Ctrl + Left arrow	Previous record
Ctrl + Right arrow	Next record
Ctrl + N	New record
Ctrl + S	Save record
Ctrl + D	Delete record

When a record is saved, the programme performs some validation checks on the data before actually saving. See *Checking data quality*.

Understanding reported errors

The application checks the data you supply as soon as you attempt to save it. The purpose of this check is to help you get your data right. If data quality checks and data entry validation identify errors, the application displays a message before saving.

There are three types of field validation in HWN:

- Type 1: **mandatory fields** are left blank or have been assigned invalid values: an **error message** is displayed, the relevant field labels are shown in red and you cannot save the data.
- Type 2: **required fields** are left blank: a **warning message** is displayed, the relevant field labels are shown in blue, but saving is possible. This will typically occur when required data are not available until the end of the surveillance period, e.g. the number of discharges in the surveillance period.
- Type 3: **optional fields** that can be empty: no warning or error message is displayed.

Figure below illustrates possible errors and warnings that could arise when you save a record in the CDI hospital data form. Note that in this case, there is one error and the data cannot be saved before the mandatory data is entered.

Example of errors and warnings
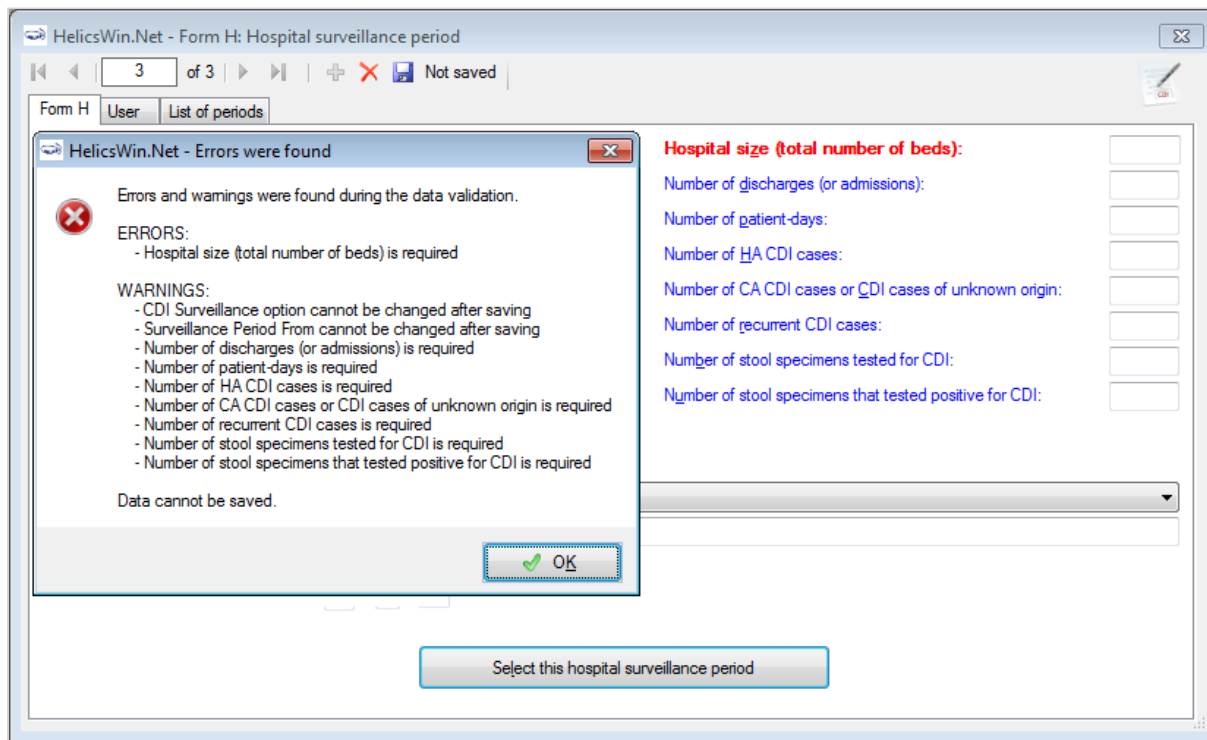
Note: Not all validation rules are implemented at data entry; some more complex rules are implemented only in the *data quality check*.

General features of the user interface

- General outlook of data forms: directly underneath the toolbar, the selected hospital code is displayed.

- You have to enter most categorical variables through drop-down lists (starting with blank line), so that you can enter only a predefined value from the list.

- Tabbing: keyboard tabbing first follows the order of input fields, after which focus will be put on toolbar.

- You can access fields with keyboard shortcuts made up of the **Alt** key and the underlined letter on the field label. For example, if you press **Alt+P** in the **Hospital** form, the focus moves to the **PPS Protocol** field.

  Once the focus is on the field, enter the first letter of the required value, for example, **S** for Standard protocol, alternatively, you can select the value from the drop-down list.

- The default buttons in the warning messages—for example, **Yes** and **No** buttons—are displayed in the language of the installed Windows operating system.

Data hierarchy

Data in HWN is stored hierarchically, with the hospital at the top and patient data at the bottom. The definition of data at any level depends on the earlier creation of data for the level immediately above.
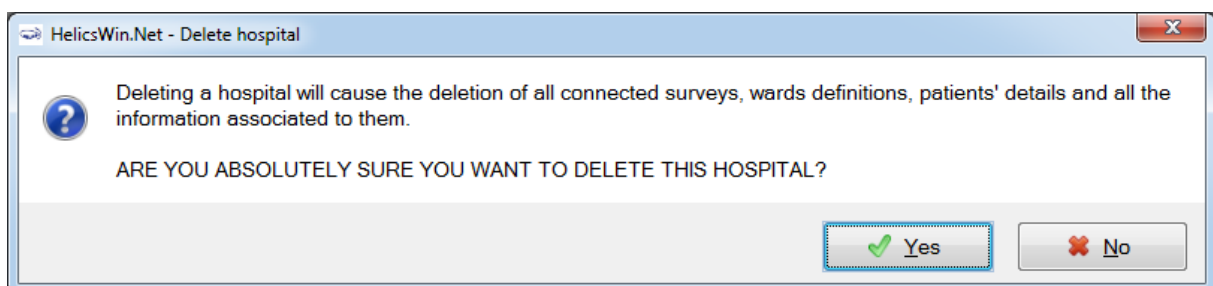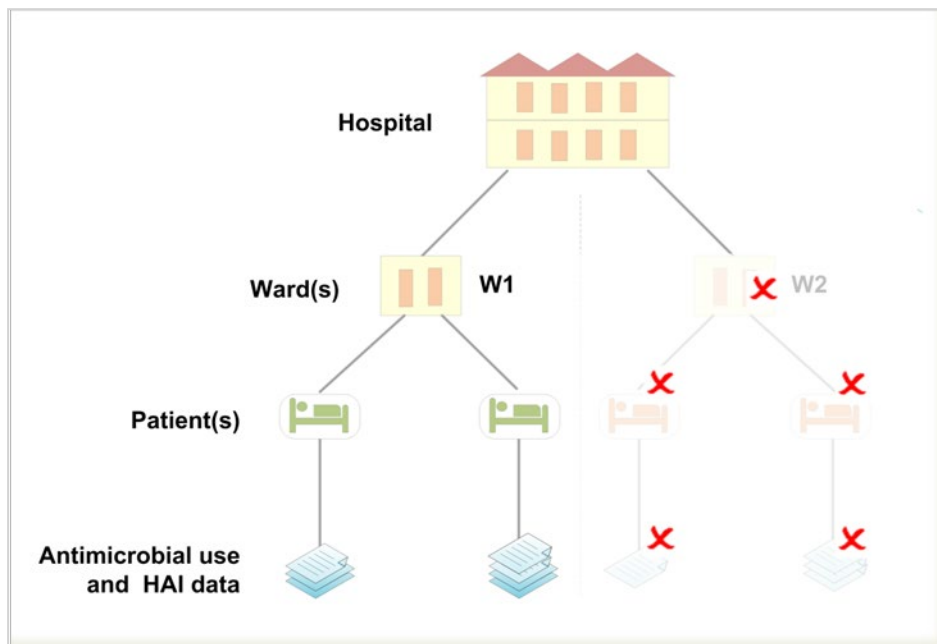
Data hierarchy
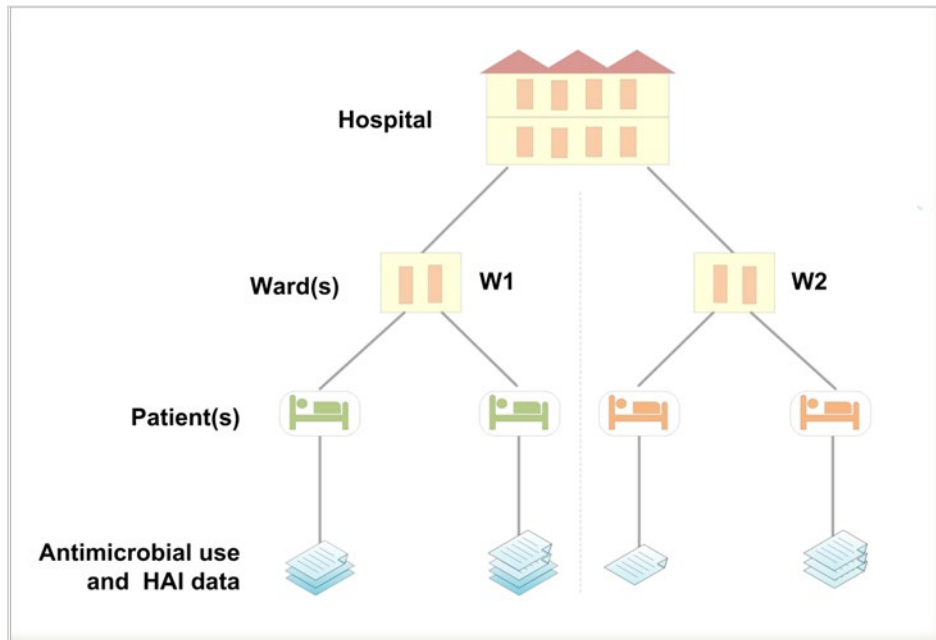
One consequence of this data hierarchy is that if you delete a definition at one level you automatically delete the data that depend on that definition, at the lower levels. For example, if you delete a ward definition (W2), all the data belonging to patients on that ward are also deleted (see figures below). Furthermore, if you delete the whole hospital record, you would delete all the related ward and patient data as well.

HWN warns you before it deletes anything, but you need to be vigilant to ensure that you do not lose your work or that of others.
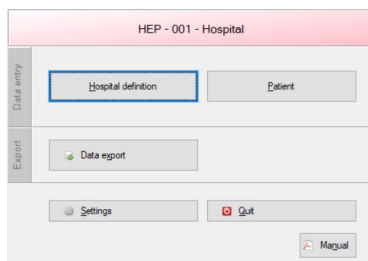
Data hierarchy – warning message

Data hierarchy – the effect of deleting a ward definition

Using the main menu

Use the main menu to open the main data entry forms for the different data levels. These forms are arranged in hierarchical order, based on hospital-, ward-, and patient-level data.

HEP main menu

Summary of main menu functions

| Button	Actions(s)
Hospital definition	Enter the name and code of a new hospital in the system.
	You can enter the data for different hospitals (sites) in the same database, e.g. hospitals within hospital trusts or organizations. This also enables national/regional coordinating centres to enter different hospitals data centrally, into a single database.
	If more than one hospital has been entered, you select individual hospitals here, by double clicking on its name in the Hospitals list.
Data export	Export data as (i) raw data (as stored in the HelicsWinNet.mdb access format database), with or without user or validation variables,
Settings	From this form you can:
	• Change your password;
	• Specify how HelicsWin.Net sorts lists that contain data values (for example, sorting antimicrobials alphabetically by ATC5 code or alphabetically by antimicrobial agent)
	• Translate labels on HelicsWin.Net forms
	This feature enables you to translate labels on data fields and controls, such as tabs and buttons. You can access the text definitions for all the labels on the forms and validation messages and translate them in any language. You can also rename user field labels so that a local or national extra data collection modules can be implemented. The system also checks problems in the translation files, such as an accidental deletion of labels, and automatically fixes inconsistencies;
	• Reset window sizes to their original values;
	• Define the level of detail of error logging (for debugging purposes).
Quit	Shut down the programme.
Manual	Open the user manual for HelicsWin.net

Defining hospitals

If you are working in a single hospital, create the definition for that hospital. Once a hospital definition has been created, you can then add its ward and survey data.

If necessary, you can add additional hospitals to the same HelicsWin.Net application. In doing this you are able to store the data for the additional hospitals in the same HelicsWin.Net database. If more than one hospital has been defined, you can only enter information for one hospital at a time.

To create a hospital definition:

1. Click **Hospital definition** in the *main menu*.
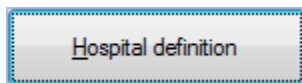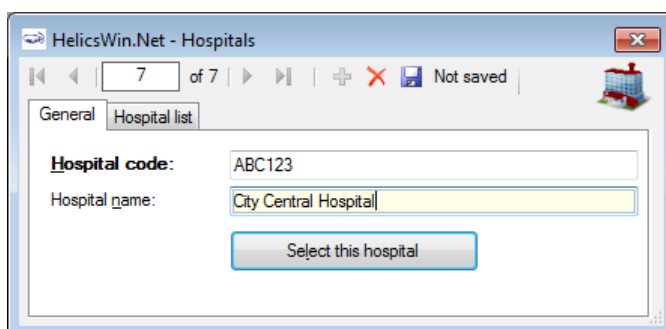

   The **Hospitals** form opens.
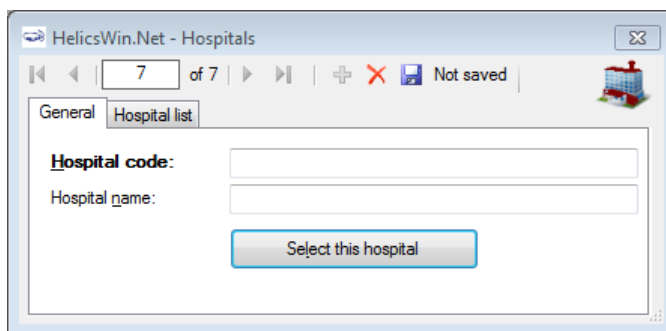
   If no hospitals have been defined yet, the fields are blank.

2. Click the **Add item** icon ✚.

   The **Hospital code** and **Hospital name** fields clear.

3. Enter the new hospital code and name (in this example, 'ABC123' and 'City Central Hospital').

4. Click the **Save** icon 💾 or press **Ctrl+S**.

   The hospital record is added to the internal database. From now on, you can access this record from this form through the Forwards ▶ and Backwards ◀ buttons on the toolbar.

5. Click **Select this hospital**.

   The *main menu* re-opens.

You can now enter this hospital's ward and survey information – see:

- *Defining wards and ICUs* and
- *Creating a HEP survey*

Selecting a defined hospital

If you have more than one hospital defined, you can enter information for one hospital at a time. This includes (i) adding or editing survey data and (ii) adding or editing ward definitions.
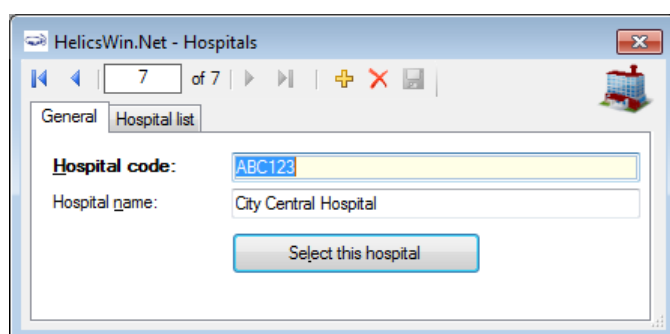
To select a hospital:

1. Click **Hospital definition** in the *main menu* (as in step 1 above).

    2. The **Hospitals** form opens.
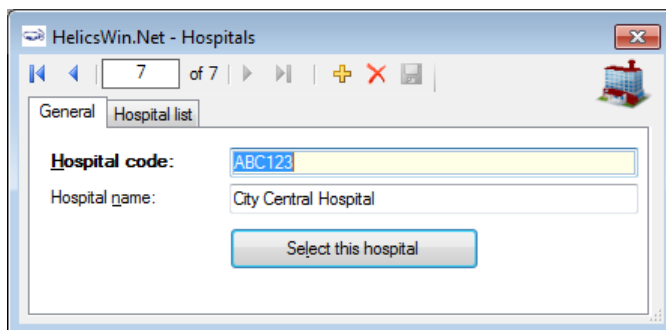
2. Click the **Hospitals list** tab.

    A list of all defined hospitals opens.
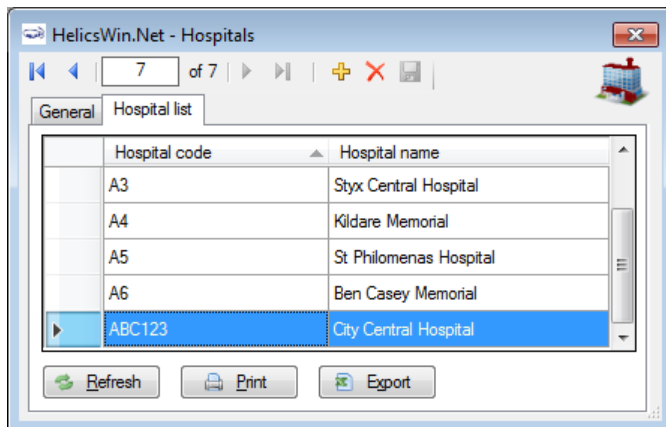
3. Click **Refresh**.

    This ensures that hospitals defined since the last refresh are included in this list.

4. To select the hospital, double-click on its code.

    This re-opens the **General** tab, and shows the hospital you chose.

5. Click **Select this hospital** to select it.

Hospital types

You do not enter details about the type of hospital while defining a hospital. The type is defined later when you create a survey.

Hospital types

Primary	Often referred to as a 'district hospital' or 'first-level referral' hospital.
	Few specialities (mainly internal medicine, obstetrics-gynaecology, paediatrics, general surgery or only general practice).
	Limited laboratory services are available for general, but not for specialised pathological analysis.
	Often corresponds to a general hospital without teaching function.
Secondary	Often referred to as a 'provincial hospital'.
	Hospital is highly differentiated by function with five to ten clinical specialities, such as haematology, oncology, nephrology, ICU.
	Takes some referrals from other (primary) hospitals.
	Often corresponds to a general hospital with teaching function.
Tertiary	Often referred to as a 'central', 'regional' or 'tertiary-level' hospital.
	Highly specialised staff and technical equipment (ICU, haematology, transplantation, cardio-thoracic surgery, neurosurgery); specialised imaging units.
	Clinical services are highly differentiated by function.
	Specialised imaging units.
	Provides regional services and regularly takes referrals from other (primary and secondary) hospitals.
	Often a university hospital or associated with a university.
Specialised	Single clinical specialty, possibly with sub-specialties.
	Highly specialised staff and technical equipment.
	Specialisation (e.g. paediatric hospital, infectious diseases hospital) should be specified in a form when this is possible.

Defining wards and ICUs

You can define wards (units) to be included in the Point Prevalence Survey, included in the SSI surveillance or different intensive care units (ICUs) in the ICU module. For each ward/unit, you have to enter an abbreviated name (the Unit ID or code) that will be used in all levels of the database and, optionally, a full ward name. The procedure to define wards in the PPS module described below is similar to the procedure to define ICUs in the ICU module.

In the SSI module, you can select "Use Without wards" if you wish to enter the surveillance data for the entire hospital without specifying wards.

To create a ward or ICU definition:

1. Click **Ward definition** (PPS and CDI) or **ICU definition** (ICU) in the *main menu*.

    The **Wards** or **Define ICUs** form opens showing the current hospital code.

    If this is not the correct hospital, click the **Close** icon to cancel. To select the correct hospital, see *Selecting a defined hospital*.

2. Click the **Add item** icon or press **Ctrl+N**.

    The form opens for editing.

3. In the **Ward name** or **ICU name** field, enter the ward/unit name (up to 20 characters) or ID.

    You cannot enter the same ID twice. The ward/unit list can be used for different hospital surveys within the same hospital.

4. Optionally, specify the full (expanded) name in the **Full ward name** or **Full ICU name** field.

5. Click the **Save** icon ![save] or press **Ctrl+S**.

6. Click the **Wards list** or **ICU list** tab to view all the wards/units for which a record has been created.
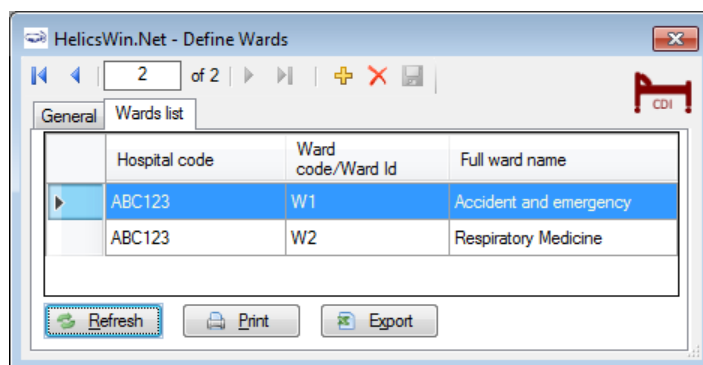
Note: The ward specialty is defined later (because it may change from one survey to another).

You can now enter this hospital's survey information – see:

- *Creating a HEP survey*

Creating a HEP survey

Entering HEP Sentinel site data

Follow the procedure in this section to create a new HEP survey for each defined hospital, entering information for each Patient. Before you can create your survey, you must *define your hospital*.

1. *Click Sentinel site details in the HEP main menu.*
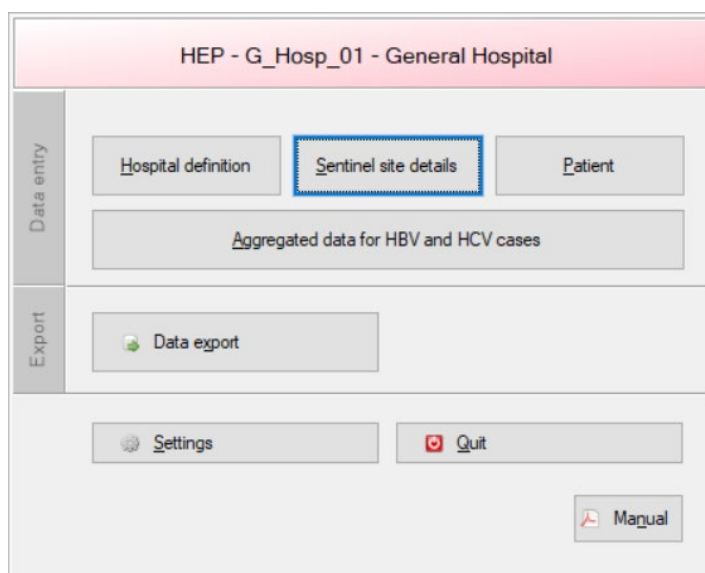
2. *The sentinels form of the HEP survey opens (for the hospital you have selected).*

3. *In the Sentinel site details form, click the Add item icon ✚ to open the form for editing.*

4.   Enter the values for the fields in the Sentinel site details tab

5.   Click the **Save** icon or press **Ctrl+S**.

Descriptions of the variables for HEP survey tabs are given in table below. If any mandatory or required data field is empty when you save, e.g. because you do not yet have the data, an error and/or warning message is shown and the field label is highlighted as a reminder - in red for a mandatory field (you cannot save) or blue for a required field. See *Understanding reported errors*.

HEP sentinel site survey tab variables

Variable	Description
Sentinel site details	
Hospital code	The hospital identifier/code assigned by national/regional HEP coordinating centre; unique code per surveillance/HEP network. Hospital codes should be unique within each surveillance network, and kept constant between the ECDC Antimicrobial Resistance and Healthcare-Associated Infection (ARHAI) surveillance protocols and from one year to the next. Inserted automatically based on the hospital selected during *Hospital definition*.
Country	
Site name / code*	Code for participating site. The number is unique and will remain unchanged for all cases reported by the same site
Type of site	
Catchment area population	

Variable	Description
Methods to determine the catchment area population	
Total number of persons attending or visiting the sites per year	

Entering HEP Patient data

Follow the procedure in this section to create a new HEP survey for each defined hospital, entering information for each Patient. Before you can create your survey, you must *define your hospital* and the *sentinel site(s).*

1. *Click Patient in the HEP main menu.*
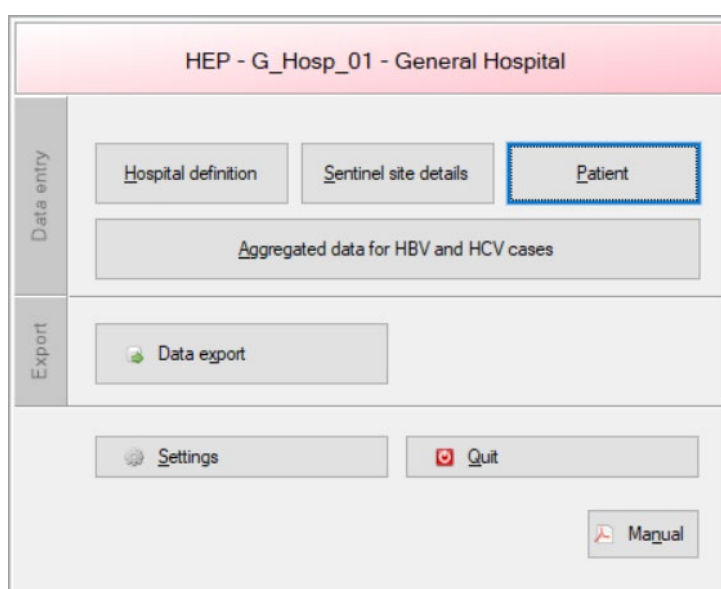
2. *The HEP survey form opens (for the hospital you have selected).*

3. *In the Patient details form, click the Add item icon ✛ to open the form for editing.*

4. *Enter the values for the fields in the Patient details tab.*

5. *Enter the values for the fields in the Likely route transmission tab.*

6. *Enter the values for the fields in the Testing history tab.*

7. *Enter the values for the fields in the Diagnosis of liver fibrosis tab.*

8. *Enter the values for the fields in the Chronic HBV diagnosis tab.*

9. *Enter the values for the fields in the Treatment of chronic HBV tab.*

10. Enter the values for the fields in the Chronic HCV diagnosis tab

11. Enter the values for the fields in the Treatment of chronic HCV tab

12. Click the **Save** icon [icon] or press **Ctrl+S**.

Descriptions of the variables for HEP survey tabs are given in table below. If any mandatory or required data field is empty when you save, e.g. because you do not yet have the data, an error and/or warning message is shown and the field label is highlighted as a reminder - in red for a mandatory field (you cannot save) or blue for a required field. See *Understanding reported errors*.

HEP Patient survey tabs variables

Variable	Description
Patient details	
Hospital code	The hospital identifier/code assigned by national/regional HEP coordinating centre; unique code per surveillance/HEP network. Hospital codes should be unique within each surveillance network, and kept constant between the ECDC Antimicrobial Resistance and Healthcare-Associated Infection (ARHAI) surveillance protocols and from one year to the next. Inserted automatically based on the hospital selected during *Hospital definition*.
Unique individual code*	The unique anonymous individual code is an automatically incremented code which is unique in a hospital level. It is filled in when the user clicks on the Add (+) button.
Participating sentinel site*	The unique sentinel code(s) defined by the user, for the selected hospital, under "Sentinel site details".
Date first attendance service/clinic in surveillance period	The date of the first patient's attendance at the service/clinic.
Date last attendance service/clinic in surveillance period	The date of the last patient's attendance at the service/clinic.
Patients' status in clinics	
Date of death	If patient died.
Cause of death	If patient died.
Gender	The patient's gender.
Age at first attendance	The patient's age at first attendance.
Country of Birth	The patient's country of birth.
Likely route transmission	
Sexual transmission among MSM/homo or bisexual male	
Heterosexual contact	
Sexual transmission (unspecified)	
Mother-to-child transmission	
Household contact with a chronic case	
Injecting drug use	
Nosocomial transmission	

Variable	Description
Occupational exposure	
Non-occupational exposures	
Blood and blood products	
Organ and tissues	
Hemodialysis	
Through selling sex	
Sexual transmission mode	If "Through selling sex" = Yes
Other	Transmission route is known, but is not mentioned in the list
If the patient reports injecting drugs, when was the last time	
Testing history	
Highest Alanine Amino Transferase (ATL) level	The patient's levels of ALT.
Date of test of highest concentration ATL	
Diagnosis of liver fibrosis	
Has an assessment of liver fibrosis been undertaken?	Submit whether there has been an assessment of liver fibrosis or not.
During the surveillance period, what was the highest stage of fibrosis diagnosed?	
Date of assessment of fibrosis	
Which tests were employed to diagnose the highest stage of fibrosis?	
Blood/serum tests (i.e. APRI score, FIB-4 and/or Fibrotest)	If there has been an assessment of liver fibrosis, submit whether there have been blood/serum tests or not.
Transient elastography	If there has been an assessment of liver fibrosis, submit whether there has been a transient elastography or not.
Liver biopsy (≥METAVIR stage F3)	If there has been an assessment of liver fibrosis, submit whether there has been a liver biopsy or not.
During the surveillance period were any of the following complications diagnosed?	
Cirrhosis	

Variable	Description
Date of first diagnosis for cirrhosis	If cirrhosis equals yes
Compensated or decompensated cirrhosis?	Submit whether the patient has been diagnosis with compensated or decompensated cirrhosis.
Jaundice	
Hepatic encephalopathy	If cirrhosis equals yes and decompensated, Submit whether the patient has been diagnosis with hepatocellular carcinoma or not.
Clinically detectable ascites	If cirrhosis equals yes and decompensated
Variceal bleeding	If cirrhosis equals yes and decompensated
Hepatocellular carcinoma	
Date of first diagnosis	If hepatocellular carcinoma equals yes
Other late-stage disease	Submit whether the patient has been diagnosis with any other late stage or not.
Date of diagnosis	If other late-stage disease equals yes
Please specify	If other late-stage disease equals yes
HIV status	
Chronic HBV diagnosis	
Chronic HBV Infection*	Submit whether the patient has been infected with chronic HBV or not.
Date of first diagnosis of chronic HBV infection	If chronic HBV infection equals yes, submit the date of first HBV diagnosis.
Location of first HBV positive result	If chronic HBV infection equals yes, submit the Patient's location of first HBV positive result.
Test and results for chronic HBV diagnosis *(*Submit the tests confirming the diagnosis for the first time)*	
Result anti-HBc IgM first test	
Date of the anti-HBc IgM first test	
Result anti-HBc IgM latest test	
Date of the anti-HBc IgM latest test	
Result HBsAg first test	
Date of the first positive HBsAg first test	
Result HBsAg latest test	
Date of the HBsAg latest test	

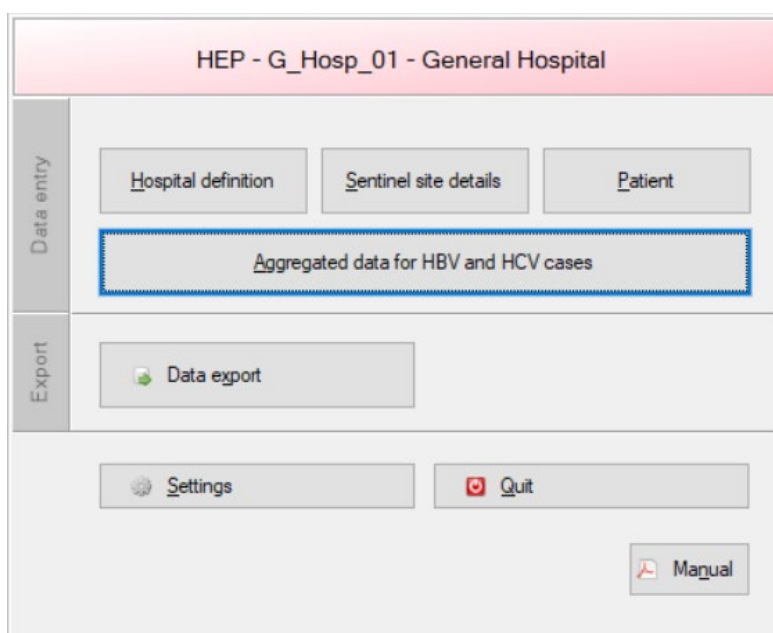| Variable	Description
Result HBeAg first test	
Date of the HBeAg first test	
Result HBeAg latest test	
Date of the HBeAg latest test	
Result HBV-DNA first test	
Date of the HBV-DNA first test	
Result HBV-DNA latest test	
Result HBV-DNA latest test (numeric)	
Date of the HBV-DNA latest test	
Result Hepatitis anti-HDV first test	
Date of the first anti-HDV test	
Result Hepatitis anti-HDV latest test	
Date of the latest anti-HDV test	
Result HDV-RNA first test	
Date of the first HDV-RNA test	
Result HDV-RNA latest test	
Date of the latest HDV-RNA test	
Treatment of chronic HBV	
Patient on treatment in surveillance period	If the patient has been infected with HBV, submit whether the Patient is on treatment or not.
Treatment eligible criteria used	
Chronic HBV treatment	
Date treatment start	If the patient is on treatment, submit the date that HBV treatment started.
Treatment ended	If the patient is on treatment for hepatitis B, submit whether the HBV treatment ended or not.
Date treatment end	If the HBV treatment ended, submit the Date that treatment ended.

Variable	Description
If treatment ended, why?	If treatment ended, submit the reason treatment ended.
Current treatment regimen	If the patient is on treatment for hepatitis B, submit the current treatment regimen for HBV.
Viral suppression achieved	If the patient is on treatment for hepatitis B, submit the HBV viral suppression achieved.
Chronic HCV diagnosis	
Chronic HCV Infection*	Submit whether the patient has been infected with chronic HBV or not.
Date first HCV diagnosis	If the patient has been infected with HCV, submit the date of first HBV diagnosis.
Location of first HCV positive result	If the patient has been infected with HCV, submit the Patient's location of first HBV positive result.
Test and results for chronic HBV diagnosis *(*Submit the tests confirming the diagnosis for the first time)*	
Result HCV-RNA first test	
Date of the HCV-RNA first test	
Result HCV-RNA last test	
Date of the HCV-RNA latest test	
Result HCV-core Ag first test	
Date of HCV-core Ag first test	
Result HCV-core Ag last test	
Date of the HCV-core Ag latest test	
Result anti-HCV first test	
Date of the first anti-HCV test	
Result anti-HCV last test	
Date of the last anti-HCV test	
Treatment of chronic HCV	
Patient on treatment in surveillance period	If the patient has been infected with HCV, submit whether the Patient is on treatment or not.
If No, Why?	
Chronic HCV treatment	
Date treatment started	If the patient is or has been on treatment for hepatitis C, submit the date that HCV treatment started.
Treatment ended	

Variable	Description
Date treatment ended	If the HCV treatment ended, submit the Date that treatment ended.
Current treatment regimen	If the patient is or has been on treatment for hepatitis C, submit the treatment regimen for HCV.
SVR achieved at last test	If the patient is or has been on treatment for hepatitis C, submit whether the SVR achieved at last test or not.
Date of the last SVR test	If the patient is or has been on treatment for hepatitis C, submit the date of the last SVR test.

Entering HEP aggregated data for HBV and HCV cases

Follow the procedure in this section to create a new HEP survey for each defined hospital, entering aggregated data for HBV and HCV cases. Before you can create your survey, you must *define your hospital* and the *sentinel site(s).*

1. *Click "Aggregated date for HBV and HCV cases" in the HEP main menu.*

2. *The HEP survey form opens (for the hospital you have selected).*

3. *In the Patient details form, click the Add item icon* ✚ *to open the form for editing.*

4.   *Enter the values for the fields in the Chronic HBV/HCV cases – Form 1.*

5.   *Enter the values for the fields in the Chronic HBV/HCV cases – Form 2.*

6.   Click the **Save** icon ⊞ or press **Ctrl+S**.

Descriptions of the variables for HEP survey tabs are given in table below. If any mandatory or required data field is empty when you save, e.g. because you do not yet have the data, an error and/or warning message is shown and the field label is highlighted as a reminder - in red for a

mandatory field (you cannot save) or blue for a required field. See *Understanding reported errors*.

HEP Patient aggregated survey tabs variables

Variable	Description
Chronic HBV/HCV cases – Form 1	
Hospital code	
Site name/code	The unique sentinel code(s) defined by the user, for the selected hospital, under "Sentinel site details".
Surveillance period start date	Start date of the surveillance period for the reported cases.
Surveillance period end date	End date of the surveillance period for the reported cases.
Country	Country of reported cases under the selected sentinel code.
Age group	
<5	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
5-14	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
15-19	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
20-24	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
25-34	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
35-44	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
45-54	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
55-64	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
>=65	Submit the total number of reported HBV and/or HCV cases, for the specific age group.
Gender	
Female	Submit the total number of reported HBV and/or HCV cases, for the specific gender.
Male	Submit the total number of reported HBV and/or HCV cases, for the specific gender.
Transgender	Submit the total number of reported HBV and/or HCV cases, for the specific gender.
Other	Submit the total number of reported HBV and/or HCV cases, for the specific gender.
Unknown	Submit the total number of reported HBV and/or HCV cases, for the specific gender.
Location at first diagnosis	
Same as reporting site	Submit the total number of reported HBV and/or HCV cases, for the specific location.
Needle exchange	Submit the total number of reported HBV and/or HCV cases, for the specific location.
Drug service (not needle exchange)	Submit the total number of reported HBV and/or HCV cases, for the specific location.
Drug service and needle exchange	Submit the total number of reported HBV and/or HCV cases, for the specific location.
Sexual health clinics	Submit the total number of reported HBV and/or HCV cases, for the specific location.
Infectious diseases	Submit the total number of reported HBV and/or HCV cases, for the specific location.
Other treatment centre	Submit the total number of reported HBV and/or HCV cases, for the specific location.
Long term complication at diagnosis time	
Liver fibrosis diagnosed	Submit the total number of reported HBV and/or HCV cases, for the specific diagnosis.

Variable	Description
Cirrhosis diagnosed	Submit the total number of reported HBV and/or HCV cases, for the specific diagnosis.
Compensated	Submit the total number of reported HBV and/or HCV cases, for the specific diagnosis.
Decompensated	Submit the total number of reported HBV and/or HCV cases, for the specific diagnosis.
Hepatocellular carcinoma	Submit the total number of reported HBV and/or HCV cases, for the specific diagnosis.
Other late-stage disease	Submit the total number of reported HBV and/or HCV cases, for the specific diagnosis.
Chronic HBV/HCV cases – Form 2	
Likely route transmission	
MSM/homo or bisexual male	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Heterosexual contact	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Sexual transmission (unspecified)	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Mother-to-child transmission	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Household contact of chronic case	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Injecting drug use	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Nosocomial transmission (includes hospital, nursing home, psychiatric institutions, dental)	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Any occupational exposure (includes needle stick injuries among healthcare workers)	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Blood and blood products	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Organ and tissues	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Haemodialysis	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Through selling sex	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
MSM	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Heterosexual	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Other	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.

Variable	Description
Other (transmission route is known, but is not mentioned in the list)	Submit the total number of reported HBV and/or HCV cases, for the specific route transmission.
Patient status in clinics	
Under follow-up	Submit the total number of reported HBV and/or HCV cases, under the specific status.
Referred to another service	Submit the total number of reported HBV and/or HCV cases, under the specific status.
Co infections	
Co-infection HBV and HCV	Submit the total number of reported HBV and/or HCV cases, with the specific infection.
Co-infection HBV Delta, HBV	Submit the total number of reported HBV and/or HCV cases, with the specific infection..
Co-infection HIV, at first diagnosis	Submit the total number of reported HBV and/or HCV cases, with the specific infection.
Treatment	
Patient eligible for treatment	Submit the total number of reported HBV and/or HCV cases, under the specific state of treatment.
Patient eligible for treatment and treated	Submit the total number of reported HBV and/or HCV cases, under the specific state of treatment.
Treatment outcomes	
Death	Submit the total number of reported HBV and/or HCV cases, under the specific treatment outcome.
Lost to follow-up	Submit the total number of reported HBV and/or HCV cases, under the specific treatment outcome.
Viral suppression achieved	Submit the total number of reported HBV and/or HCV cases, under the specific treatment outcome.
Sustainable Virological response	Submit the total number of reported HBV and/or HCV cases, under the specific treatment outcome.
Complication after treatment	Submit the total number of reported HBV and/or HCV cases, under the specific treatment outcome.

ta quality

HelicsWin.Net performs a selected number of automatic validation checks during data entry. These checks do not pick up all possible problems. You are strongly recommended to perform a further level of in-depth checking *before* creating a report, exporting or merging data. The HelicsWin.Net *data quality check* function performs these in-depth checks. The checks must be started manually.

The data quality check verifies the internal consistency of all information entered into your database. This verification helps you to identify any problems, in turn greatly reducing the chances of producing inaccurate or inappropriate data outputs, and helping to ensure functional export of your data. As with all such data operations, you are advised to check your final data and ensure that the data make sense.

When you perform a data quality check, HelicsWin.Net produces messages at three severity levels: Error, Warning and Success. A data quality check output is produced, with each message including details of the issue identified.

Data quality check messages

Severity	Code	Description
Error	ERR	A fatal inconsistency has been identified in a record or across multiple records. The severity of the inconsistency is such that the data could be misreported, or there could be a failure of a merge, report or export operation.
		User action: You must locate and fix all such errors before proceeding with any merge, report or export operations.
Warnings	WARN	A significant inconsistency has been detected that indicates that data may be compromised in merge, report or export operations.
		User action: You must identify the inconsistency and then decide whether the issue identified might invalidate your data.
Success	SUCC	The data quality check found no issues with the record; the check was therefore deemed to be a success.
		User action: None.

Some types of errors detected

One common warning occurs when merging ward or patient data, when one of the two datasets has less detailed hospital data. In this situation, if you are sure that the hospital definitions relate to the same hospital, it would be safe to merge the data.

Errors detected by the data quality check (but not detected on data entry) include the following:

- The variable *has_amu* is reported as *Yes*, but there are no antimicrobial use data reported in the **Antimicrobial use** form.

- The variable *has_hai* is recorded as *Yes*, but there are no healthcare-associated data reported in the **HAI** form.

- In the Light protocol only:
  - A warning is generated when the user did not report denominator data by consultant/patient speciality for a given ward survey.
  - An error is generated if the total of the denominator data by consultant/patient speciality does not equal the value of *Total number of patients in ward* for a given ward survey.

- An error is generated if the consultant/patient specialty of a patient does not have a corresponding consultant/patient specialty record at the ward level.

Running a data quality check

A data quality check checks the whole of the current HelicsWin.Net database.

To run a data quality check:

1. Click **Data quality check** in the *main menu*.
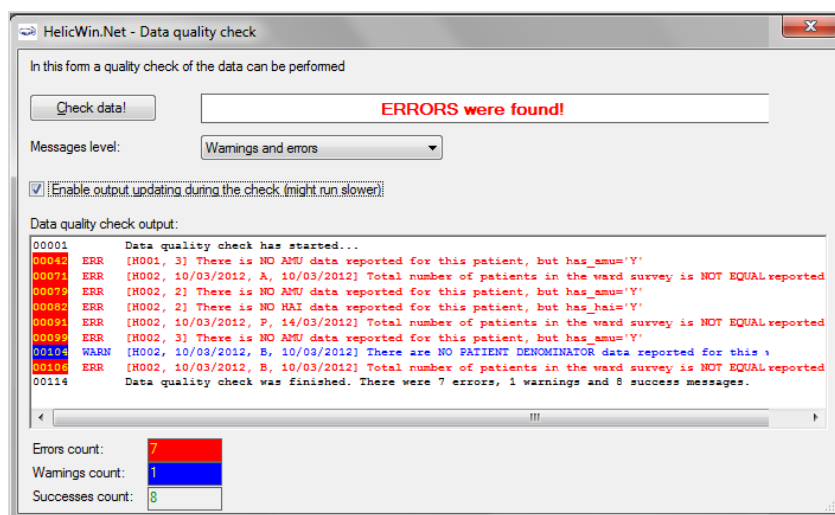
The **Data quality check** form opens.

2. In the **Messages level** field, select *Warnings and errors* (recommended).

3. Deselect **Enable output updating during the check** (recommended).

Enabling this option updates the data displayed in the *Data quality check output* field every time a new line is added. If this option is not enabled, updates are only made periodically.

If the output consists of only 50 lines, for example, you can evaluate the output displayed in the *Data quality check output* field. However, if you have verbose output (Message level = all) and you have many patients, etc., thousands of lines of output might be displayed in the field. In such a case, if you enable this option (i.e. if you check this check-box), system response time can be very slow; whereas leaving this option unchecked will improve system speed.

4. Click **Check data**.

When the processing has finished, the resulting messages are displayed in the data quality check output text box, and the (colour-coded) breakdown of the Error, Warning, and Success counts are shown underneath.

Exporting data from the database

Before exporting data, always perform a data quality check and correct any data errors that you find. We recommend using the HelicsWin.Net *data quality check* functionality to help you achieve this (see Section 0).

You can export in the original Access database format (as an .mdb file compressed in a ZIP file) or in the TESSy CSV format.

Exporting data in Microsoft Access format

You can export data from the HelicsWin.Net database files as a zipped Access .mdb file.
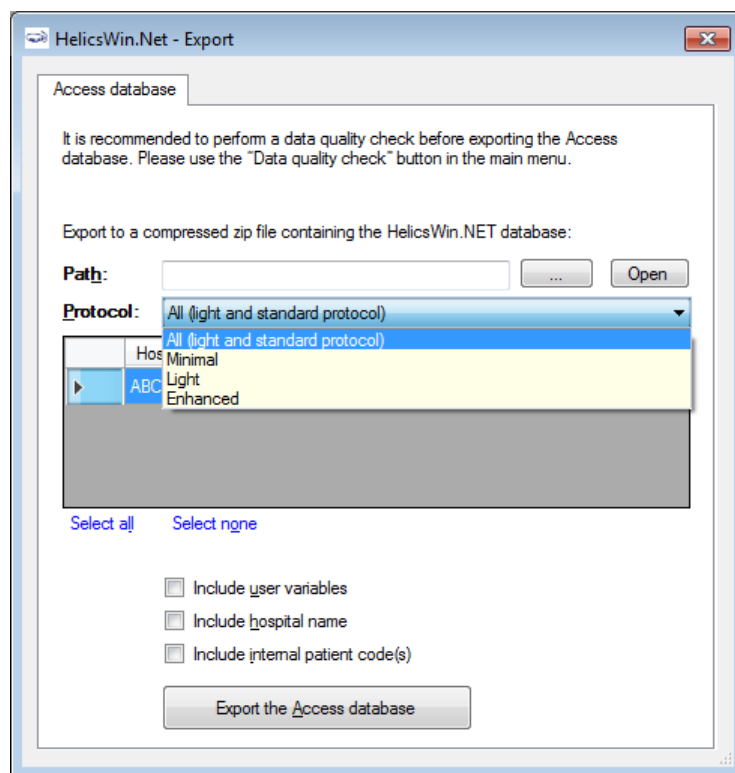
Before you start, make sure that the survey start and end dates are defined in the **Hospital data** form for each hospital for which you want to export data.

To export data in Microsoft Access format:

- Click **Data export** in the *main menu*.

    The **Export** form opens, by default in the **Access database** tab.

    CDI

ICU

PPS

- Click the **Open** button (to the right of the **Path** field), to locate the folder to which you want to send the exported file, and then click **OK**.

  For example, to use the folder C:\HWN2\Export, go to the folder C:\HWN2, and create the folder **Export** manually.

- CDI and PPS: In the data grid, select the code(s) and survey dates for the hospital-survey(s) for which you are exporting the data. You can select more than one hospital-survey by holding down the control button, and then clicking on each hospital code you wish to select or select all hospitals by clicking the **Select all**.

  Make sure that the CDI / PPS start and end dates are defined in the **Hospital data** form.

- ICU: The entire selected surveillance year for the current hospital will be exported.

- Optionally, use the checkboxes to choose whether to include additional sets of variables in the exported files. These are data entered relating to:
    a. Validation studies (not for CDI)
    b. Users
    c. Hospital names
    d. Internal patient codes (for both primary and validation data).

  As some of these may contain confidential information, they are not exported by default.

  If a checkbox is left unchecked, the corresponding variables will be empty in the export file.

  For the pilot study of the HAI-Net ICU protocol v2.0, user variables include the feasibility questionnaire data and need to be included in the export.

  To preserve patient confidentiality in compliance with Data Protection principles, the internal patient code data must not be included in the export file sent to the regional, national or EU level, and must not be included in any data sent to ECDC/TESSy.

- Click **Export the Access database**.

  HNW generates a ZIP file containing the exported database file **HelicsWinNet_export.mdb** or **HelicsWinNetICU_export_yyyymmdd_hhmmss.mdb**

  The ZIP file is date and time stamped with the file name having the format:
  HWN_yyyymmdd_hhmmss.zip (PPS) or HWN_ICU_yyyymmdd_hhmmss.zip

- In the **Access database** form, click **Open** to view the contents of the folder you have exported your file to.

- ICU pilot: attach the exported zip file containing the Access database to an email and send it to your national HAI surveillance coordinator.

Merging two database files for the same hospital

Typically you need to merge data whenever you have collected survey data on more than one computer. In the scenario described here, there are two computers, named A and B, each of which contains data collected from the same hospital (hospital code G01), but different wards. We are going to merge the data from computer B with that on computer A. The computers share a networked drive P.

The following table summarises the database names, location, and content:

Hospital code	Computer	Wards	Original database	Location of database files	Data quality check required

G01	A	W01, W02	HelicsWinNet.mdb	C:\HWN2	Yes
G01	B	W11, W12	HelicsWinNet.mdb	P:\HWN2	Yes

On computer A

*Backup the current database and select hospital G01 as the active hospital*

1. Copy the file HelicsWinNet.mdb to a backup folder (on computer A).

    The merge process modifies the original file, so if anything does go wrong, you may need this backup.

2. Click Hospital definition in the *main menu*.

    The **Hospitals** form opens.

3. Select the hospital with code G01, and then click **Select this hospital**.

    The form closes and the code G01 is displayed at the top of the main menu.

On computer B

Export the file HelicsWinNet.mdb database to the common P drive.

Note: You do not need a backup of the database on computer B, because you will be working with a copy and the original will remain unchanged.

1. Create a folder HWN2 on the P drive.

2. Click **Hospital definition** in the *main menu*.

    The **Hospitals** form opens.

3. Select the hospital with code G01, and then click **Select this hospital**.

    The **Hospitals** form closes.

4. Click **Data Export** in the main menu.

    The **Export** form opens.
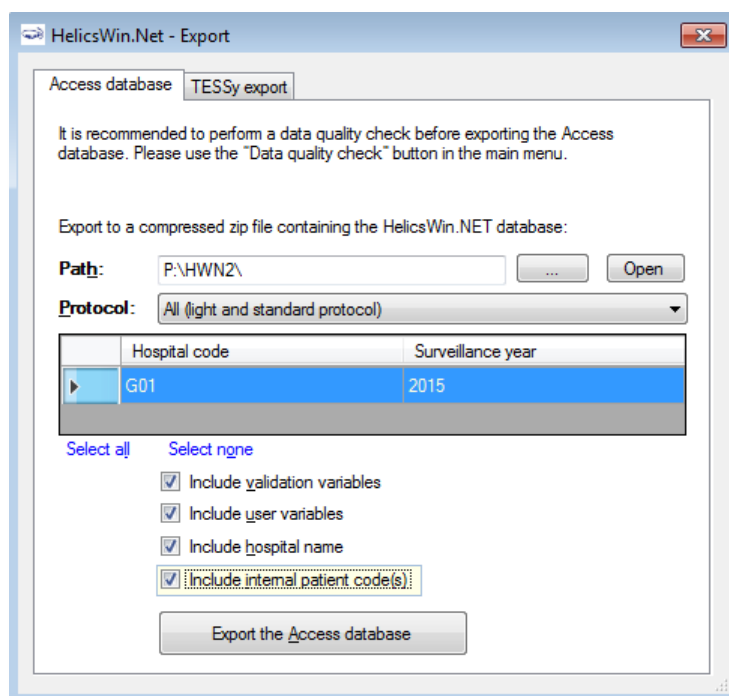
5. In the **Access database** tab, click the **Open** button (situated to the right of the **Path** field), and navigate to the folder you just created on the P drive, and then click **OK**.

   The text P:\HWN2 is added to the path field. You cannot edit this field directly.

   > **Note:** The following steps match those described above in the section *Exporting data from the HelicsWin.Net database*.

6. In the **Protocol** field, select the protocol(s) as necessary for your survey(s).

7. Select the hospital code **G01,** and check the start and end dates to confirm that you have the correct survey.

8. Optionally, tick relevant checkboxes.

9. Click **Export the Access database**.

   The database is exported as a zip file.

10. Note the name of the zip file and click **OK**, and then close the **Export** form.

    Navigate to the P folder and unzip the file (HelicsWinNet.mdb) to P:\HWN2.

On computer A

With hospital G01 selected, open the Merge form and add the database from computer B, now stored on the P drive.

1.   Click **Data merge** in the *main menu*.

The **Merge** form opens.
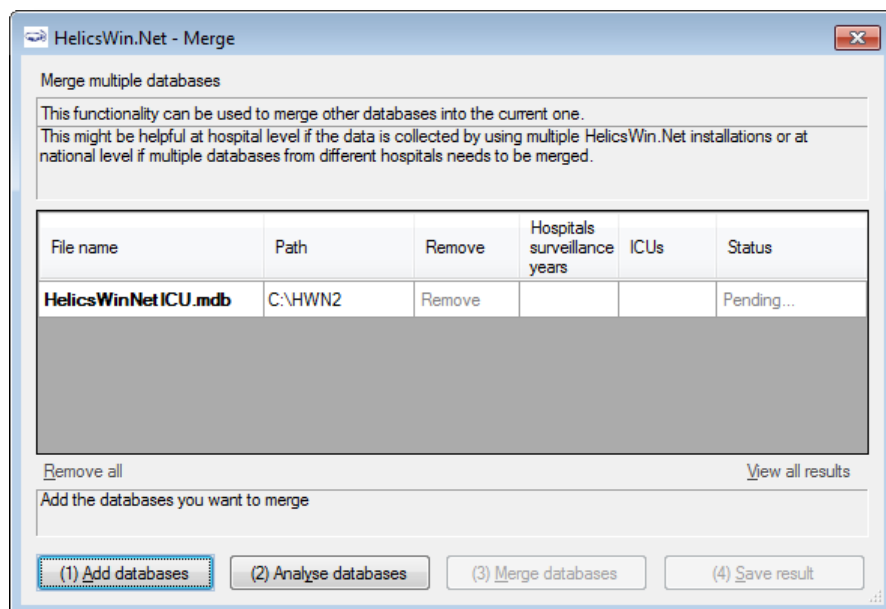
2.   Click **(1) Add databases**.

3.   Navigate to the folder containing the file you want to merge, in this case it is HWN2 on the P drive, and then select **HelicsWinNet**.mdb.

The P database is added to the list.

File name	Path	Remove	Hospitals surveillance years	ICUs	Status
HelicsWinNetICU.mdb	C:\HWN2	Remove			Pending…
HelicsWinNetICU.mdb	P:\HWN2	Remove			Pending…

Click **(2) Analyse databases**.

If the files are correctly formatted, the status **Analysed OK** is returned. In addition, the hospital survey dates and ward names are displayed for each database.

File name	Path	Remove	Hospitals surveillance years	ICUs	Status
HelicsWinNetICU.mdb	C:\HWN2	Remove	G01 24/0…	W-01 ,W…	Analyzed OK
HelicsWinNetICU.mdb	P:\HWN2	Remove	G01 26/0…	W-11 ,W…	Analyzed OK

4.   Check that the survey dates and ward names, as displayed, represent the correct data.

You can expand the column widths to read the data as necessary.

5. Check that the survey dates and ward names, as displayed, represent the correct data.

6. Click **(3) Merge databases**.

If the version of database B is older than the database A, a pop-up will be displayed "The {Database Name1}.mdb, {Database Name2}.mdb, N to merge in is/are older than the current HWN version. An automatic upgrade of the database will take place. Please confirm to proceed.". Otherwise, if the version of database B is newer than the database A, an error will be displayed that "The {Database name1}.mdb, {Database name2, N to merge in is/are newer than the current HWN version. The upgrade cannot continue. Please use a newer version than the current one."

If the merge and the upgrade – if needed – were successful, the following message appears at the bottom of the **Merge** form.
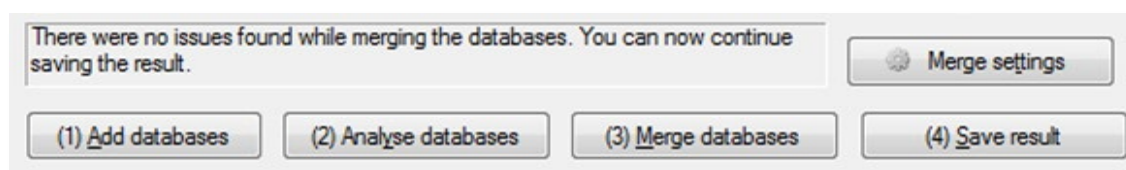
7. Click **(4) Save result.**

A warning box opens. This warns you that saving the data will change the dataset that is active in your HelicsWin.Net to be a merged version of the datasets selected in the previous steps, i.e. from computers A and B.

8. Click **Yes.**

9. Optionally, restart HelicsWin.Net to ensure that the data is refreshed. This is recommended.

10. Additionally, we recommend running a Data quality check from the *main menu*, following the merge, and a restart, to identify any issues**.**

To check patient data

You can check your new data in the **Patients** form.

1. Click **Hospital definition** in the *main menu*.

   The **Hospitals** form opens.

2. **Select the hospital you wish to check.**

3. Click **Patient/Antimicrobial use/HAI data**.

   The **Patients | Risk Factors** form opens

4. Click the **Patients list** tab.

   The list opens. You can sort the list by column header, if necessary.

5. To examine the list in detail, click **Export**.

   HWN exports the data as a CSV file, which you can open in Excel.

Troubleshooting data merges

Warnings

I get warnings when I try to merge data from a single survey made on two different computers.

The most common reason for warnings is that your hospital definitions are not identical in the two databases. In such cases you will get a warning message, but you will still be able to merge the data. If you are sure you are not going to lose data, you can go ahead and merge. In these cases, HWN discards the second hospital definitions and uses the one in the database you are merging data into.

Duplicate patient IDs and collision detection

There are several scenarios that can lead to having duplicate patient IDs. The action you need to take depends on several factors:

Scenario 1: **If you are merging two distinct databases that contain the same patient IDs, but these IDs belong to different patients:**

- You need to turn on the **Auto-increment patient identifier on collision** setting in the **Merge settings** form.
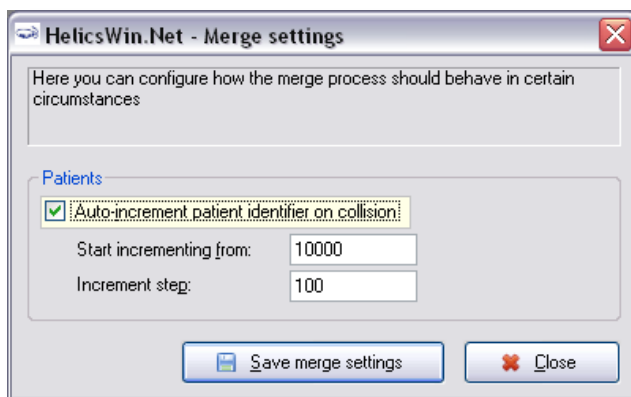
1. To access the **Merge settings** form, click **Data merge** in the *main menu*, and then click **Merge settings**.

The default values usually work, but you may need to change these if you are doing multiple merges, for example.

Scenario 2: **You really do have some duplicate data with the same patient records occurring more than once.**

- In this case, make sure you turn off (clear) the auto-increment setting.

Any duplicates will **not** be uploaded.

Caution	It is possible to get a situation where both scenarios are true in part. If this is the case, you can only make progress by examining each record in turn.

Modifying settings

You can modify basic settings in HelicsWin.NET to suit your own personal preferences.

To change settings:

1. Click **Settings in the** *main menu*.

    The **Settings** form opens; by default the content of the **General** tab is displayed.
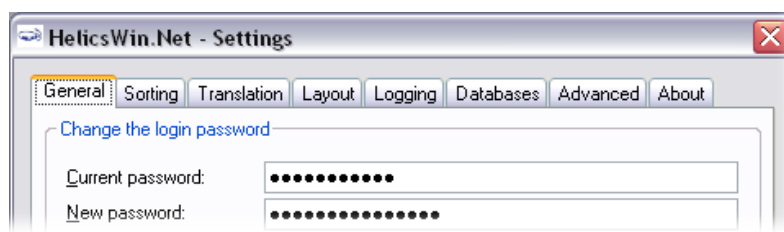

Table below outlines which settings you can change.

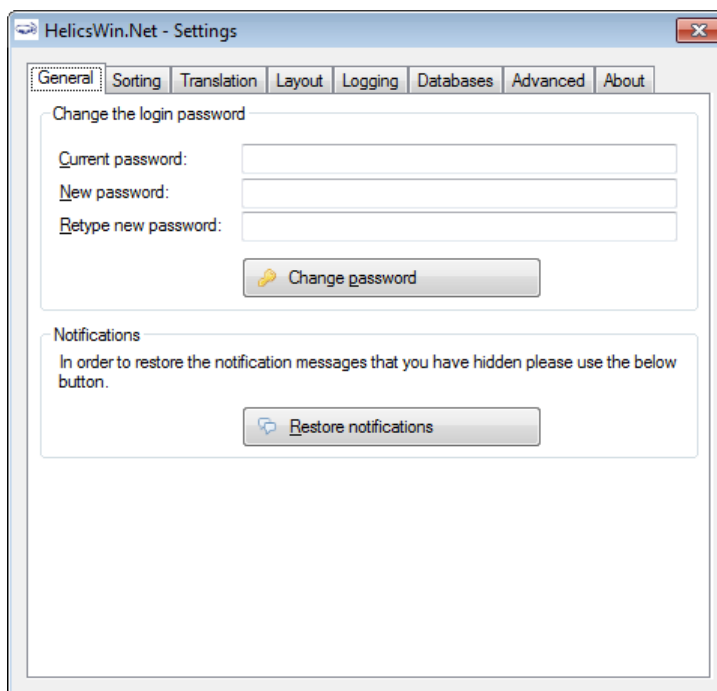| Tab	Functions
General	- Reset password and restore hidden notification messages
Sorting	- Set the sort order for data display and reports
Translation	- Edit translation texts that appear in the user interface. - Check the translation for missing or hidden text. - Automatically fix inconsistencies in the translation file.
Layout	- Restore the application to its default layout settings. The application remembers your screen layout if you resize any screen elements. - Scale the application, including text size and button size, to suit your screen. - A set of miscellaneous controls.
Logging	- View the location of the folder where the logs are stored; open the folder. - Set the level of detail collected in log files. Note: setting the level to trace may slow down the application.
Databases	- Lists the current database in use. - Backs up all databases to the back folder to a chosen backup folder.
Advanced	- Resets all customizations made to your application.
About	- Contact information. - Links to documentation, i.e. the protocol and forms, and this manual. - Version number and license agreement

Changing your log-in password

You can replace your existing password with a new one from the **General** tab in the **Settings** form. However, you do need to know your existing password to be able to replace it.

Important:	For security reasons, if you forget your password you will not be able to recover it and so you will be locked out of the application. Re-setting your password requires special intervention from your National PPS Co-ordinating Centre or equivalent.

To change your log-in password:

1. Click **Settings** in the *main menu*.

The **Settings** form opens; by default the **General** tab is displayed.


2. In the **Current password** field, enter your existing password.

3. In the **New password** field, enter your new password, and then enter it again in the **Retype new password field**.

4. Click **Change password** to implement the change.

The **General** tab also allows you to *restore notifications*.

Notifications

A number of dialog boxes allow you to select not to see that particular notification again.
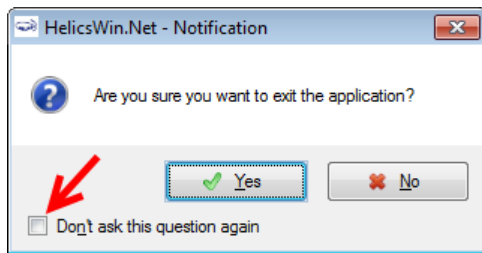
If you later wish to see all the notifications that you have selected not to see:

1. Click **Settings** in the *main menu*.

    The **Settings** form opens; by default the **General** tab is displayed.

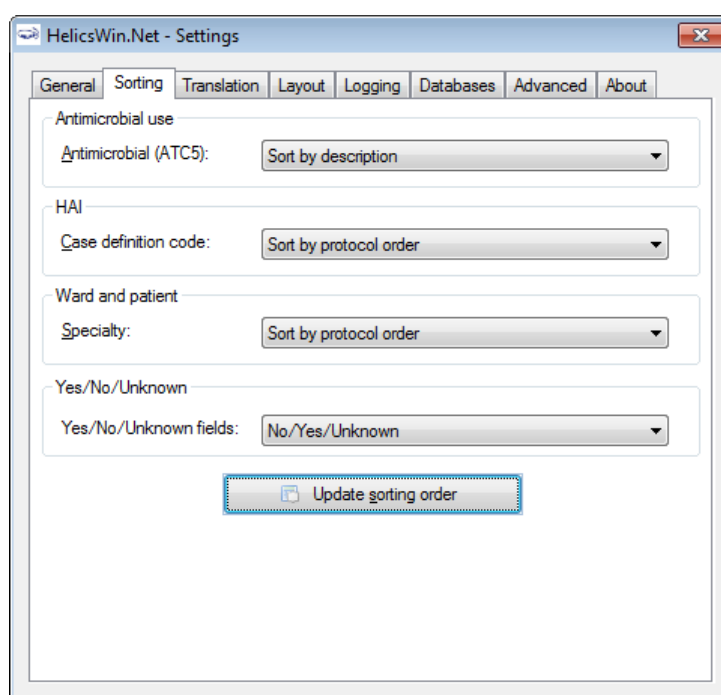2. **Click Restore notifications**.
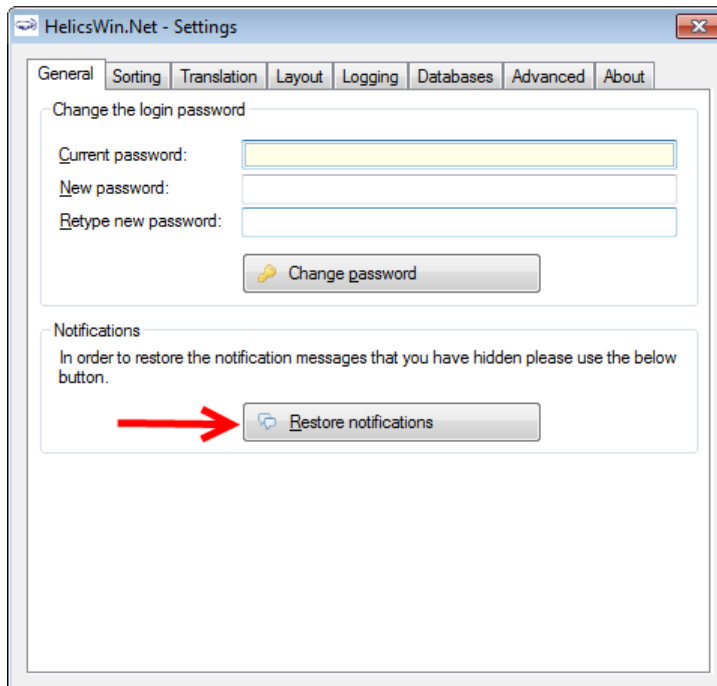
Sorting drop-down lists

To change the sorting order for options displayed in drop-down lists:

1. Click **Settings** in the *main menu*.

    The **Settings** form opens; by default the **General** tab is displayed.

2.   Click the Sorting tab.

3.   For each section on this form, select your preference for the sorting order, see Table below.

4.   Click **Update sorting order**.

The preferences you have set are now available in the software application.

List	Options
Antimicrobial use	Sort by description. Sort by code (alphabetically).
HAI – Case Definition	Sort by protocol. Sort by code (alphabetically).
Ward and patent - Speciality	Sort by protocol. Sort by code (alphabetically).
Yes/No/Unknown fields	Either 'No/Yes/Unknown' or 'No/Unknown/Yes'. Also, you will be requested to choose this if you translate the HelicsWin.Net user interface.

Translating the text in user forms

HelicsWin.Net is very flexible when it comes to translation. You can translate the texts manually from the default language, which is English. The items that can be translated include: Labels on the forms, Buttons, Form titles, and Error and warning messages.

The customizations you implement apply only to your current PC. However, it is possible to export a language translation file **Translation.mdb**. This pre-prepared file can then be run on any other PC running HelicsWin.Net. ECDC invites users and coordinating centres who have made a translation to send their zipped translation file **Translation.mdb** to *hainet@ecdc.europa.eu*. In this way, a central language database can be made available to all users.

Recommendation: To avoid duplication of work, translations are best performed at the national level. The National PPS Coordinating Centre can then distribute the database file Translation.mdb to the hospitals.

You can either translate user form labels and texts:

- Directly in HelicsWin.Net – see *Translating user forms in HelicsWin.Net*

or

- In either MS Access or MS Excel – see *Translating user forms using a pre-prepared file*.

Translating user forms in HelicsWin.Net

To translate the default labels to your language in HelicsWin.Net:

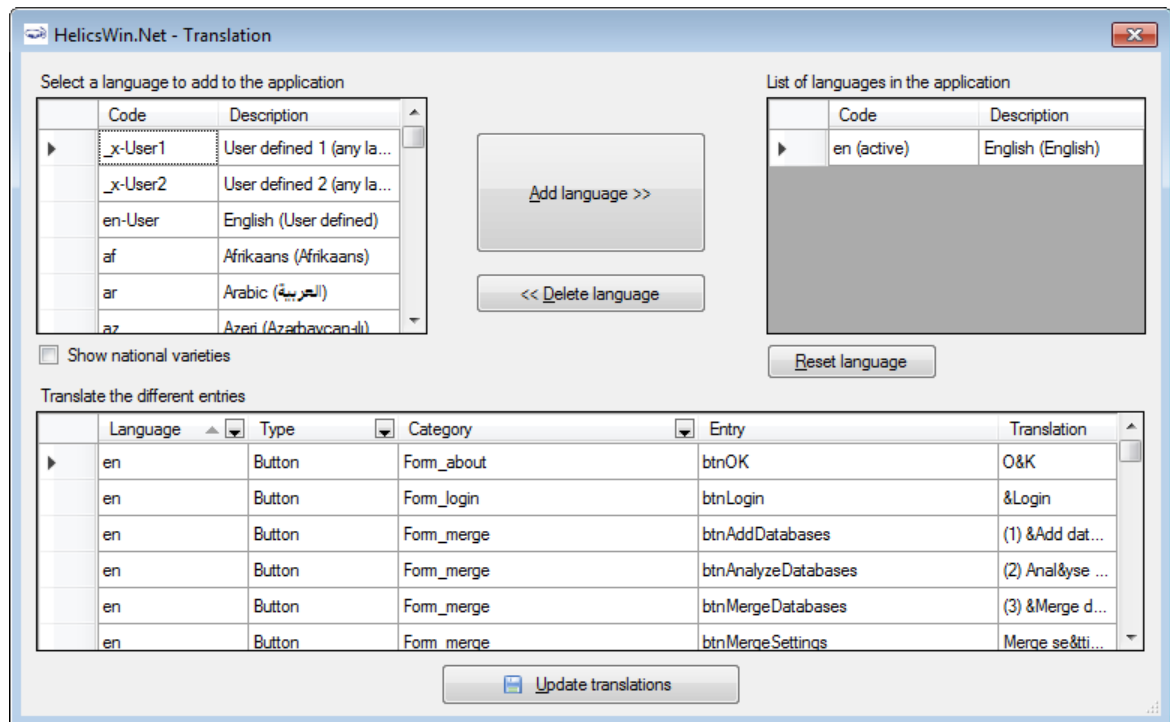1. Click **Settings** in the *main menu*, and then click the **Translation** tab.

   The **Translation** form opens.
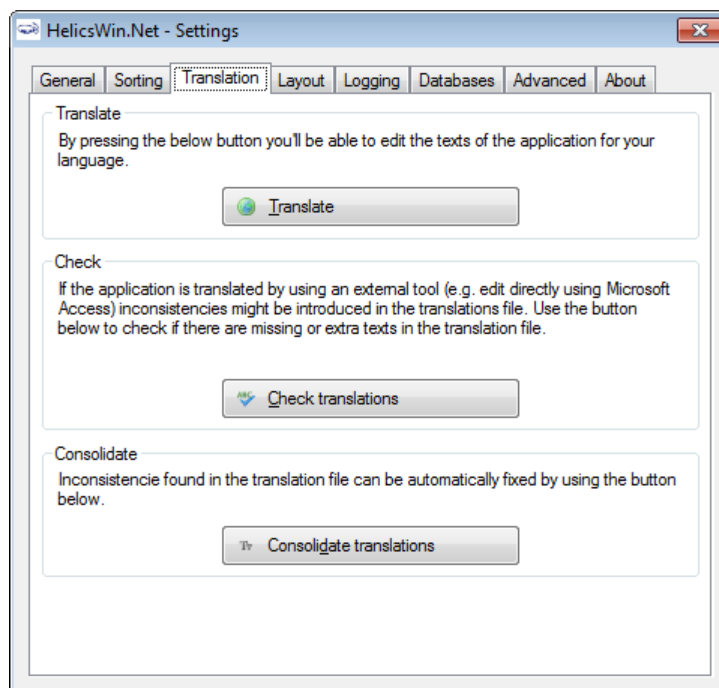
   Please note that the Check translations and Consolidate translations options are only used in connection with *translating user forms using a pre-prepared file*.

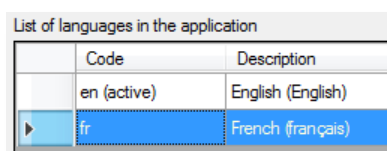2. Click **Translate**.

   The **Translation** form opens.

3. In the **Select a language…** list, select the language you want to translate to, for example,

  fr French (français)

4. Click **Add language**.

  The selected language is added to the list under **List of Languages in the application.**

5. Select the new language from this list.

  The selection indicator ← points to the selected language.

The labels for the foreign language are shown in the **Translate the different entries** grid at the bottom of the form.

The entries in the **Translate** column are initially simply the English labels, and you must translate them one by one.

6. You can make the data easier to manage if you apply filters to the column headers to reduce the number of items visible in the table, for example:
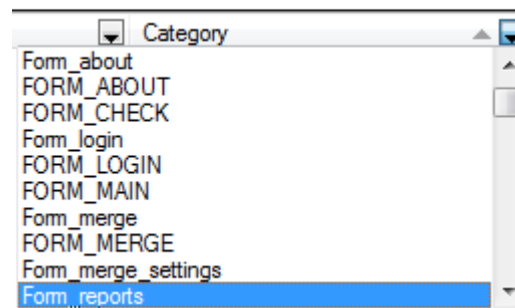

You can filter each column just as would do in Excel or Access, by clicking the down arrow, and making a selection. **Examples:**

To show only the names in the **Reports** form:
Click the down arrows to the right of **Category**, and select **Form-reports**.

To show only the button names in the **Reports** form:
Expand the **Type** column header and select **Button**.
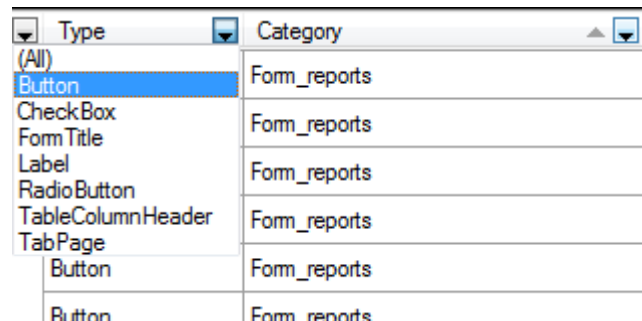
7. In the translation column, replace the English text, for example, "Cancel" with the corresponding text is your language, for example, "Annuler" in French.

8. Repeat these steps for all labels in the user interface that you want to change.

9. After each update, restart the application. When when you login, select the language which you translated (for example, French).

Creating and translating keyboard shortcuts

In any user form, any text character that is preceded by "&" (ampersand character) is displayed underlined; HWN automatically assigns a keyboard shortcut **Alt+underlined_character.** The characters preceded by "&" do not need to be used in the English language (e.g. D&éfinition).

The behaviour for each control type is as follows:

| Control type	Behaviour
Field	Cursor moves into the field
Button	Same as clicking the button
Tab	Same as clicking the tab

Translating keyboard shortcuts

When you switch to another language, translating text will remove the original keyboard shortcuts connected to that text. Keyboard shortcuts can be implemented in the translation tool, within the text entered in the column labelled **Translation**, by entering '&' (the ampersand symbol) before the letter for the shortcut. This is illustrated in the following example.

The following screenshot shows that the French translation of the button in the *main menu* for **Ward definition** has been translated to **Définition des services.** The shortcut has been set to **v** by placing '&' before the v in services, i.e. **Définition des ser&vices.**
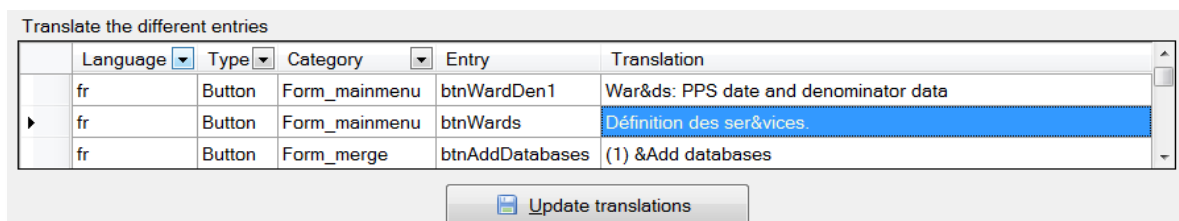
The following screenshot shows the result of the translation. The button Ward definition has been changed to Définition des services. The shortcut V is indicated by underlining, i.e. Définition des serv<u>v</u>ices. Clicking v here will open the **Wards** form.
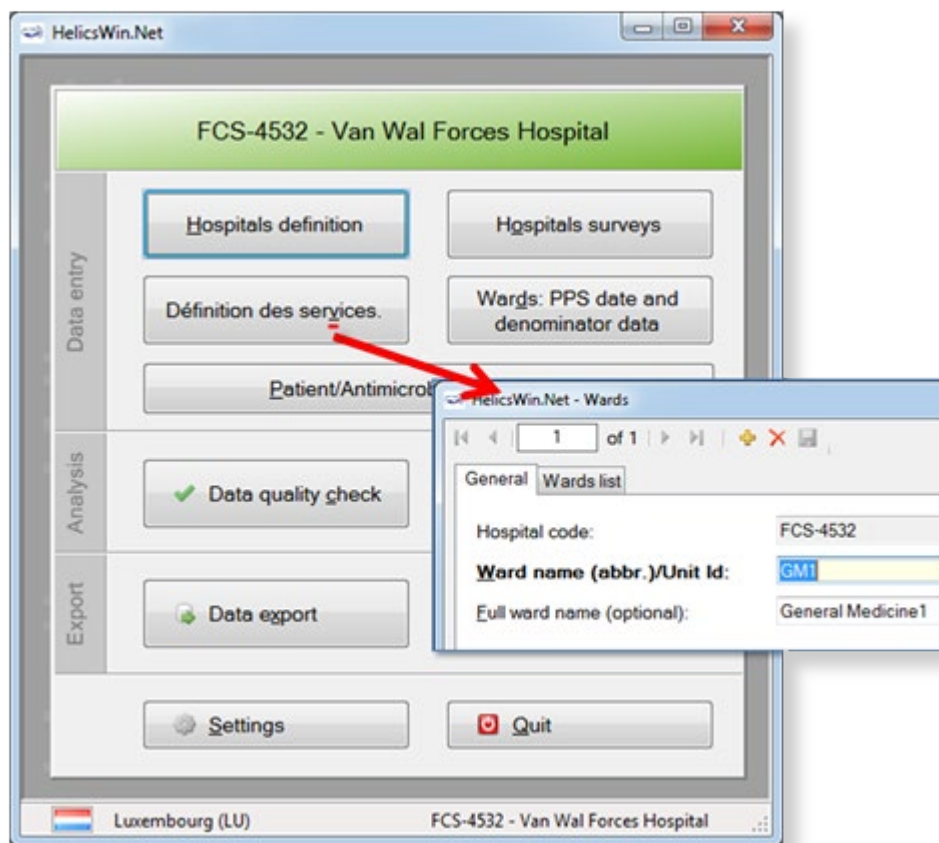
Note that the **Wards** form is still labelled HelicsWin.Net – Wards. This field is translated in the Translation form in Type *FormTitle*.

Language	Type	Category	Entry	Translation
fr	FormTitle	Form_ward_den2	Form_ward_den2Title	Light: consultant/patient specia...
fr	FormTitle	Form_wards	Form_wardsTitle	Wards
fr	FormTitle	FormMessageBoxConfirmSe...	FormMessageBoxConfirmSe...	Extra confirmation

Translating drop-down list items

The labels in the drop-down lists are not stored in the file Translation.mdb, and therefore you cannot find them in the **Translation** form. These labels are stored in a separate database file, **Reference.mdb**. These can be translated there using Microsoft Access. See also *Translating user forms using a pre-prepared file*.

For example, in a French translation, you can change the value in the **Description** field from "Unknown" to "Inconnu".

Warning:	Do not change the values of any code (for example, "UNK") in Reference mdb. If you do, the application may not work properly, and you will also have problems when you come to upload your data to TESSy (nationally nominated users only.)
Note:	If you change the labels (descriptions) in the Reference.mdb file, the change is implemented for all languages, independently of the language chosen at login. Therefore, always make a backup copy of the original Reference.mdb before starting to translate the value labels.

Translating user forms using a pre-prepared file

As an alternative to *translating user forms directly in HelicsWin.Net*, you can edit the translation file, **Translation mdb** in Microsoft Access.
To translate HelicsWin.Net labels in Microsoft Access:

1. Repeat steps 1 to 5 in the procedure *Translating user forms in HelicsWin.Net*.

2. Click **Update**.

3. Close HelicsWin.Net.

    This ensures that the labels for your language will be available in Microsoft Access. HelicsWin.Net only saves your changes in the **Transaction.mdb** file when HelicsWin.Net is closed.

4. Open the **Transaction.mdb** file in Microsoft Access.

    This file is located in the HWN folder (the default is C:\HWN2).

5. Open the **tbl_translation** table.

6. Filter the **Language** column to show only entries for you language (for example, "fr" for French).

7. Add your translations to **Translation** column.

8. Save **Transaction.mdb**.

9. Copy your updated **Transaction.mdb** to the HWN folder and overwrite the existing Translation.mdb.

10. Restart HelicsWin.Net.

11. Check the translation in HelicsWin.Net, see *Checking your translation*.

Checking your translation

When you have translated outside HelicsWin.Net, there is a risk of errors occurring in the **Transaction.mdb** file – for example, an accidental change to a field outside the Translation column, or the unintentional deletion or insertion of a row.
Once you have replaced the **Transaction.mdb** file in in the HWN folder (the default is C:\HWN2), you should check the translation database for errors:

1. Close and restart HelicsWin.Net to reload the translation database.

2. Click **Settings** in the *main menu*, and then click the **Translation** tab.

    The **Translation** form opens.

3. Click **Check translations**.

If there are errors, a list of these is displayed.

```
HelicsWin.Net - Message                                              ✖

Checking the translations...

3 keys need to be deleted and 7 added

Keys to delete:
    az|Form_reports_settings|Button|btnTemplateReset ()
    az|Form_settings|Button|btnBackupsOpenBackupsFolder (Intentional e
    az|Form_settings|Button|btnLoggOpenLogFolder (Intentional error in

Keys to add:
    az|Form_reports_settings|Button|btnTemplatesReset = &Reset the tem
    az|Form_reports|Button|btnReportsSettings = M&ore reports settings
    az|Form_settings|Button|btnDatabasesBackupsOpenBackupsFolder = &Op
    az|Form_settings|Button|btnGeneralChangePassword = Change &passwor
    az|Form_settings|Button|btnGeneralRestoreNotifications = &Restore
    az|Form_settings|Button|btnLoggingOpenLogFolder = &Open folder
    az|Form_settings|Button|btnLoggingUpdateLoggingLevel = Update lo&g

Translations check is finished. Inconsistencies were found.

                          ✖ Close
```
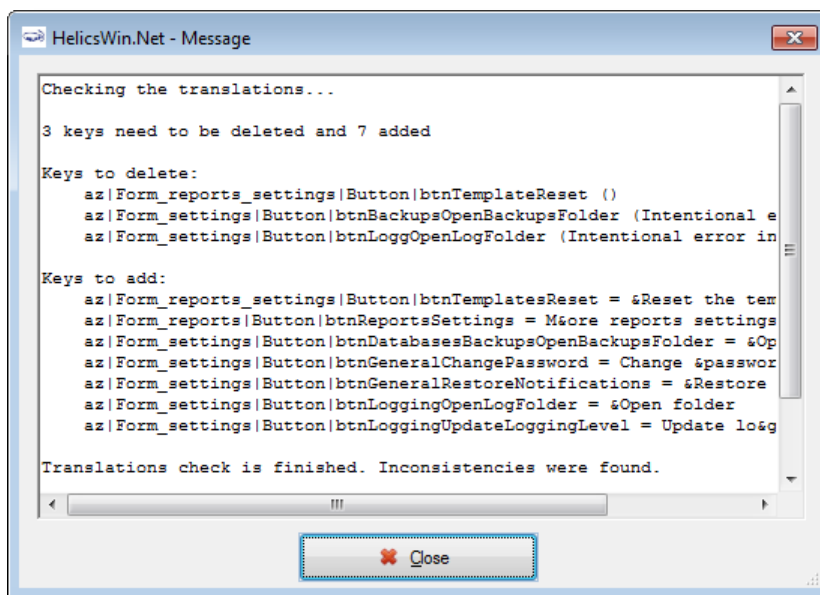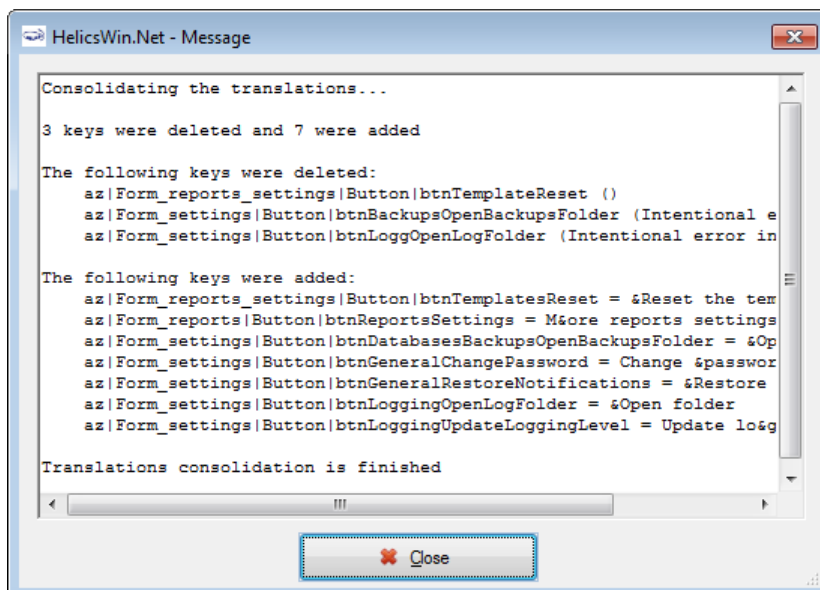
4. Click **Close**.

5. Click **Consolidate translations**.

A list of the corrections made is displayed.

```
HelicsWin.Net - Message                                              ✖

Consolidating the translations...

3 keys were deleted and 7 were added

The following keys were deleted:
    az|Form_reports_settings|Button|btnTemplateReset ()
    az|Form_settings|Button|btnBackupsOpenBackupsFolder (Intentional e
    az|Form_settings|Button|btnLoggOpenLogFolder (Intentional error in

The following keys were added:
    az|Form_reports_settings|Button|btnTemplatesReset = &Reset the tem
    az|Form_reports|Button|btnReportsSettings = M&ore reports settings
    az|Form_settings|Button|btnDatabasesBackupsOpenBackupsFolder = &Op
    az|Form_settings|Button|btnGeneralChangePassword = Change &passwor
    az|Form_settings|Button|btnGeneralRestoreNotifications = &Restore
    az|Form_settings|Button|btnLoggingOpenLogFolder = &Open folder
    az|Form_settings|Button|btnLoggingUpdateLoggingLevel = Update lo&g

Translations consolidation is finished

                          ✖ Close
```

The corrections made do not, of course, insert a translation, but only restore the default setting for the incorrect key.

6. Note the errors.

7. Finalise correction of the errors by manually translating the keys using the procedure described in *Translating user forms in HelicsWin.Net*).

If your translation of the **Transaction.mdb** file contains no errors, the following message is displayed when you click **Check translations**.
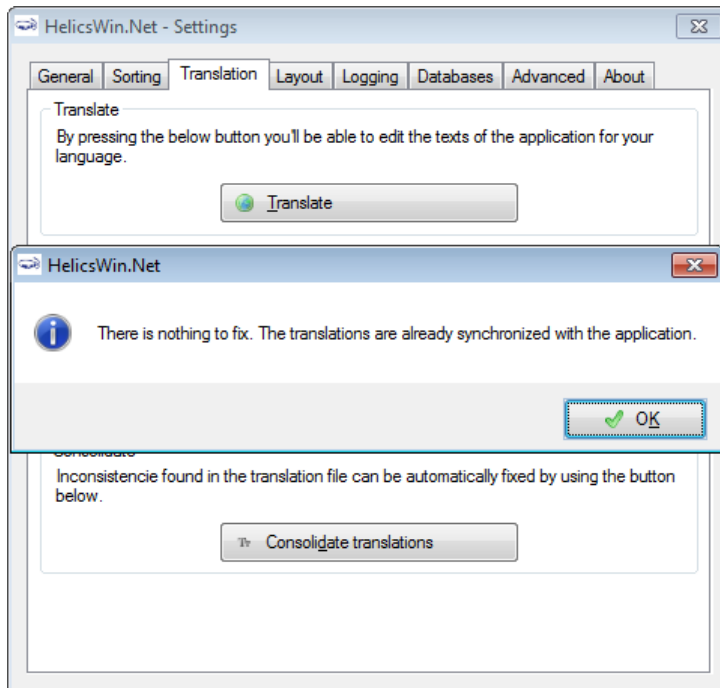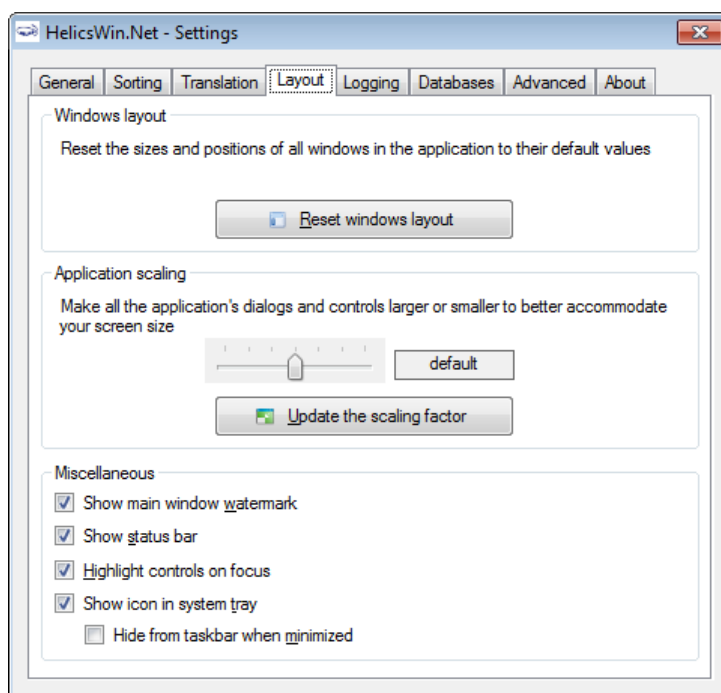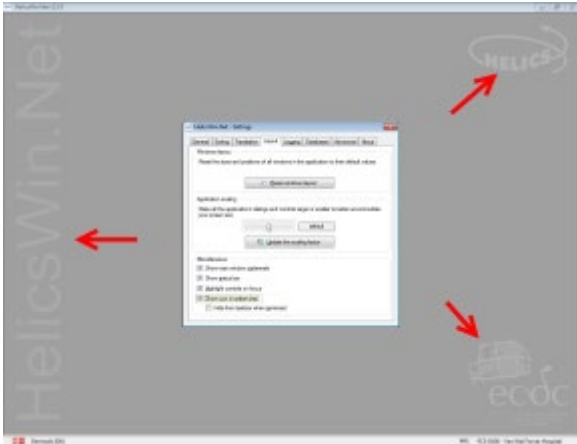

Resetting form layout options

If you change the size or the position of the windows, HWN remembers the windows settings the next time HWN is launched.
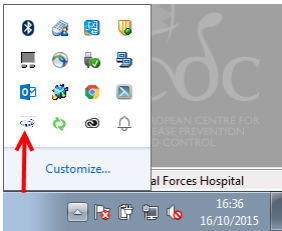
To reset the size and position of all HWN windows to their original values:

1. Click **Settings** in the *main menu*, and then click the **Layout** tab.

The **Layout** form opens.

2. Click **Reset windows layout** to revert to HelicsWin.Net's default display settings.

   Or

3. Use the slider to increase or decrease the size of the HelicsWin.Net windows (requires you to log in again).

4. Select or deselect the miscellaneous settigns options, see table below.

Setting	Description
Show main window watermark	Display the HelicsWin.Net watermarks.
Show status bar	Show HelicsWin.Net status information in a horizontal bar at the bottom of the screen.
Highlight controls on focus	A control is highlighted when the cursor hovers over it, or when you tabulate to it.

|	
Show icon in system tray	Add the HelicsWin.Net icon in the system tray (located in the Windows taskbar at the bottom of the screen next to the clock) for quick access to HelicsWin.Net.
Hide from taskbar when minimized	When HelicsWin.Net is minimized, the HelicsWin.Net icon is not displayed on the taskbar at the bottom of the screen.

Log file for debugging

Each session of HWN is logged so potential issues can be easily diagnosed. Using these files can save debugging time in the event of a crash of the application at user level.

The log files are saved in the **Logs** folder in the HelicsWin.Net installation folder. You can set the logging level to produce logs at different levels of detail.

1. Click **Settings** in the *main menu*, and then click the **Logging** tab.

    1. The **Logging** form opens.
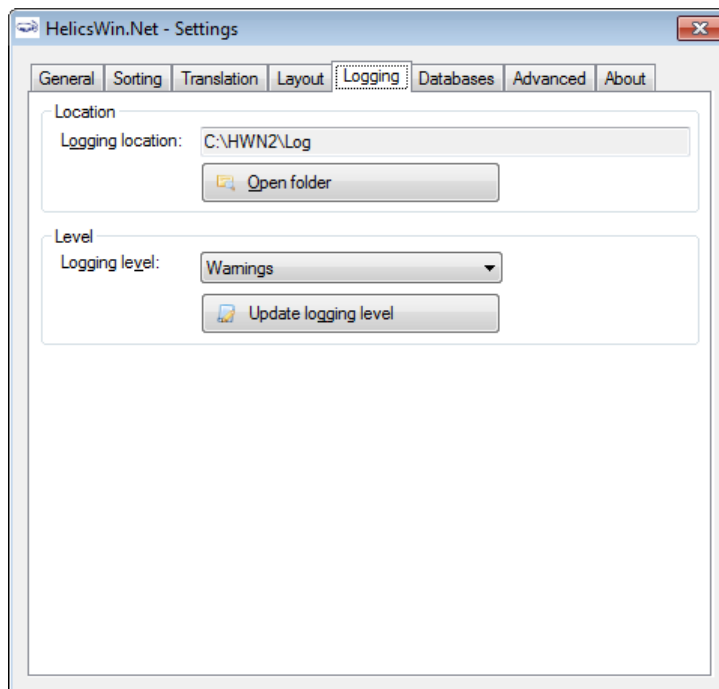
2. Click **Open folder** to access the log files.

3. Adjust the logging level, if desired.

4. Click **Update logging level**.

Level	Logging
None	No messages are logged.
Errors	Only error messages are logged.
Warnings	Warning and error messages are logged.
Info	Information, warning and error messages are logged.
Trace	Trace, information, warning and error messages are logged.

See Data quality check messages for a description of error and warning messages.

HelicsWin.Net databases

The **Databases** tab shows the paths to the database **.mdb** files and the backup locations.
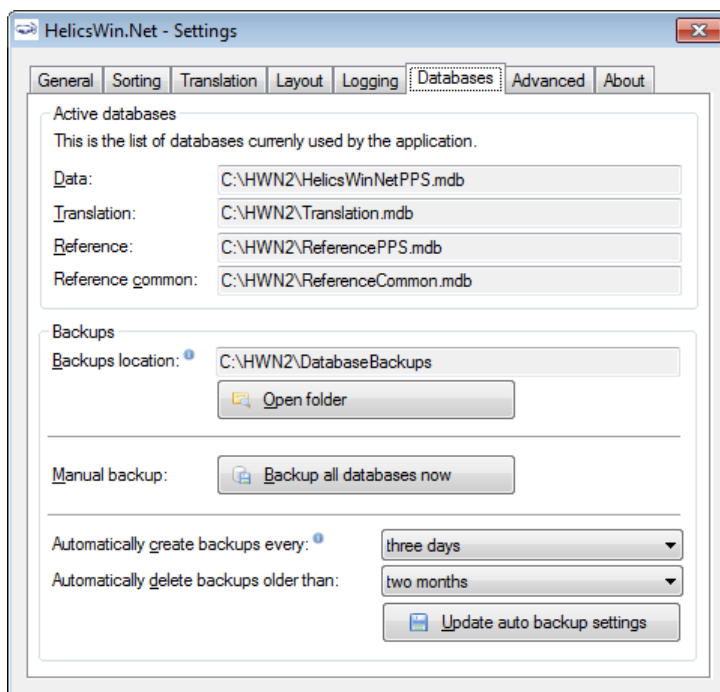
1. Click **Open folder** to select a backup location.

2. Click **Backup all databases now** to make a backup.

HelicsWin.net allows you to select automatic backup creation and deletion:

1. Select a frequency for the automatic backup creation and deletion from the respective drop-down lists.

2. Click **Update auto backup settings** to apply your choice.

Resetting default settings

The **Advance** tab enables you to remove all configurations you have made to HelicsWin.Net by restoring the default settings.
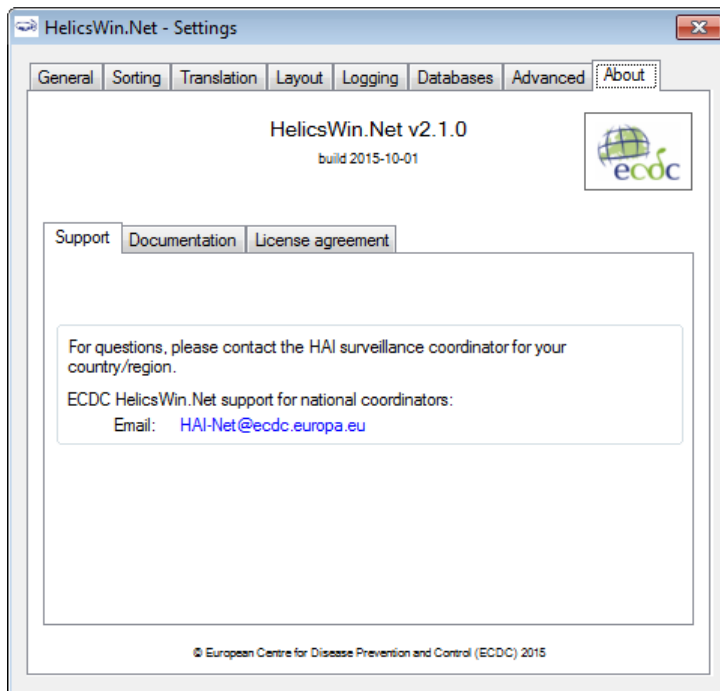
Click **Rest all settings** to remove all your configurations.
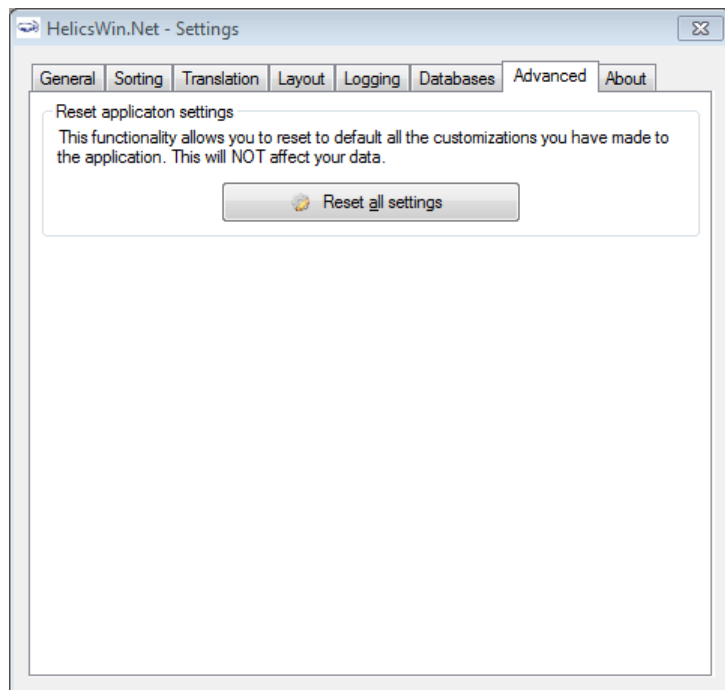
About HelicsWin.Net

The **About** tab in the **Settings** form contains three tabs:

- *Support*
- *Documentation*
- *License agreement*



HelicsWin.Net HelpDesk support

The first-line HelpDesk for HelicsWin.Net is at the national level, ensured by the national/regional PPS coordinator. These coordinators may refer questions to ECDC by posting them on the HAI-Net Extranet, or by sending an email to *HAINET@ecdc.europa.eu*.

Accessing documentation, protocols and forms

The **Documentation** tab contains links to:

- A PDF version of the user manual.
- The PPS and ICU protocols.
- The PPS and ICU forms.

These documents can also be found in the **Documentation** folder (e.g. C:\HWN2\Documentation).
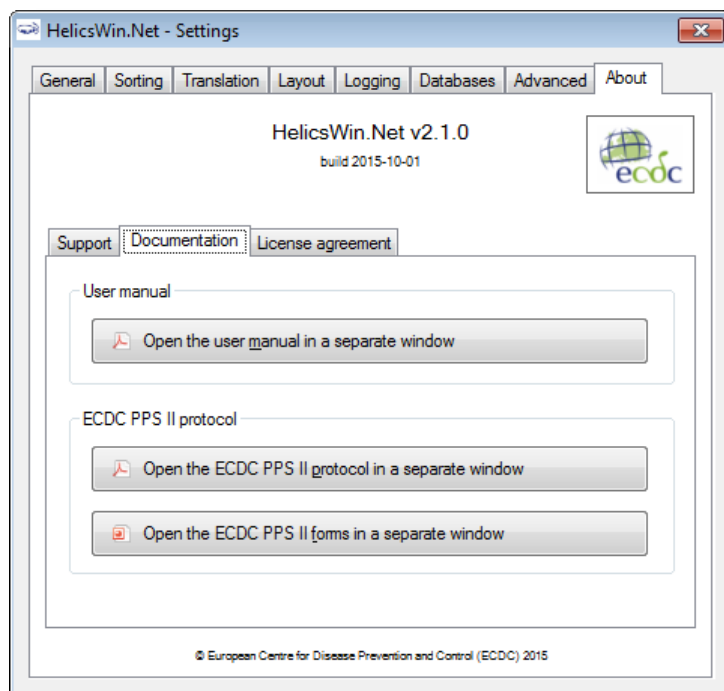
License agreement

The **License agreement** tab contains a transcript of the HelicsWin.Net license terms (which you are requested to read closely) and a link to information on the third-party products included in HelicsWin.net.
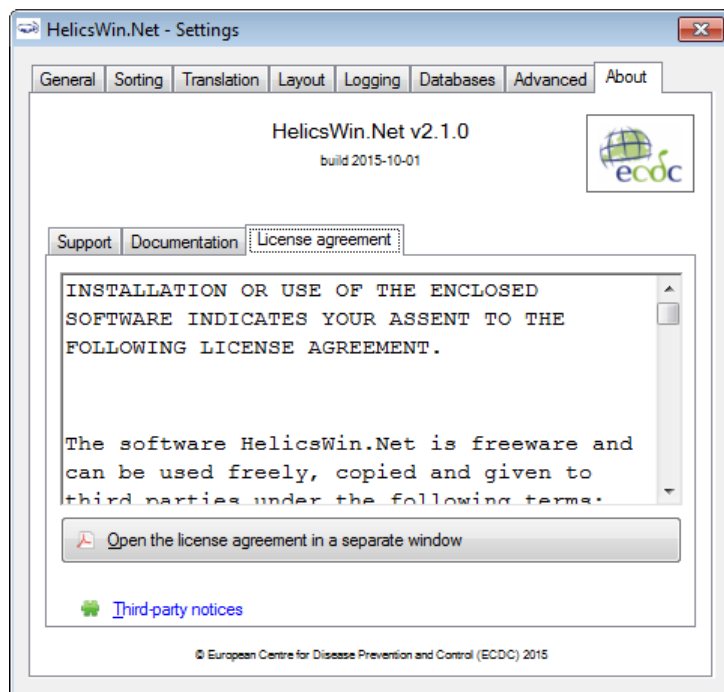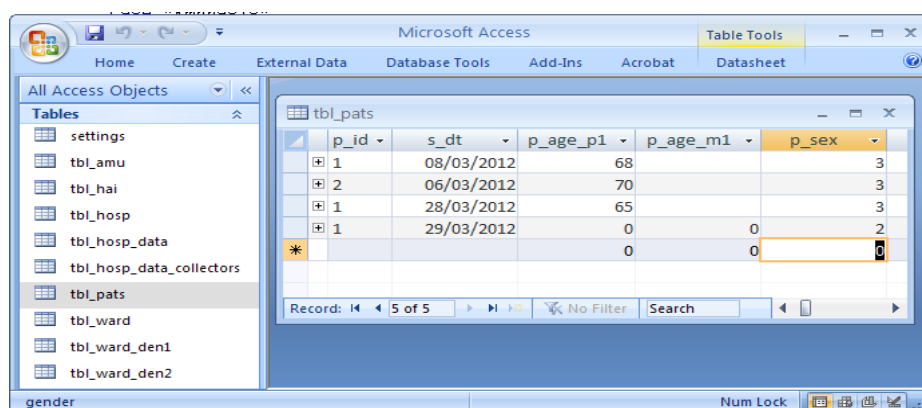
HelicsWin.Net database files

The database files used to store your data and settings are accessible to anyone who has access to the PC on which the application is installed.

Structure of the HelicsWinNet.mdb database

The data are stored in the internal software format in the HelicsWinNet.mdb database (Microsoft Access 2000 format) which is stored in the folder where the programme was installed. For data transfer to a national coordinating centre, this .mdb file can be sent by email, preferably after compression using a password.

If you open the file in Microsoft Access, you can see the tables and their data, as shown below:

Relationships

You can view the relationships between the tables in the HelicsWinNet.mdb database using standard Access tools.