

## Instruction SWEET-DPV

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### **Key points to remember**

- 1. regular data backups**
- 2. one installation of the database per centre**  
**→ either one single desktop installation or one server installation with multiple client installations**
- 3. apply with the local data regulations**
- 4. adjust lab units before first data entry**

## 1 Licence agreement

You can import the signature file during the licence dialogue. Please do not try to open the signature file yourself, only SWEET-DPV can handle the file.


**licence agreement**  
Licence agreement  
DPV-Version 7.50  
Effective 29.01.2016  


This is the DPV documentation software for the international SWEET diabetes quality improvement group. This software is available in German, English, French, Greek, Portuguese, Spanish and Polish. This is a legally binding contract, please read carefully. By installing or using the DPV software, you oblige to all regulations in this contract. If you do not agree with all regulations in this contract, you have to stop using the DPV software immediately and uninstall the software.  
A DEMO version is available on the internet. The DEMO version is for the information of future users only, not for documentation of patient data. The functionality of the DEMO version is limited, for the DEMO version Ulm University does not grant any liability.

The DPV software was developed at Ulm University to document quality of care, and for scientific-epidemiologic analyses. Public funding (BMBF Competence network diabetes, German center for Diabetes Research, German ministry of health, German Research Council), foundations (EFSD, German Diabetes foundation, Dr. Burger-Busing-foundation) and pharmaceutical companies support the project or supported it in the past. This does not allow any claims towards these sponsors.

**Licence agreement**  
Each licensee receives a version of the DPV software with a unique signature, to allow joint data analyses among several or all licensees.  
The licensee is allowed to install the software on a single desktop computer or in a server network. A separate installation on several computers by one licensee is not definitely not recommended, as this will lead to inconsistent and multiple documentation. If the software is installed repeatedly despite this advice, the licensee is solely responsible for all potential consequences.  
The licensee is allowed to have backup copies of the software, if this is required for future use. Beyond that, the licensee is not allowed to duplicate the software for any other purpose.  
Changes to the software in order to correct software errors or expand the functionality are only allowed, if the modified program code is used by the licensee only. Software use by the licensee includes the professional or profit oriented use, if this use is limited to the licensee. Identification of the user (name of the institution, signature, DPV software serial number) as well as this licence agreement are not to be deleted or modified.  
In addition, without a written previous agreement by Ulm University, the licensee is not allowed to reproduce the DPV software, to change, to modify, to decompile, to disassemble, to reengineer the software or use it as a basis for other software developments. In addition, without a prior written agreement by Ulm University, the licensee is not allowed to forward the DPV software to others, to sell, to copy, to rent, to clone separate licenses, or to distribute any information gained by decompiling the software or the backup copies.  
Any violation against this regulations will automatically terminate the right of the licensee to use or own the DPV software.

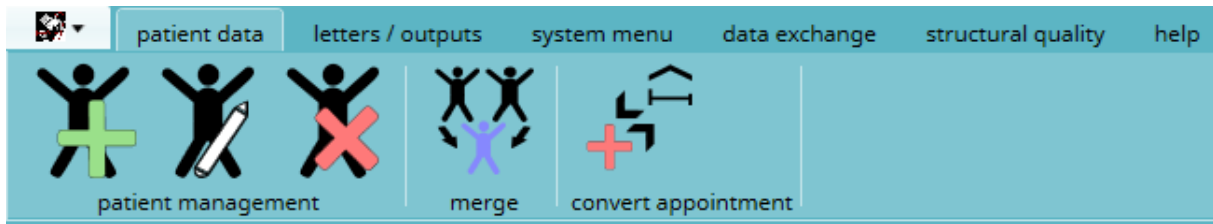
To use the DPV software without restrictions, a signature file with the name "diction.dbf" is needed. You can request this file for free from PhD Stefanie Lanzinger (Ulm University) under [stefanie.lanzinger@uni-ulm.de](mailto:stefanie.lanzinger@uni-ulm.de)  
Please note that you do not need a new signature if you install DPV on a new PC/server. Your signature is included in the data backup that you use to transfer your existing data.

**Path to the signature file (diction.dbf)**  
  
☒ I decline    ☐ I still want to test DPV (max. 30 days)    ☐ I accept



## 2 Patient data

Patient data can be administrated on the first tab of the main menu.



Here you can add new patients or edit existing patients.

### 2.1 Search for patients

In order to edit a patient, a patient must be selected first. A patient can be chosen out of the list shown below.

last name	first name	birthday	city
Tök	Crassus	28/06/1994	
Tök	Merimac	08/04/1994	
Tök	Töbias	03/04/1992	

3 patients found.

Select patient:



It is also possible to search for patients, therefore search criteria can be added in the menu and by clicking on the search button all the matching patients will be displayed in the list.

Search for patient:



Show all patients:



## 2.2 Patient level data

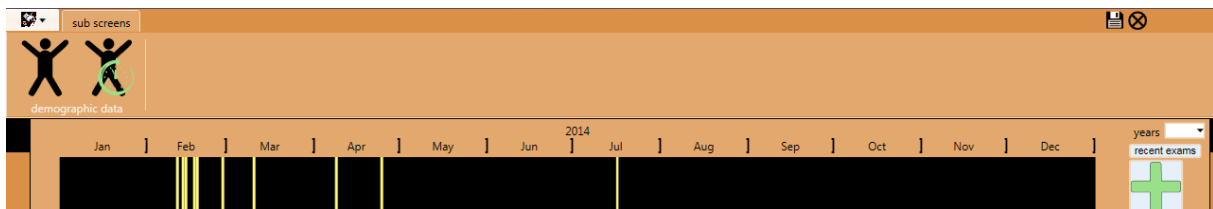
When a new patient is added or an existing patient is edited, the input mask with the patient level data will be displayed. Here you can enter information about personal data, data of diabetes and other chronic diseases and anamnesis data.

## 2.3 Visit level data

In order to add or edit the visit level data of the SWEET data set, please click on the button which displays a patient with the SWEET logo and a green clock:



After that a timeline appears. The ten latest examinations of the patient are displayed on this timeline. A yellow bar represents an outpatient examination, green bars represent inpatients examinations.



To choose an existing examination, please click on the corresponding bar in the timeline.

To add a new examination, please click on the "+"-button. When adding a new examination, please provide the date of the follow-up. With the "+" button a new follow-up examination will be added.

**Add new visit: follow-up data**

select date

10/02/2025

15

Type of appointment

☐ outpatient

☒ inpatient

☐ telemedicine

☐ external appointment

+

✕

## Instruction –SWEET-DPV

On the tab “history | exam” you can enter the parameters of the patient history and the examination of the patient which are part of the SWEET dataset:

The 'history | exam' tab is active. It contains the following sections:

- admission**: admission date (10/02/2025), reason (not registered), discharge date (10/02/2025).
- hypoglycaemia**: severe hypoglycaemia (text input).
- measurements**: height (cm), weight on admission (kg), BMI on admission (kg/m²), weight on discharge (kg), BMI on discharge (kg/m²). Includes SDS and percentile columns.
- blood pressure**: systolic (mmHg), diastolic (mmHg).
- examination**: consciousness (clear, impaired).

On the tab “metabolic control self monitoring”, you can enter the sensor data. Sensor profiles can be entered manually or can be imported:

The 'metabolic control self monitoring' tab is active. It contains the following sections:

- self monitoring**: blood glucose (/week), cont. gluc. measurement (days), continuous use button.
- CGMS**: device (dropdown), value refers only to CGM device (not a pump).
- profiles**: The following data refers to the last two weeks:
  - average glucose (mg/dl)
  - GMI (Glucose Management Indicator) (%)
  - coefficient of variation (%)
  - proportion glucose > 250 mg/dl (%)
  - proportion glucose > 180 mg/dl and <= 250 mg/dl (%)
  - proportion glucose > 180 mg/dl (%)
  - proportion Time in Range (70-180 mg/dl) (%)
  - proportion glucose < 70 mg/dl (%)
  - proportion glucose >= 54 mg/dl and < 70 mg/dl (%)
  - proportion glucose < 54 mg/dl (%)
  - number of scans / man. readings per day

## Instruction –SWEET-DPV

On the tab “medication” the medications included in the SWEET dataset can be entered. When you select “yes” for one of the medications, the correspondent substance group needs to be selected as well:

The screenshot shows the 'medication' tab selected in the top navigation bar. The form contains several sections for medication management:

- copy previous record**: A button to copy data from a previous record.
- medication: hypertension**: A dropdown menu with 'hypertension' selected.
- medication: lipid metabolism**: A dropdown menu with 'no' selected.
- medication: oral antidiabetics**: A section with a dropdown menu set to 'yes'. Below it, there are checkboxes for 'biguanides', 'incretin enhancer', 'SGLT2 inhibitor', and 'sulfonylurea'. Under 'sulfonylurea', there are dropdown menus for 'glibenclamide', 'glimepiride', and 'others'.
- medication: injectable antidiabetic**: A dropdown menu.
- medication: thyroid gland**: A section with a dropdown menu set to 'yes'. Below it, there are dropdown menus for 'thyroid hormone', 'thyrostatic agents', and 'Iodine'.

On the tab “insulin therapy” you can enter the parameters of the insulin therapy which are relevant for the SWEET dataset:


The screenshot shows the 'insulin therapy' tab selected in the top navigation bar. The form is divided into two main sections:

- therapy: up to now**: This section includes input fields for 'number injection timepoints' (with a '/day' label), 'daily prandial insulin' (with a 'U' label), 'daily basal insulin' (with a 'U' label), and 'total daily dose' (with a 'U' label). There is a checkbox for 'pump / AID'. A 'copy therapy last visit' button is in the top right. Below these fields is an 'insulin preparations' button and a text input field.
- therapy: recommendation**: This section has identical input fields and layout to the 'up to now' section, including a 'copy therapy above' button in the top right.

On the tab “laboratory values” you can enter every laboratory value which is relevant for the SWEET dataset:

history	exam	metabolic control-self monitoring	medication	insulin therapy	laboratory values	secondary diseases	additional examinations
<b>metabolic control on admission</b>							
pp. BG <input type="text"/>		mg/dl		pH value <input type="text"/>		urine acetone <input type="text"/>	
HbA1c <input type="text"/>		%		ADAG <input type="text"/>		mg/dl	
						HbA1c-%-MOM <input type="text"/>	
						%	
<b>lipid values</b>							
cholesterol <input type="text"/>		mg/dl		HDL <input type="text"/>		mg/dl	
LDL <input type="text"/>		mg/dl		triglycerides <input type="text"/>		mg/dl	
				remnant cholesterol <input type="text"/>		mg/dl	
						Non-HDL <input type="text"/>	
						mg/dl	
<b>thyroid function parameters</b>							
T4 <input type="text"/>		nmol/l		ft4 <input type="text"/>		ng/dl	
						TSH <input type="text"/>	
						µU/ml	
<b>kidney function parameters</b>							
urine albumin (concentration) <input type="text"/>		mg/dl		urine albumin (collection) <input type="text"/>		µg/min	
						Albumin-to-creatinine ratio <input type="text"/>	
						mg/gCrea	
<b>Antibodies to</b>							
<b>thyroid gland</b>							
TPO <input type="text"/>		U/ml		TGAbs <input type="text"/>		U/ml	
<b>coeliac disease</b>							
TGA-IgA <input type="text"/>		U/ml		TGA-IgG <input type="text"/>		U/ml	
endomysium <input type="text"/>		titre		gliadin IgA <input type="text"/>		U/ml	
total IgA <input type="text"/>		mg/dl				gliadin IgG <input type="text"/>	
						U/ml	

On the tab “secondary diseases” you can enter the results of the eye examination:

history	exam	metabolic control-self monitoring	medication	insulin therapy	laboratory values	secondary diseases	additional examinations						
<b>eye exam</b> <table border="1"> <thead> <tr> <th></th> <th>right</th> <th>left</th> </tr> </thead> <tbody> <tr> <td>exam</td> <td>(no examination performed) ▼</td> <td>(no examination performed) ▼</td> </tr> </tbody> </table>									right	left	exam	(no examination performed) ▼	(no examination performed) ▼
	right	left											
exam	(no examination performed) ▼	(no examination performed) ▼											
<b>additional examinations</b> <div>  <div></div> </div>													

## 2.4 Extended visit level data

In order to add or edit follow-up data with additional parameters, please click on the button which displays a patient with a green clock:



If you want to enter parameters which are not contained in the follow-up data input mask, you can select more specific input masks:



## 2.4.1 Insulin therapy

The insulin therapy can be documented on the page "Therapy: insulin, nutrition, counselling, others" in the follow-up input mask.

Six different schemes are available, depending on the kind of insulin regimen the patient uses. The input masks for the different schemes always consist of two parts. The top part contains the entered insulin therapy prior to the visit. The bottom part contains the recommended insulin therapy for the patient.

When entering the insulin therapy, the "average BU" for the "meal insulin / BU" is required, as both entries are essential for calculating the total daily insulin dose.

It is possible to copy the recommended insulin therapy of a prior visit as "insulin therapy up to now" (button "copy therapy last visit") or to copy the "insulin therapy up to now" as recommended therapy (button "copy above therapy").

## 2.5 Save data

There are two ways to leave the input mask. Either the current data can be saved or the input be canceled. The buttons for saving can either be found on the right side of the menu or on the application menu. To get to the application menu, please click on the DPV-Symbol.

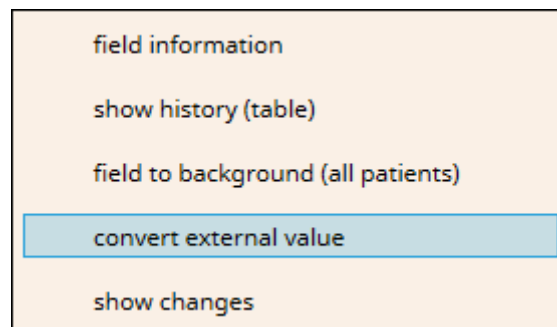


By saving, added/edited data of all input masks of a patient will be saved. By cancelling, all the changes for this patient will be discarded.

## 2.6 Context menu

### 2.6.1 Convert external value

External laboratory values measured in a different lab unit than the defined lab unit in SWEET-DPV can be converted to the defined lab unit. Therefore, please right-click on the respective entry field. A context menu will be shown. To convert the lab value please select 'convert external value'.





A new mask will be shown. Please enter the value and select the responding lab unit. This value will be converted to the defined lab unit.

**convert value**

Here you can enter a value measured in a different lab unit.  
This value is converted to the defined lab unit automatically.

	T3 value	lab unit
external	<input type="text" value="1.4"/>	<input type="text" value="ng/ml"/>
≡	140	ng/100ml



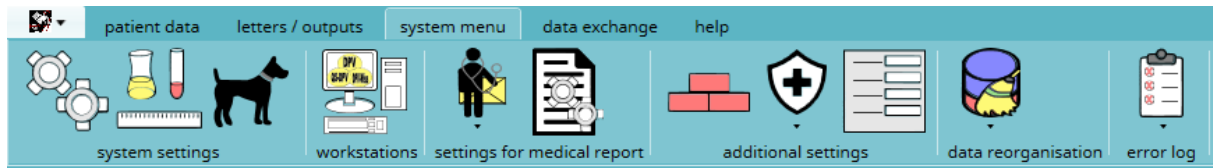
For changing the lab units in SWEET-DPV, please refer to chapter 4.2 Definition of units.

### 3 Letters / reports

On the second tab of the main menu several outputs can be generated: summaries, patient graphics and a treatment plan.

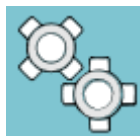
## 4 System menu

On the third tab “system menu” of the main menu general configurations of DPV can be set.



### 4.1 System parameters

Here the settings for the configuration of DPV can be edited. This concerns the settings for the name and the country of the institution and the reference values of the patient graphics.



#### 4.1.1 User management

The user management can be accessed from the menu of the system parameters.



In the user management new users can be added or existing users be edited/deleted.

#### 4.1.2 Data of the institution

Via the tab “data of the institution” you can adjust the name and country of your institution.

Additionally the number of patients you treat per year can be entered. The number of patients treated per year is part of the SWEET data set.

number of paediatric patients treated in previous years

year	patients with type 1	patients with type 2	patients with type 3
2020	40	0	0
2021	55	3	4
2022	60	15	1



Total number of paediatric patients treated in your center during the specific year:

year

patients with type 1

patients with type 2

patients with type 3

#### 4.1.3 Data backup

Via the tab “data backup” settings for a regular data backup can be set:

- Directory in which the data backup should be created
- Interval of backup / backup reminder
- Setting whether the backup should be created automatically or if a reminder should be displayed instead
- Timepoint when the data backup should be performed / the reminder should be displayed

data of the institution | letters / outputs | data backup | age-dependent reference values | input masks | interfaces | performance

data backup

path

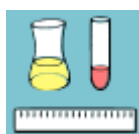
backup interval  days

create automatically ☐

notification on

#### 4.2 Definition of units

Here the units used in the institution can be defined.



The predefined definition of 01/01/1901 is already set. When first using DPV, please edit the definition of this date. This entry cannot be deleted.

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When a unit for a lab value should change in future, a new definition can be added.

Several definitions can be set. DPV uses the definition with the latest date before the date of the respective examination.

definition of laboratory units

selection overview

date

01/03/2024
01/07/2023
01/11/2021
03/12/2017
01/08/2017
20/02/2014
01/02/2010
30/08/2003
02/04/2003
11/01/2001
02/05/2000
20/02/1997
17/02/1997
22/11/1995
01/01/1901

tips

Please adjust your individual settings on the predefined date (01/01/1901).  
Please add a new record for every change during the documentation with the date from which on these settings should be valid.

A input mask with five pages containing the predefined units will be shown. If a unit does not match to the unit of the lab, please change the unit.

Additionally, please adjust the normal range for HbA1c. Therefore, please click on the button "HbA1c normal range" while checking the lab units.

parameter	unit
HbA1c	%

HbA1c normal range

In the new input mask the defined normal ranges for HbA1c can be seen. There is again a predefined entry for 01/01/1901. A new normal range should only be added when the lab changes something in the measurement of HbA1c.

laboratory mean normal values for HbA1c value

valid since	mean	SD	normal range	method	manufacturer
01.01.1901	4.930	0.210	4.510 - 5.350 %		

valid since

☐ mean

☐ standard deviation

normal range

determination method

manufacturer

HbA1c

HbA1c

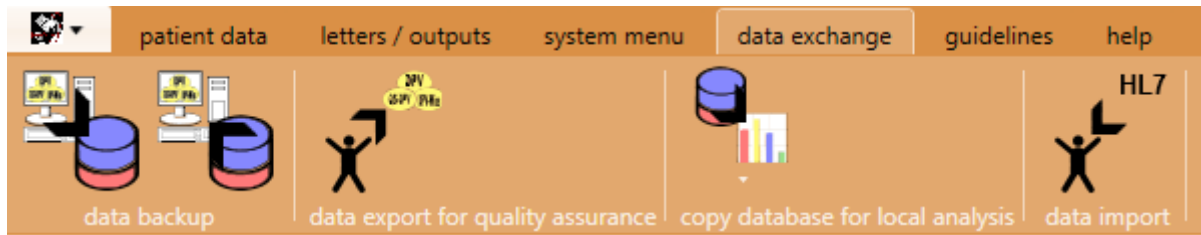
HbA1c

If the predefined normal range does not correspond to the normal range of the lab, please select the entry for 01/01/1901 and click the button.

Then the normal range for HbA1c can be changed. Please click the save button to save the data. Please close the input mask with the "X"-Button, when finished.

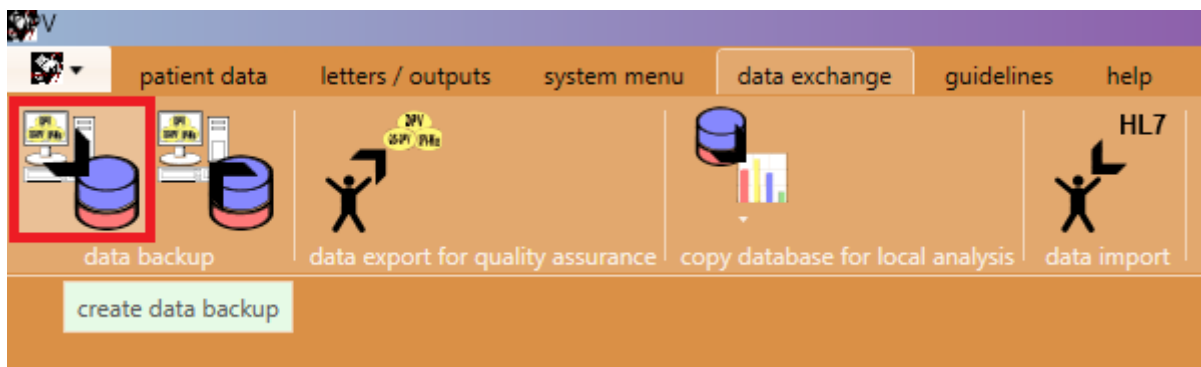
## 5 Date exchange

Here data can be saved and restored and the anonymized export for quality assurance can be done.



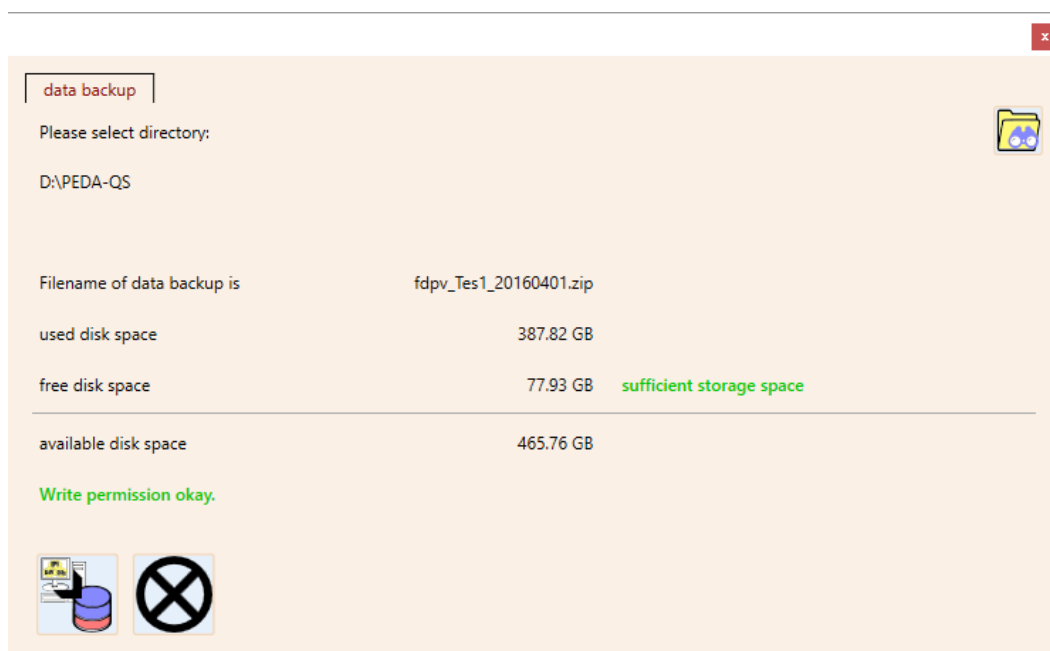
### 5.1 Data backup

To protect your data, we recommend to perform data backups on a regular basis. Especially before an update to a new version a data backup is important, as in case of an error the data can be re-stored.



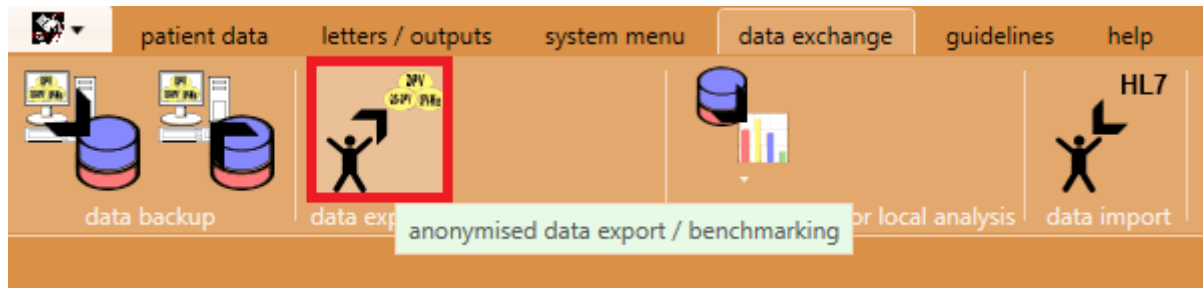
The directory for the data backup can be selected using the button with the folder symbol. The archive with the saved data will be written in this directory.

We recommend to use a directory on another physical device (e.g. USB, CD, etc.) than the installation folder.



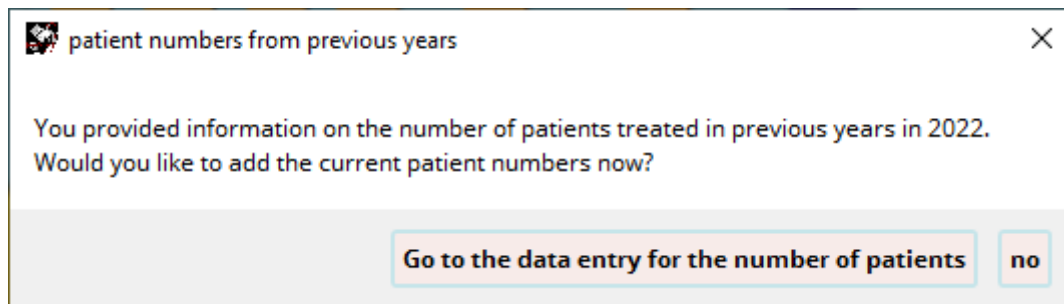
## 5.2 Data export for quality assurance

In order to transfer your data for the SWEET validation report and the SWEET benchmarking, please click on “anonymized data export / benchmarking”:



### 5.2.1 Patient numbers from previous years

If you haven't entered the number of paediatric patients treated per year, a message appears which reminds you of doing so.

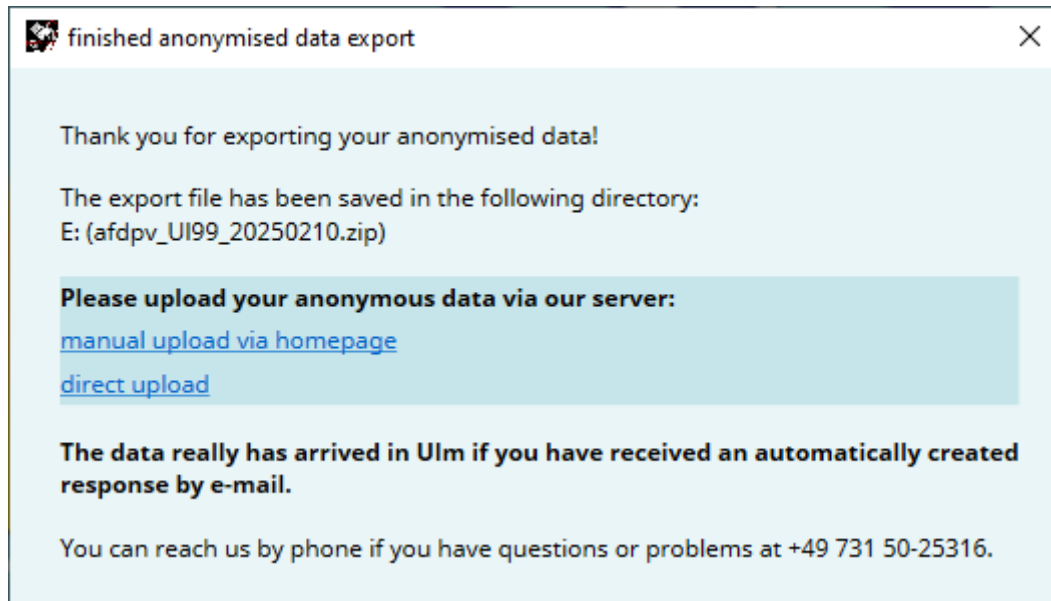


### 5.2.2 Creating export file

With this export a ZIP-file is created. This ZIP-file can be sent either via e-mail or the file can be uploaded via our homepage.

### 5.2.3 Uploading export file

After the export file is created, you can either upload the data manually via our homepage (<https://sweet.zibmt.uni-ulm.de/uploadSweet/>) or upload the data directly via SWEET-DPV:



## 6 Help

Via the tab item “help” you can get information about your SWEET-DPV installation, contact persons for software import and information on updating SWEET-DPV. You can also save the error log in case of problems with SWEET-DPV.

