

## Instruction DPV for SWEET

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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 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 DPV for SWEET can handle the file.

**licence agreement**

Licence agreement  
DPV-Version 7.3  
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 and Greek.  
The users are responsible to comply with the local data regulations.

The University of Ulm is not legally liable for any malfunction of the software.


The DPV-Software is developed at the Ulm University and is the property of Ulm University.

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 Prof. Dr. R. Holl (University of Ulm) under [reinhard.holl@uni-ulm.de](mailto:reinhard.holl@uni-ulm.de)

**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 can either be added new patients or edited existing patients. It is also possible to delete 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.

A screenshot of the 'search for patient' form. The form has a header bar with a search icon and a close button. Below the header, there are several input fields and checkboxes. The 'last name' field contains 'Baggins' and the 'first name' field contains 'Bilba'. The 'pat. ID' field is empty. The 'birthday' field contains '15.04.2004'. There are checkboxes for 'phonetic search', 'limit query to', and 'patients with continuing care only'. The 'limit query to' field is set to '15' days. The 'patients with continuing care only' checkbox is checked. Below the form, there is a table with the following data:

last name	first name	birthday	city
Baggins	Bilba	15.04.2004	

The table is empty except for the one row. At the bottom right, it says 'one patient was 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 Demographic data

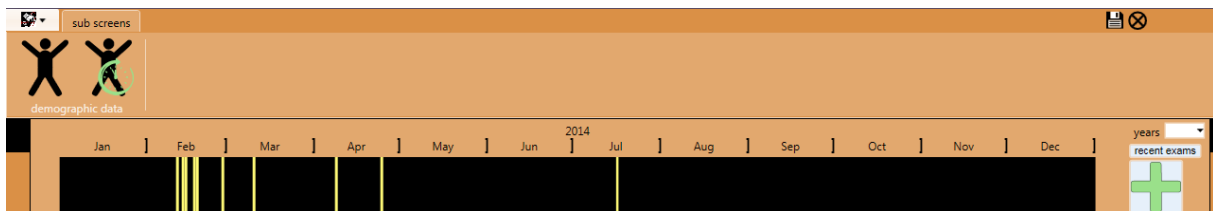
When a new patient is added or an existing patient is edited, the input mask for demographic data will be displayed. Here information about personal data can be entered, data of diabetes and other chronic diseases and anamnesis data.

## 2.3 Follow-up data

In order to add or edit follow-up data, please click on the button which displays a patient with 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 examination.





To add a new examination, please click on the "+"-button

Please provide the date of the follow-up. With the "+" button a new follow-up examination will be added.

**Add new patient visit**

select date



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

To display the examinations of a specific year, please select a year in the drop-down menu on the right side of the timeline. By clicking the button “current exams”, the ten latest examinations of this patient will be displayed on the timeline.

The follow-up screen consists of different pages. On the page "laboratory values" the laboratory values of the patients can be documented.

If the entered value is out of the defined normal range, the background of the corresponding entry field is marked red. The lab units and the normal range can be defined in the system menu, see chapter 4.2 Definition of units.

1093 Banks, Belisima born on 19/08/1996 - type-2 diabetes mellitus since 26/10/2008 follow-up 21/06/2010

history exam therapy: medication therapy: insulin, nutrition, counselling, others laboratory values additional examinations

**metabolic control**

fasting BG  mg/dl postprandial BG  93 mg/dl urine glucose  g%

pH value  bicarbonate  mmol/l urine acetone

sodium  potassium  BOH-butyrate  mmol/l

**routine lab values**

HbA1c  6.1 % (a43.17 mmol/mol Hb) ADAG  128 mg/dl HbA1c-%MOM  117.99 %

fructosamine  µmol/l C-peptide  ng/ml

cholesterol  250 mg/dl HDL  mg/dl LDL  mg/dl

triglycerides  mg/dl lipids fasting ☐ no ☐ yes

thyroid gland T4  µg/100ml T3  ng/100ml TSH

FT4  µU/ml FT3

creatinine  mg/dl eGFR GFR measured  urine albumine  mg/gCrea

GOT/ASAT  U/l GPT/ALAT  U/l γ-GT  U/l

normal range for cholesterol [- 200]

### 2.3.1 Insulin therapy

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

Five different schemes are available, depending on the kind of insulin regimen the patient uses. The screens 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.

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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”).

The screenshot displays two identical therapy input forms stacked vertically. The top form is titled 'therapy: up to now' and the bottom form is titled 'therapy: recommendation'. Both forms have a 'copy' button on the right side, which is highlighted with a red box and labeled 'copy therapy last visit' for the top form and 'copy above therapy' for the bottom form. The forms contain input fields for meal insulin (B, S1, S2, L, S3, D, S4), correction factor, long acting insulin, and total calories. The 'copy' button is located at the top right of each form.

## 2.4 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.

The screenshot shows the 'sub screens' menu in the SWEET application. The 'Save' button is highlighted with a red box. The 'Cancel' button is also visible. The 'DPV-Symbol' is located at the top right of the screen.

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.

## 2.5 Context menu

### 2.5.1 Convert external value

External laboratory values measured in a different lab unit than the defined lab unit in DPV for SWEET 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'.

The screenshot shows the 'routine lab values' form. It contains fields for HbA1c, fructosamine, cholesterol, triglycerides, thyroid gland (T4, FT4), creatinine, GOT/ASAT, ADAG, C-peptide, HDL, lipids fasting, T3, FT3, HbA1c-%-MOM, LDL, TSH, urine albumine, and GPT/ALAT. A right-click context menu is open over the T3 field, showing the option '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.

The 'convert value' dialog box is shown. It contains the text: 'Here you can enter a value measured in a different lab unit. This value is converted to the defined lab unit automatically.' Below this, there is a section for 'T3 value' with an 'external' input field containing '1.4' and a 'lab unit' dropdown menu set to 'ng/ml'. Below this, the converted value '140' is shown with the unit 'ng/100ml'. At the bottom, there are two buttons: a green thumbs up button and a black X button.

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

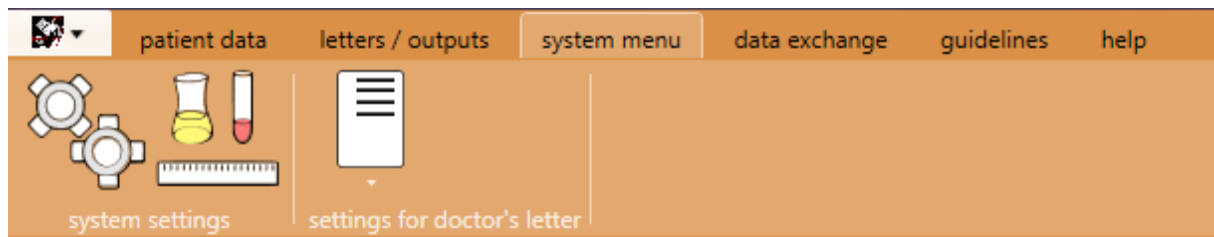
### 3 Letters / reports

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 of the main menu general configurations of DPV can be set.



### 4.1 System settings

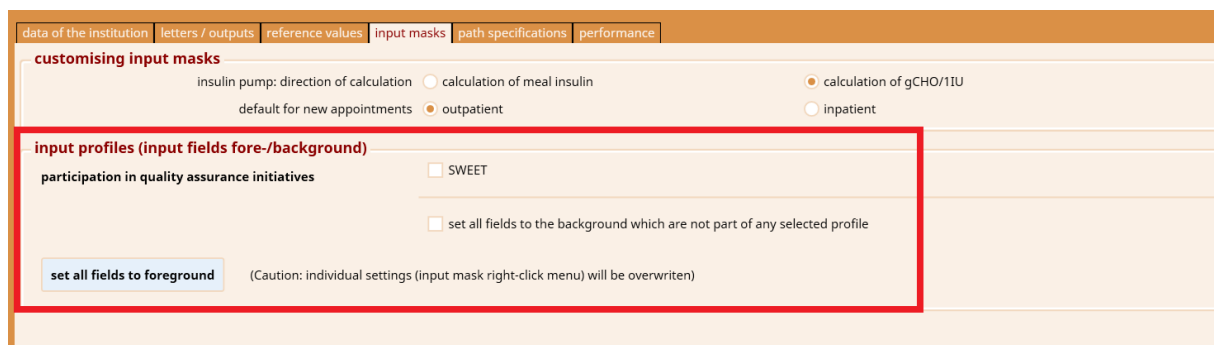
Here the settings for the configuration of DPV can be edited. This concerns the settings for the name and the country of the institution and the reference values of the patient graphics.

From the menu of the system settings the user administration can be reached. In the user administration new users can be added or existing users be edited/deleted.

#### 4.1.1 Input masks

In DPV it is possible to select input profiles. These can be selected on the tab “input masks”. It is possible to set fields to the background which are not part of the selected profiles.

In order to simplify the data entry for the SWEET project, the SWEET input profile needs to be ticked and the checkbox “set all fields to the background which are not part of any selected profile” needs to be ticked additionally. This way you can easily see which fields are part of the SWEET dataset.



Using the button “set all fields to foreground” every field of DPV will be set to the foreground.

In the following example fasting BG and sodium are set to the background and pH value is set to the foreground.

fasting BG	<input type="text"/>	mg/dl
pH value	<input type="text"/>	
sodium	<input type="text"/>	mg/dl

## 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.

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.

date
16/12/2014
01/02/2010
02/04/2005
30/08/2003
11/01/2001
02/05/2000
20/02/1997
17/02/1997
22/11/1995
01/01/1901

**tipps**

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 screen 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**

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In the new screen 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

☐ normal range  -

determination method

manufacturer

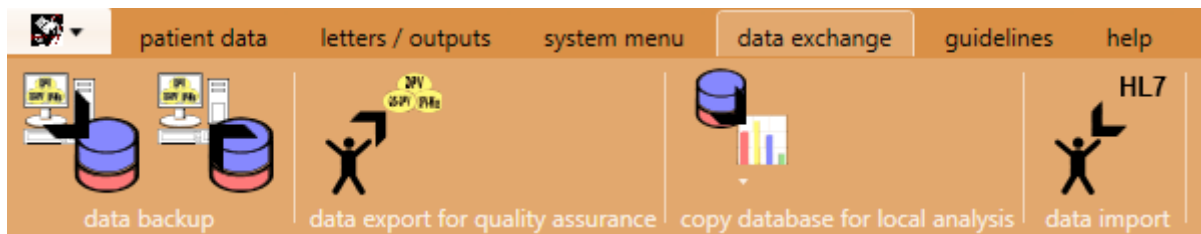
Icons on the right: HbA1c (green plus), HbA1c (blue checkmark), HbA1c (red X).

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 screen with the "X"-Button, when finished.

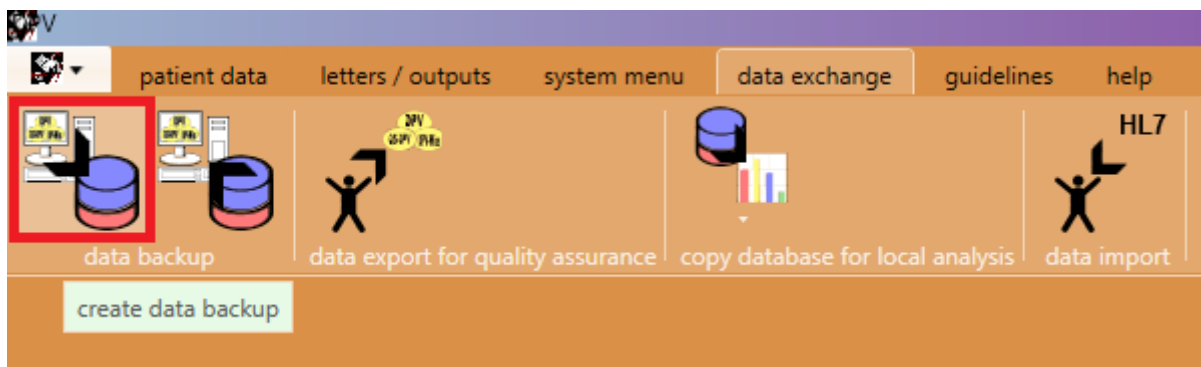
## 5 Date exchange

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



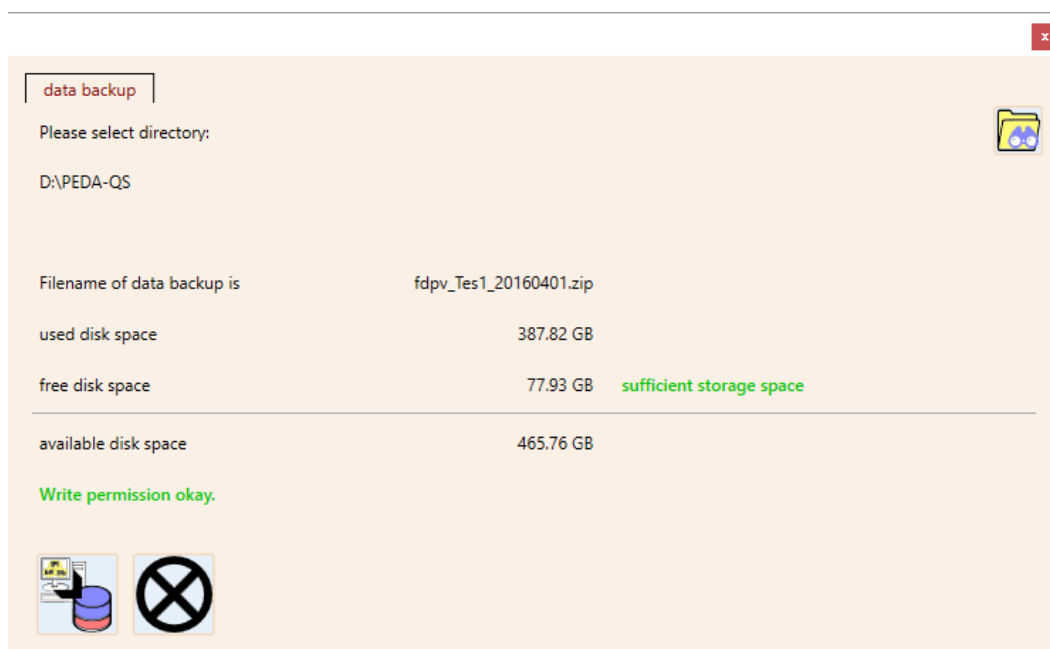
### 5.1 Data backup

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.

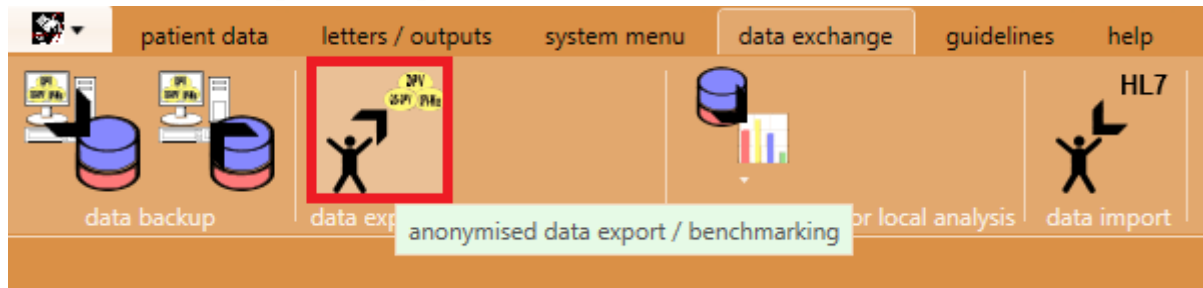


The directory for the data backup can be selected using the button with the folder symbol. The archive with the saved data will be written in this directory.

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



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 (<https://sweet.zibmt.uni-ulm.de/uploadSweet/>).