PhysioDom®
HDIM

D2.3 Final functional Specifications Document and Test Report

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SUMMARY

Home Health Record – HHR®

This document presents the functions the end users are expecting from a CIT platform to help them organizing the Home Dietary Intake Monitoring – HDIM ®.

The HHR, the heart of a platform PhysioDom®©[1], will encompass all the numerical functions required to help the professionals in organizing the Dietary Coaching for a population of Seniors living at home, on a large territory.
The HHR is presented in two parts:

- the HHR-Pro consulted by the Professional via the computer in his consultation room.
- the HHR-Home consulted by the beneficiary via his TV screen at home

The HHR presents two originalities. It is a tool:

- focused on home care, in two dimensions: Health and Social care, with a new section dedicated to the Home Dietary Coaching – HDIM ®
- linked with the home section of the PhysioDom platform and managing health data using the TV screen, by means of a TV Box and a remote control.

Therefore, the specifications of the functions of the required numerical tools, a little bit complex, have been considered as a very important step. All the Partners of the Consortium, and particularly the Pilot sites, have contributed significantly to the discussions and approved the final version labelled - D2.1.

PhysioDom-HDIM is a generic platform of tools and services, following up the French project "Réseau Vercors Santé - RVS", and destined to Seniors living in the European Union. This platform will be validated in three Pilot sites, located in the Netherlands, Spain and the UK.
According to the Validation methodology selected in the project, the main functions of the platform will be validated by each pilot taking into account local organisations of care services. Some functions will not be validated, notably those already validated in the RVS project (See Dow - page 6). But the validation of the Dietary Coaching services, which is a new type of services, is mandatory.
Following the decisions made during the PMB meeting in Grenoble (23/24 September 2014) the pilot sites have made many changes to version V3.5, cancelling various functions which were initially foreseen in the software. These modifications are included in the new version V3.6 and mainly concern the HHR-Pro

[1] PhysioDom ®© is a trade mark and a copyright declared as background in the Project.

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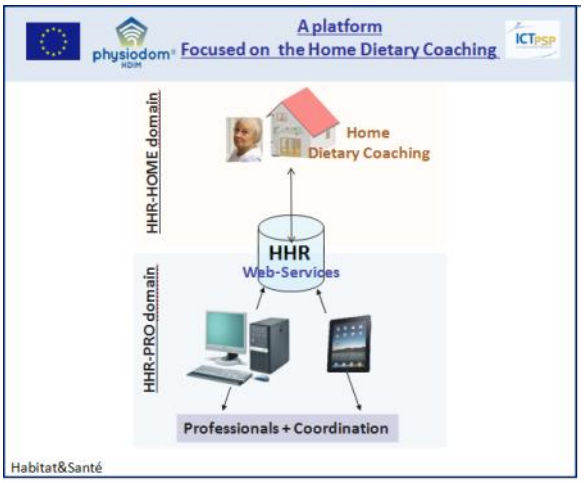
HHR-PRO - Functional Specifications

I. Introduction



1. The HHR ®

The Home Health Record – HHR ® will collect all the numerical functions required to assist professionals in organizing the Dietary Coaching for a population of seniors living at home, on a large territory.

In PhysioDom the HHR is presented in two parts:

The HHR-HOME consulted by the Beneficiary via the TV screen at home

The HHR-PRO consulted by the Professional via the computer of his consultation room.

This chapter, concerns only to the part of the HHR consulted by the Professional via the computer of his consultation room: the aim was to present a set of well organized functions to be able to organize the Home Dietary Coaching to be put at the Professionals' disposal through an interface named – HHR-PRO (HHR-PRO domain).

2. Pre-requisites

HHR, seen from the blue side, has to propose a Web interface to enable the professionals to access the platform. This web site should run on desktop computers as well as on touch devices such as Android tablets or iPads. The qualities imposed to the desktops will be presented in the technical specifications.

This document aims to present the professionals' current point of view on the expected functions of the Web services.

The web site will be available in three languages: Dutch, English and Spanish.

Four separate main chapters have been dedicated to: Parameters, Coordination, Beneficiaries and Professionals. Concerning the two others chapters, the web site is organized using headings displayed on a Menu presented in a classical way, on the left of the screen.

Some important requirements:

- Following the DOW, the Web site must respond to security, interoperability and respect of the laws and administrative rules related to the management of health and nominative data in the four countries involved in the project;
- To pay attention to the rights given to the Users, through a matrix of rights specific to each Pilot Site and run by the Coordination of the Pilot Site;

- To pay special attention to the user friendliness of the authentication procedures and the navigation into the software.

II. The main chapters of the Menu for the Coordination

In this document, " Coordination" must be comprised as a function in the health nets, given to a person, a group of persons or an establishment. This main function will be well identified in the three Pilot sites and described in the WP3 – T3.6/ D3.1.
This function has nothing to do with the role of the Coordinator in the Project Management Board of PhysioDom-HDIM.

1. Setting of the Parameters

HHR-Pro allows the following parameters settings:

Selection of the language to be used :

Available languages are: Dutch, English and Spanish.

Management of the nomenclature values:

Nomenclature describes the lists of codified values used with HHR-Pro
These values feed the Pdm (Pull down menu) fields when not a free text but a predefined value has to be selected in order to fill one information.

Some of these nomenclatures used in HHR-Pro are updatable, so they can be enriched by new values if needed by the users.
For instance, the list of the values for "Perimeter" which is used in the characterization of a beneficiary can be updated in Nomenclature Management section.

2. Set-up of the Directory

See Professionals Directory ... - Page 20

3. Set-up of the rights for Professionals

Starting from the Professional Directory to set up the rights of the Professionals presumes:

- To give rights to each professional group related to the HHR-PRO data management: consulting, writing and removal. The best way of working on this task is to fill in a table with crossed data between the items of the Menu and the various professions involved in PhysioDom-HDIM at the Pilot Site
- To place each Professional in the right Professional group
- To give a login and a password to each Professional
- To limit the rights of each Professional: he/she is authorised to consult only the HHR of the Beneficiaries he/she is in charge of.

4. Set-up of a beneficiary record

Administrative data of the beneficiary

To create an entry point into the information system for a beneficiary, the following data must be filled in:

- Personal data: First name / Surname / Title / Date of Birth / Height / Social IOD

- Additional data: addresses (principal and secondary) / Telephone numbers (at home and/or mobile phone)
- Contacts: Professional contacts
- Assigned PhysioDom-Box
- Additional data: Marital Status (list) / Disability (type and percentage) / Way of life (list) / Profession (current or former – list)

+ 2 Buttons – "Save" and "Validate"

Creation of the Beneficiary file

The following data are required to install a Beneficiary in the Health net - PhysioDom-HDIM

Object of the demand / Entry Date / Where does the Beneficiary come from / Planned end date / Real end date / Destination / Professional

+ 2 buttons – « Save » and « Validate »

Special Rules for a Beneficiary file

➢ **Entry panel – Activation of the beneficiary**: **this means the beneficiary is actually involved and active in PhysioDom Program**

- When creating the beneficiary, he remains to be activated by it is decided to do so
- When activating the beneficiary, the Start date field is automatically filled with the current day date (if empty)
- When filling a start Date is filled, the system activates automatically the beneficiary if he is not
- When the beneficiary is activated:
  - new fields are mandatory: Height, Start date, PhysioDom-Box, Main diagnosis.
  - the beneficiary row font goes from grey to black in the Beneficiary list of coordination
  - the beneficiary can be viewed by the professionals assigned to this Beneficiary (no visible from the professionals if deactivated)
  - the screens related to the Initial health status can be filled (no way if deactivated)

➢ **Entry panel – Deactivation of the beneficiary**: **this means the beneficiary is not yet in the program or went out of the PhysioDom Program**

- When deactivating the beneficiary, the End date field is automatically filled with the current day date (if empty)
- When the beneficiary is deactivated :
  - the beneficiary row font goes from black to grey in the Beneficiary list of coordination
  - He is no longer visible by the professionals

➢ **Entry Panel – PhysioDom Box:**

- The Physiodom Box field is to be filled with exactly the corresponding box number assigned to the beneficiary when provisioning the box with sportal system

5. Assignment of the professionals to a beneficiary record

The Coordination will register a professional in the professional contacts of the beneficiary. In this way, the Professional will have the right to consult the HHR of that Beneficiary.

6. Consultation of the lists of Messages and Data from the homes, and from the consultation offices

The Coordination can consult the list of all the available messages and data concerning a Beneficiary, or of a particular day, thanks to the filter tools.
When a new record is stored in the system, an event “new record” is added to the event diary. If one or more values are out of the threshold range, an event “threshold alert” is also added.
A click on one of these events will display the detail of the record.

III. The main chapters of the Menu for the Beneficiaries

1. To consult the HHR

Beneficiaries have the right to consult their files left at their convenience – direct consultation or consultation through a duly authorized professional.

Beyond this right, recognized in the countries of each of the pilot sites, and written in the DOW, chapter B.3.5.3 - Ethical issues, the project implements a specific access for non-professionals (Beneficiaries) - the possibility to fill out one or more questionnaires without access to the rest of the record, function of their rights.

In a second time, if it remains time and budget, it will be interesting:
- to built a specific home-page
- to built a specific menu focusing on the search of a questionnaire, the entry of the corresponding data and its validation.

2. To fill up some questionnaires

For each of questionnaire entries:
- will be entered: identity of the author, date and time
- a space is reserved for comments.

IV. The main chapters of the Menu for the Professionals

The main chapters are: Selection of the beneficiary / Beneficiary Overview / Quick look on the HHR / Healthcare Section / Social Section / Data Section / Directory
After logging, the selection of a Beneficiary by the Professional will display the first page of “Beneficiary Overview”. Then one can navigate through the Menu.

1. Selection of the beneficiary

By name (coordination) / By list (professionals)
This section allows all professional users to visualize the list of beneficiaries which have been authorized as users and to select one of them.

The Beneficiary list can be filtered and sorted using the Filter Box, on one item only, with the following fields: Last Name / Zip code / City / Perimeter (geographical sector)
By selecting a beneficiary the "Beneficiary Overview" will be displayed, containing his data (cf. Beneficiary Overview, below).

Selecting a beneficiary is the first action that a professional should do when accessing the application.
The professional – physician or legal person will see only the HHR-PRO of the beneficiaries that have been assigned to him.
The list can display 25 beneficiaries per page.
The list displays following data for each beneficiary: Last and first name / Indication of the last change in the folder / Date / time of folder last update / Perimeter (mandatory for coordination, optional for others)
Last change in the Beneficiary folder will be displayed as follows:

- X hours ago: if a change has been made during the day
- X days ago: if a change has been made during the month
- X month ago: if a change has been made more than one month ago

Examples: '2 hours ago', 'a day ago', '7 days ago', 'a month ago'
Date / Time of last change will be displayed based on the language settings.

2. Beneficiary Overview

The “Beneficiary Overview” shows a synthesis of the Beneficiary’s general data.

Personal Identification data + Postal Address + TV Box number*

*Complying with the data protection laws – see the Dow B3.5.4 - pages - 99-100.

Active Services

Here the list of all the services of the Health Care and Social Care Plan organised for the Beneficiary can be found.

Type of services	Frequency	Professional involved

Professional contacts

All the contacts are entered by the Coordination at the set-up.

First name	Surname	Role	Phone	Email

History of Beneficiary record modifications

A display which allows a quick view on the list of the last events that has taken place in the HHR-PRO. The last event is presented first in the list.
The main events:

- Messages to home: new
- Healthcare report: new or modification
- Healthcare assignment : new
- Healthcare plan: new or modification

- Social report: new
- Social assignment: new
- Social care plan: modification
- Data recording: new from cabinets or from homes.

The selection of an event in the list conducts the user to the corresponding area in the HHR-PRO. For example: one click on « Data recording » will display the page « data curves ».

3. PhysioDom – WP2 – "Alert" Function

Introduction

The Warning Status

In D2.1 - HHR - PRO (see page 8) the management of the alerts is mentioned without precising its function and the way it can be managed. However, the pilots consider the "Alert" function to be essential.

Therefore, the proposal below aims to define an alert function which is simple to implement in the HHR - PRO on the following conceptual basis:

Considering an "Alert" function allows to characterize a state (Status) of the HHR – Pro - «the
Warning Status», which must typify each HHR, permanently, with two modes «ON» and «OFF»,

- *Status "ON" - visualized on the screen by a "red triangle"*
- *Status "OFF" – distinguished by the fact that there is no specific signal on the screen.*

All the HHR - PROs show by default the status "OFF", except those that have been activated (see below) which show the "red triangle". This new management of the alert function highlights the central role given to the "Warning Status" in the software features.

The Warning Status in HHR-Pro

A «Warning Status» is linked to each beneficiary, allowing to characterize the status - in state of alert or not - of the Beneficiaries' file.

- Warning status activated : Warning status «ON» – The Beneficiaries' status in state of alert
- Warning status not activated : Warning status «OFF» – The Beneficiaries' status is not in a state of alert

By default, the Warning status is turned «OFF»

Two additional information are associated to this Warning Status:

- "Date" when the status was updated at last
- «Author» of the last update
  - If Warning status "ON"
    - «Home» if the alert comes from the modifications made at the Beneficiaries' home
    - «Name» of the Professional, if the alert comes from a modification from this professional (by entering a new data in the HHR during a consultation for example)
  - If Warning status "OFF"
    - «Name» of the Professional, who had turned the Warning Status to "OFF"

When the Warning Status is set ON or OFF in HHR-Pro?

The Warning Status «OFF/ON» of a beneficiary will change under the following conditions:

Automatic turning «ON»

The system automatically turns the warning status of the beneficiary to «ON» after one of the events described below, which are listed in the chapter "Last Events" of the "Beneficiary Overview":

- When the threshold is exceeded upon measurement of one of the general parameters: APS, APD, Pulse, Temperature, ….
- When the threshold is exceeded upon measurement of one of the HDIM parameters: Weight, Lean/fat ratio, …

Notes:

- *A measurement can be obtained in two ways:*
  - *upon entry of the data in the HHR-PRO ;*
  - *by importing the data from the HHR-Home.*
- *If the warning status is already on «ON» there will be no change in the system whatever new event entered in the HHR-PRO.*
- *For this release, the management of the alert thresholds has not been foreseen for the "Questionnaires" and for the "Symptoms Assessment";*

Automatic execution upon one of the events cited above:

If the warning status is already «ON», the system will not do anything
If the warning status is «OFF», the system will carry out the following actions:

- Warning Status will be turned «ON»
- Display of the date of the last update on the Status = Date of the current day
- Display of the name of the author who made the last update related to the event generating the alert – "home" or name of the Professional

Manual turning «OFF»

From the position «ON», turning the status to «OFF» always has to be done manually and by an authorized user on this function (no Automation).

If the Warning Status is turned «ON», the Status can manually be turned «OFF» on the "Beneficiary Overview" screen of the HHR-Pro

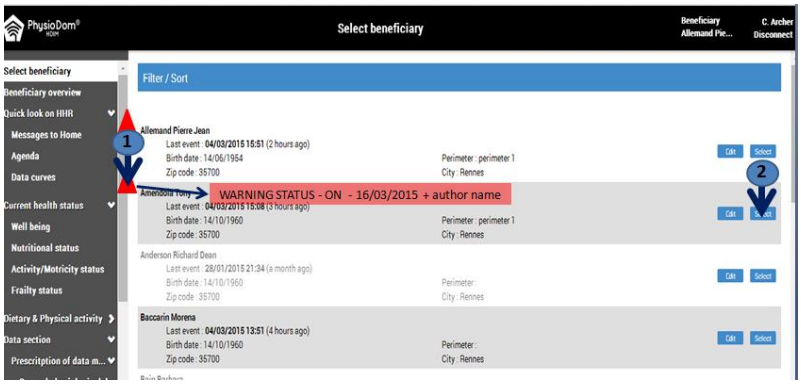
- Warning Status turned «OFF»
- Date/time last update of the Status = Date of the current day
- Author of the last update = Name of the connected user having turned off the Warning status

How is the Warning Status in HHR-Pro displayed and updated

The Warning Status is displayed on two screens: "Select Beneficiary" and "Beneficiary Overview"

Select Beneficiary

Display of the Warning Status:



In the list of the beneficiaries, the "Warning Status" is displayed at the level of each beneficiary:

- **If the Warning Status is turned «ON»**: a red triangle is displayed. A tick on the triangle (1) displays a panel with : the date when it was turned «ON» and the name of the professional)
- **If the Warning Status is turned «OFF»**: there isn't any signal displayed on the screen
- **A tick on the button "Edit" (2) will open the "Beneficiary Overview" (see below)**

Display mode taking into account the Warning Status:

The list of beneficiaries is by default sorted (displayed upon opening of the screen -select Beneficiary or when resetting the filter/sort mode) according to the following rules:

- Primary order: those with the Warning Status on «ON» are will be displayed on the top of the list, followed by those whose Warning Status is «OFF»
- Secondary order: alphabetical order on «name/surname».

Note : *This way of managing allows to present the beneficiaries in the alert state on top of the list and to use the alphabetical order as a secondary classification. In this way the modified files can easily be identified and the 'Beneficiary Overview' be opened to see in which parts changes have been made.*

Beneficiary Overview

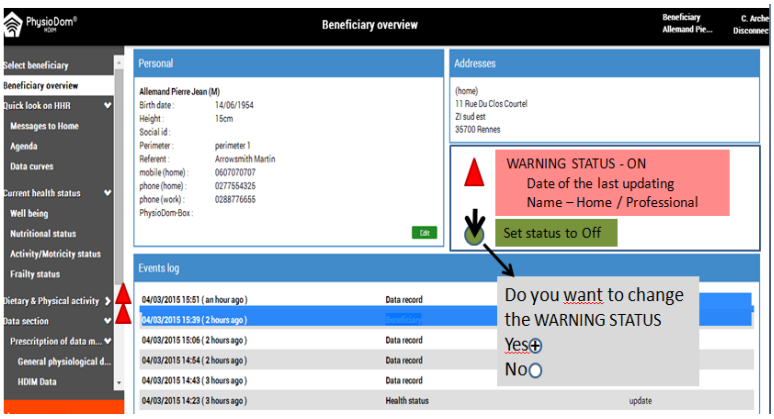
The **«Warning Status»** of the selected Beneficiary, is displayed as a label on top of the panel «**Events log»**.

Name of the label if "Warning Status = ON"

- Red Triangle + a panel «Warning Status ON»

Button to manually update the Warning Status

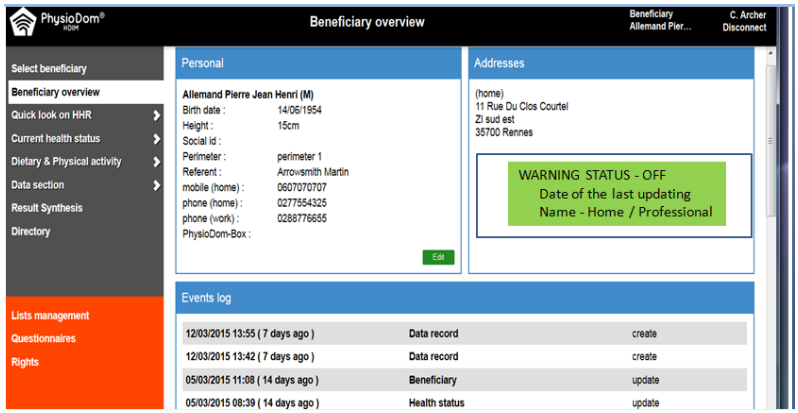
Beside the entitled «Warning status ON», there is a button which allows to change the status manually:



- Button entitled: «Set Status to «OFF»
- Colour of the button: green
- Action of the button:
  - Display of a confirmation message «Do you want to change the Warning Status?» («Yes» or «No»)
  - IF "Yes" Set and save the change to «OFF» + date of current day, + author of the update (LOGIN of the connected user).

- Refreshment (reload) of the screen (see below)

Name of the label if "Warning Status = OFF"



•a panel with : «Warning Status OFF» + Date of last updating + author – home / Professional

Note :
It does not handle the history of updates of the Warning status. Only the last update is stored.

User Rights' management of Alerts

Consultation of the Beneficiaries which are in the Warning Status

Users can view the alerts of beneficiaries that are present in the system in the list of beneficiaries (screen - Select a Beneficiary), depending on their access' rights.

Update of the Warning Status

The update (turning «OFF») of the warning status, is reserved to authorized users.
The matrix of rights includes a specific habilitation to "Update of the Beneficiary Warning status".

4. Quick look at the HHR-PRO

Agenda

The Agenda presents all the services offered to the Beneficiary (Basic Health Services, Assistance Services, Basic Social Services) . It is built automatically with the data from the Health and Social care Plan. It can be displayed by day/ week / month.
When a service is selected, a window will present the details of the service – name of the service and time.
All the modifications in the Agenda are sent to the HHR-Home.

Messages to home

Messages to Home screen allows to:

- Visualize the list of messages sent to Home Beneficiary (25 messages by page) and the detail of each message. The list displays following data for each message:

Message	
Title of the message Contents	Author Date

The HHR-Home will indicate when a message had been read at home.
+ Filter tools

Create a new message to home

Creating new messages is only possible on the Professional web site.
These messages are defined by: status / title / content.
The statuses are:

- Transmitting: the message is currently transmitted to home
- Read: someone at home has read the message

Nota**:** The web site will indicate that a new message had been posted to the beneficiary set top box. An icon will be displayed on the TV screen indicating that new messages are present.

Data curves

- General data - Systolic arterial pressure / Diastolic arterial pressure / Pulse / Temperature / Blood glucose level / diuresis / Faeces
- HDIM data - Weight / Fat/lean ratio / BMI / Distance travelled (pedometer) / ...
- Symptoms assessment results
- Questionnaires scores
- Warning thresholds.

With the help of the curves, the modifications of the results of the measures performed at home or in the Professional's consultation room can be viewed.
All the results - Physiological parameters, symptoms assessment results, questionnaires scores, can be presented, but the system can display only two curves at the same time on the screen.
Together with the curve, the system presents the upper and lower thresholds warnings selected for the parameter displayed on the screen. By default, the results obtained during the last 30 days are displayed on the screen. One can change the investigated period.

5. Healthcare Section

Initial Health Status

When the patient enters the PhysioDom-HDIM service, the Coordination has to collect each of the following data sets:

Well being :

- **SF 36 (score)**

SF-36	Date	Score

A click on SF-36 will open the selected "Questionnaire" form in order to fill it
The SF-36 score will be displayed in Data section - Results from data recording, and assessed at the beginning and at the end of the 12 months period.

Note : Implementation of Well being feature to be confirmed once the way to manage SF12/SF36 questionnaire cleared

Nutritional Status

- **Diet values**

	Data / Score	Date	Status
Height			
Weight			
Lean/Fat ratio			
BMI			
MNA-SF (Nutritional status)*			Normal
			Risk of undernutrition
			Undernutrition
SNAQ (Appetite) *			Not at risk of unintentional weight
			At risk of unintentional weight
DHD-FFQ (Diet Score)*			

*A click of the line will open the selected" Questionnaire"

- **Assistance Services**

Services	Frequency – Comments (When in the day/week) - (Text)	
Delivery Assistance (meals on wheels)		□
Assistance in meals preparation		□
Assistance to eat		□
Other		□

For each service of this list: One should be able to have the same Item prescribed to several "Meals on the day" – breakfast, lunch, snack, dinner, before bed

Activity/Motricity Status

- **Distance travelled**

Number of steps	□	

Basic Health Care Plan (Prescriptions)

Notes

- **All the "Prescriptions" will fill up the "Agenda" of the Beneficiary.**
- For most of the prescriptions – Basic health services / Dietary and Physical Activities / Basic Social Services, it should be interesting for a Professional or for the Coordination to consult the list of the beneficiaries who receive such selected service.
  So, under each of the following table one should be able to read:
  A Professional: the system can display the list of the beneficiaries (whose he/she has in care nursing) who take advantage of each prescription + Export function.
  The Coordination: the system can display the list of all the beneficiaries who take advantage of each prescription + Export function.
  Implementation if it remains time and budget for it.

The logo of PhysioDom will represent this paragraph.

Basic Health Services - Prescriptions

Type of Services (Pdm)	Details of the service (Text)	Provider (Pdm)	Profes MD Coord. (pdm)	When (day / week)	Time of the service	Date Start/ End	Frequency
Nursing							
Physiotherapy							
Chiropody							
Hygiene							
Drug delivery							
Other							

- **It's the data – "Details of the service", which will be sent to the HHR-HOME in the HHR2/Health Care Plan.**

Dietary and Physical Activity Plan- (Prescriptions)

All the "Prescriptions" will fill up the "Agenda" of the Beneficiary.

Dietary Plan

- **Watch undernutrition diagnosis**

SF MNA(Nutritional Status)	◉

A click on the radio button will open the "Questionnaires" list allowing the prescription of the filling up for SF MNA

Eetscore (Diet Score)	◉

A click on the radio button will open the "Questionnaires" list allowing the prescription of the filling up for Eetscore, from the specific dietary Dutch software data.

- **Special diets**

Prescriptions (free text)

Only : a flag indicating the prescription of special diet + the prescriptions (free text)

- **Assistance Services**

Type of Services (Pdm)	Provider	Date Start /End	Meals on the day	Time of the service	Frequency	When in the Week
Delivery Assistance (meals on wheels)	Social		Lunch			Tuesday Wednesday
Assistance in meals preparation	Social		Lunch Dinner			Every day except WE
Assistance to eat	Nurses	15/04/ 15	Dinner			Every day exept WE
Other						

- One should be able to prescribe the same service to the five "Meals on the day".
- **The data corresponding to each of these services will be stored in the HHR-PRO / Dietary Plan, for a period of thirty days preceding the current date, and can be displayed on the TV screen.**

Physical Activity Plan

- **General Prescriptions**

Recommendations (Text)

- **Once filled up by the Health care Professionals, the table (above) will be sent to the HHR-HOME in the HHR2/Activity Plan.**
- **The data will be stored in the HHR-PRO for a period of thirty days preceding the current date, and can be displayed on the TV screen.**

Health professionals' reports

Destined to the Beneficiary to be consulted on the TV.

Medical /Nursing/Physiotherapy/Psychology/Coordination/Nutrition/Physical Activity (Pdm)

Type of Professional (Pdm)	Author (Name)	Date
Title of the Report	Short	
Observation	2 lines max	
Conclusions	1 line max	

- **The data will be sent to the HHR-HOME in HHR2 - Reports.**

6. Social Section

Basic Social care plan - (Prescriptions)

All the prescribed Social Services will fill up the "Agenda"

Type of Services (Pdm)	Details of the service	Provider (Pdm)	When (day / week)	Time of the service	Date Start/ End	Frequency
Shopping help						
House works						
Washing Ironing						
Administrative Assistance						
On call at home						
Mobility Assistance						
Remote Assistance						
Other						

- **The data will be sent to the HHR-HOME in HHR2/Health Care Plan.**

Social professionals reports

- **Care equipment**

Items	Mark (Text)	
Weight scale	A&D	□
BP monitor	A&D	□
Pedometer		□
Glucometer		□
Remote Alarm		□
Falls detector		□
...		

7. Data Section

Prescription of Data monitoring

All the prescriptions will fill up the Agenda and will be presented on the HHR-Home – Agenda + HHR1

Note : a prescription for a parameter, symptom or questionnaire can be duplicated from another prescription of the same type.

General Data

Parameters		Threshold Sup.	Threshold inf.	Start date	Frequency	When in the Day/Week
APS	□					
APD	□					
Pulse	□					
Blood Glucose	□					
Diuresis	□					
Faeces	□					
Other						

- Diuresis and faeces can be measured but without threshold.
- This list can be configured by adding new types of data for a Beneficiary.

- To make easier the data management at home, it will be necessary to gather the parameters – APS + APD + Pulse to be programmed at the same - date/frequency/day of week.

HDIM Data

Parameters		Thresold Sup	Thresold Inf	Start date	Frequency	When in the Day /Week
Weight	□					
Lean/Fat	□					
BMI	□					
LDL Cholesterol	□					
HDL Cholesterol	□					
Total Cholesterol	□					
Abdom. Perim.	□					
Calf Circ.	□					
Other						

- This list can be configured by adding new types of data for a Beneficiary.
- To make easier the data management at home, it will be necessary to gather the parameters – Weight / Lean/Fat / BMI, to be programmed at the same - date/frequency/day of week. Idem for the two others groups – "Cholesterol..." and "Abdom. Circ + Calf Circ."

Symptoms assessment

Symptoms		Start date	Frequency	When in the Day / Week
Pain	□			
Fatigue	□			
Depression	□			
Anxiety	□			
Drowsiness	□			
Nausea	□			
Shortness of breath	□			
Difficulty sleeping	□			
Well being	□			
.....				

- This list can be configured by adding new symptoms for a Beneficiary.

Questionnaires

Questionnaires	Frequency (text)	Dates (scheduled in the 12 months period)	Comments

MNA (Nutritional Status)			
SF-MNA (Nutritional Status)	*		
SF 36			
SNAQ (Appetite)	*		
Chair Stand	*		
Eetscore (Diet Score)			

- To plan the questionnaires filling up, by defining the scheduled dates for each of them.
- **SF-MNA (Nutritional Status), SNAQ (Appetite) + the chair Stand, Eetscore (Diet Score), all focused on the Diet coaching will be sent to the HHR-Home with their scores only.**
- To make easier the data management at home, it will be necessary to gather the questionnaires – SF-MNA/ SNAQ / Chair Stand, to be programmed at the same - date/frequency/day of week
- Comments management*: the comments, registered for each questionnaire, are reserved to the Professionals* and will be used for writing the comments in the Dietary Plan / Daily Diet Recommandations, or in the Physical Activity Plan.
- To comment a "Questionnaire" the Professional can send a "Message" to the Beneficiary.

Results from data recording

List of the data entered at home or in the consultation room and displayed by date.
The professional can view for a given date: the list of the data + the identity of the place of the recording - "Professional" or "from Home"

Data recording table

Date	List of data presented at that date - Physiological parameters - Symptoms - Questionnaires	Professional / Home

- **The results will be sent to the HHR-Home – HHR1 in the corresponding Section**
- **Concerning the Questionnaires, only the scores of - SNAQ (Appetite), MNA SF (Nutritional Status), Eetscore (Diet Score) are sent to the HHR-Home;**
- The Eetscore - Only the 10 subscores will be presented here with the sum giving the Eetscore global score + the global advice.
  The list of the 10 subscores will be sent to the HHR-Home without the associated advices.
- + 2 buttons - "Modify" + "Delete"

Data recording

The professionals can enter **only new** data from the consultation room:

- Physiological parameters + Symptoms assessment scores (Manual input)
- scores of the Questionnaires (automatic input after filling in).

Items to be measured	Date / Hour	Value	Professional Involved	Comments
- Physiological parameters - Symptoms Assessment - Questionnaires - Eetscore				- comments - comments - comments - global comments

- The selection of an Item will open the list to be filled in by the Professional.
- **The results will be sent to the Data Recording Table (See above).**
- Comments management : the comments, registered, are reserved to the Professionals and will be used for writing the comments in the Dietary Plan / Daily Diet Recommandations (coaching) – page 20.
- The Daily Diet Recommandations will be sent to the HHR-Home / Dietary Plan
- The Eetscore will be filled up out of the HHR-PRO. The data come from the WU server and are manually entered here by the Professionals
- Only the 10 subscores will be presented here with the sum giving the Eetscore global score + the global comments, but without the advices corresponding to each subscores
- + 2 buttons – "Save", and "Come back to the list"

Specific Data for Evaluation

Visits of Professionals at home / Medical examinations / / Hospitalisations, to solve a problem in line with HDIM services.

Items	Date	Date	Date	Date	Total
Visit of Prof. at home					Nb
Medical Examination					Nb

Hospitalisation				Total
Name of the Hospital	Date enter	Date exit	Time in hospital (automatic)	Days

- + 2 buttons – "Save" "Add"

8. Results – Synthesis

	First measure	Last measure	Delta Results Last – First
DHD-FFQ (Diet Score)			
MNA (Nutritional Status)			
SF-MNA (Nutritional Status)			
SF 36			
SNAQ (Appetite)			
Chair Stand			
Number of steps			
Abdominal perimeter			
Calf perimeter			
Weight			
Lean/Fat			
BMI			
Symptoms assessment Results for each one			
Cholesterol			
Other			

The Directory

The Coordination will set up one Professionals directory collecting data from Persons or moral entities (Hospital Home care organisations …); nobody can work in PhysioDom without being registered in the Directory

Professionals directory

Name / surname	Professional class	Details	Phone	Email

+ Filter tools and the Export functions
+ 2 buttons « Add » “Modify” for the Coordination

The users of Physiodom

The Users of Physiodom can be Professionals from the Directory or Beneficiaries.

The access rights of each user are defined by his role. A Role defines a user profil for whom can be customized the access rights to the screen of HHR-Pro using the Administration Righrs of HHR-Pro

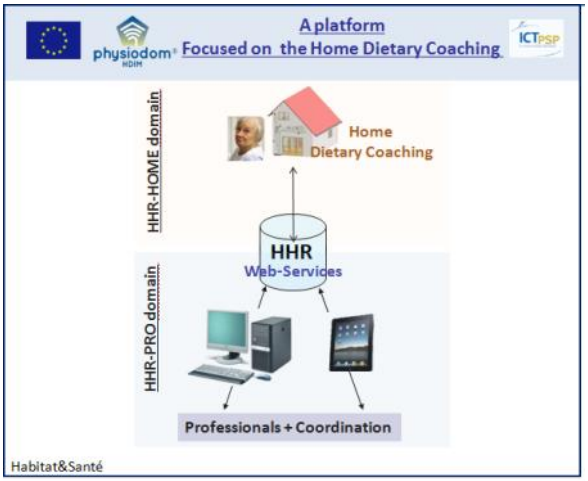
The roles to be customized can be defined in the corresponding screen in List Management

Each role has to be characterized by a role class which gives a general context of use for the role
HHR-Pro manages 5 class of role (see nomenclature Role class in list Management), which are defined as following:

ROLE CLASS	ROLE	Characteristics
ADMIN: Administration	• Administrator	• One single role prescribed • Can see all recorded beneficiaries, activated or not • Access in Read/Write to Administration screens • Expected to have all rights on all screens
COORD: Coordination	• Coordination • Other role if needed • …	• One or several roles can be defined depending on the organization of each pilot • Can see all recorded beneficiaries, activated or not • Access in Read Only to Administration screens
HEALTH: Health Professional	• Physician for instance • Other role if needed • …	• One or several roles can be defined depending on the organization of each pilot • Only beneficiaries activated and assigned to the logged professional • No Access to Administration screens
SOCIAL: Social Professional	• Social worker for instance • Other role if needed • …	IDEM HEALTH PROFESSIONAL
PAT: Patient or Beneficiary	• Beneficiary	• Only one single role possible • can see only his own folder • Access directly to his overview • Expected to have no access to the Directory • No Access to Administration screens

HHR-HOME - Functional Specifications

I - Introduction



1. The HHR ®

The Home Health Record - HHR® will collect all the numerical functions required to assist professionals in organizing the Dietary Coaching for a population of seniors living at home, on a large territory.
In PhysioDom the HHR is presented in two parts:

The HHR-HOME consulted by the Beneficiary and the home cares via the TV screen at home

The HHR-PRO consulted by the Professional via the computer of his consultation room.

Here, only the first part is concerned: the aim was to present a set of well organized functions to be able to organize the Home Dietary Coaching to be put at the Beneficiaries disposal through an interface named – HHR-HOME (HHR-HOME domain).

2. Global Pre-requisites

Languages

The HHR-HOME Platform is available in 3 languages (Dutch, English and Spanish).

The PhysioDom-Box

The TV box of the PhysioDom platform is called PhysioDom-Box.
Each home is equipped with a numbered PhysioDom-Box and with a specific remote control.
No major modification is made to the original organization - TV + Box of the Beneficiary.
PhysioDom-Box is connected to the TV via:

- The second HDMI plug
- A HDMI connection + Peritel plug if necessary

PhysioDom-Box is connected to the Internet Network and the server through:

- A 3G type connection
- An ADSL type connection by using an Ethernet cable to connect the PhysioDom-Box to the ADSL box

At the time of the installation, the PhysioDom-Box is connected to the Grid of the apartment/house; it should not be unplugged.

The PhysioDom-Box is the intermediary between:

- The TV screen - where the data of the Home Health Record are displayed- HHR-HOME
- And the remote server which manages the HHR-PRO with information filled out by the Professionals.

The management of the Server-PhysioDom-Box connection is ensured by the technical service of the Pilot.
Beyond the TV screen, the Internet network, and its own remote control, the PhysioDom-Box is connected to the sensors of the physiological parameters,. The connexion to a Tablet (I-pad...) is under consideration.

The Remote Control

The used remote control buttons are:

- The color buttons (red, green, yellow, blue) to access the screen of the different application sections
- The arrow buttons to move the focus to the different items of the screen
- The OK button to activate an element of the screen or validate data entry
- The Menu button to display the Home screen
- The numeric buttons to enter numeric data
- The Power button, to switch on/off the HDMI signal and display the Home screen. TBD (depends on the platform).

Sensors of the physiological parameters

Placed at the residence these sensors can be:

- Radio-communicating with the PhysioDom-Box with an automatic input of the data;
- Not communicating and then requiring a manual input of the data.

In PhysioDom, bathroom scales and tensiometer are radio-communicating - with Bluetooth connection, well adapted for indoor use.

The bathroom scales

They must generate three types of data: weight, the ratio FFM/FM and BMI.
All the Beneficiaries included in the Panel are equipped with such a bathroom scale.
The reading of the parameters will takes place depending on the prescriptions by the Professionals on the HHR. The measurement protocol will be specified at the time of the installation of the material at home.

The tensiometer

The tensiometer with Bluetooth function will be provided on request, depending on the pathologies which are treated, to provide data on blood pressure and heart rate.

The data generated by these two sensors are automatically captured by the PhysioDom-Box, which implies that the “Measurements” screen is displayed on the TV before the weighing or the blood pressure measurement. The system is then ready to receive information coming from the sensors. Measurement has to be validated.

If the automatic measure of the data doesn’t work, the beneficiary can input the data with the remote control.

Other types of sensors

These are placed in the residence, generating data captured by means of the remote control (or a keyboard, not prescribed in this version):

- Each Beneficiary will be equipped with a pedometer measuring the distance travelled, the number of steps…
- Sensors of more classical parameters - thermometer, glucometer… depending on the pathologies.

Optional data

Some data will be captured without intermediation of a sensor:

- Data coming from clinical measurements - calf circumference, diuresis.
- Data coming from the beneficiary's own appreciation, the symptoms - pain, tiredness….

All these data stored for a while in the PhysioDom-Box, will enrich the file of the Beneficiary, managed by the Professionals assuring the medical care, and in particular the persons in charge of the Home Dietary Coaching service.

Navigation

For this version of PhysioDom, navigation on the TV screen, by means of the remote control was simplified to be more intuitive, avoiding hierarchical ways of navigation, which is time-consuming.

In the current version, the modifications on a page can be consulted by scrolling with the arrow buttons of the remote control and selecting highlighted items using the OK button.

The changes in the menu can be obtained by activating one of the four corresponding colour buttons displayed in the upper part of the screen. Activated on the screen, these buttons give access to the four main chapters of the HHR-HOME: Diary, Mailbox, HHR1 (data capturing, information feedback of the Professionals), HHR2 (prescriptions).

One can enter directly in one of the chapter of the HHR-HOME by pressing the corresponding colour button of the remote control.

II – User cases

1. The Actors

- Beneficiaries included in the PhysioDom panel which have been trained
- The family and other natural helpers
- Health and social care Professionals at home to help the beneficiary or to be acknowledged.

2. Access to the PhysioDom platform

By means of the television of the beneficiary, thanks to its remote control with HDMI plug (or Peritel) connected to the PhysioDom-Box.

Which screen should appear first?

- The screen that was opened the last time that PhysioDom was used or
- The first page of the HHR-HOME – the presentation of the menus?

The latter would be the ideal solution, but this means that the signal of the change in entry plug should be recuperated ("switch") which allows switching from the classical TV to the PhysioDom channel.

If that is technically not possible, the beneficiary should be able to press a button of the PhysioDom remote control (ex: I/O) to display the first page of the HHR-HOME.

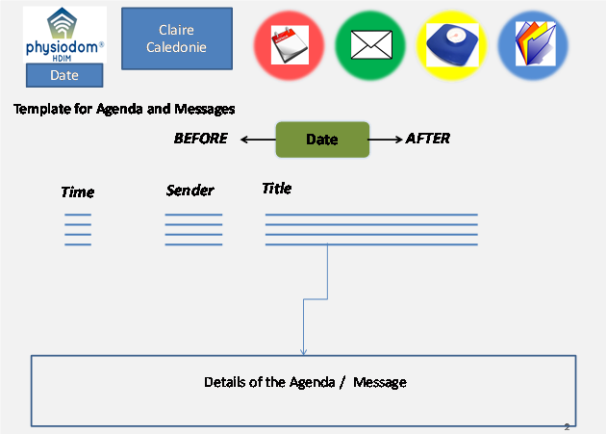
3. The TV screen presentation

(to be validated during the Pre-Pilot Execution – WP3)

The background uses one of the four coloured buttons of the remote control, according to the section to be consulted- Agenda-red, Message-green, HHR 1-yellow, HHR 2-blue.

The contents are displayed in three parts:

- **The upper part** identical for all screens, with from left to right: the PhysioDom logo, the date and day of the week, the name of the Beneficiary, and the representation of the four coloured buttons in the order: Red (Agenda), Green (Messages), Yellow (HHR1), Blue (HHR 2).
- **On the lowest** part of the screen, technical messages will be displayed, such as "the HHR isn't connected".
- **The central and lower part** change according to the section consulted.



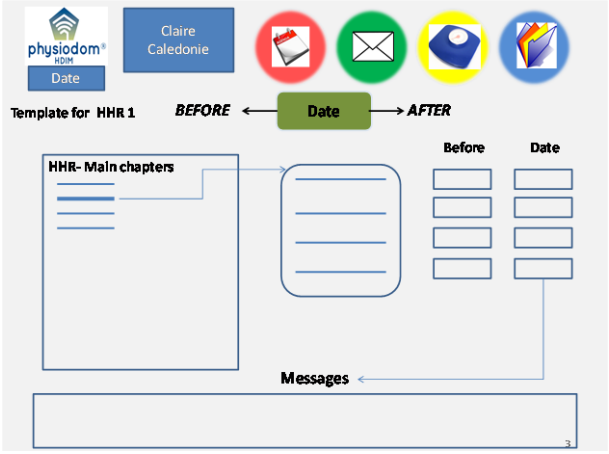
Agenda and Messages see opposite for the design of the screen:

- On top: the date surrounded by 2 zones - BEFORE/AFTER
- Middle part: the list of the services or messages.
- In the lower part: the description of the services or contents of the message.

The HHR1

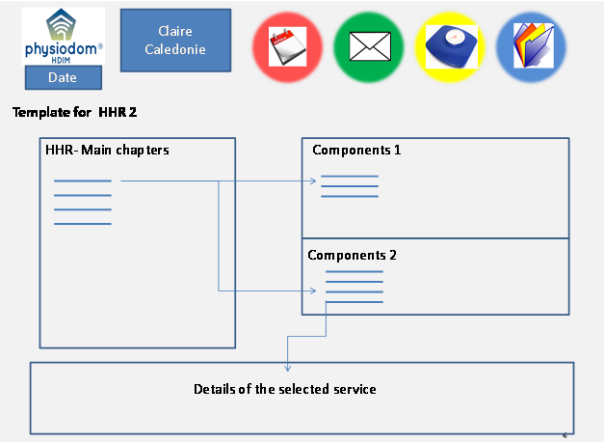
The screen looks like the picture at the opposite with field G showing the main chapters.

The content of the selected main chapter is shown in the field on the right and the two columns further on the right show the following fields:



In the most right column, called "date", the results of the measurements taken at the present day can be entered.

- In the column “before” the result of the previous measurement is displayed
- The lower field shows the messages specific to this part of the HHR.

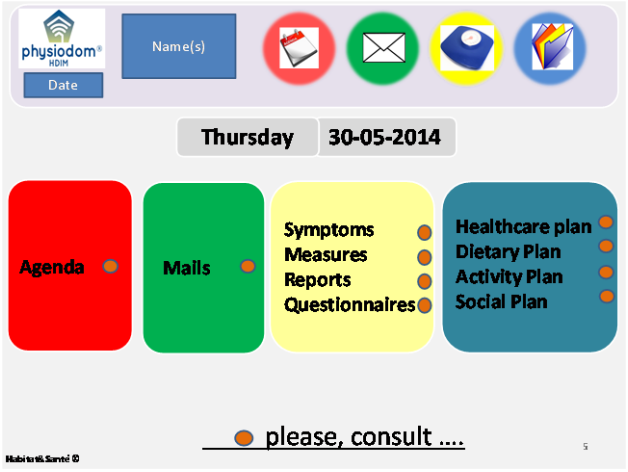


The HHR 2

This screen contains 3 fields reserved to display the health /social plans of care, posted by the professionals in the HHR-PRO.

According to the principle described previously, the selection of a main chapter opens the field “components 1” and if necessary, the field “component 2”.

The lower field is dedicated to display the details of the health and social care services selected in the upper screen.



The first screen

Called screen of the menus, shows the four main chapters of the HHR-HOME, the colour of each box corresponding to the colours of the buttons of the remote control: Agenda-red, Mailbox-Green, HHR 1-Yellow and HHR 2-Blue.

The day and the date appear in big characters on the top of the central part.

Each line of the contents of the four fields can be individualized by a luminous point announcing a change posted on the HHR-PRO and transmitted to the TV. This (these) warning light(s) disappear after consultation of the modification(s) by a person at home.

In the upper part a drop-down menu can be opened which shows all the beneficiaries connected to the PhysioDom-Box installed at this home. The selected name allows displaying the corresponding HHR-HOME, with the name of the Beneficiary.

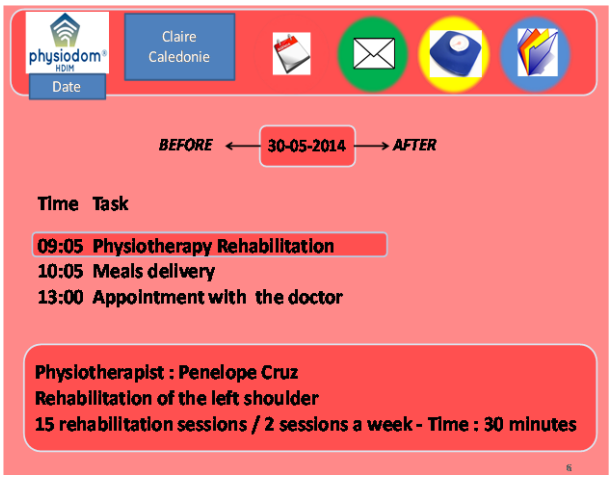
Selection of the beneficiary

There can be one or more Beneficiaries in one place, but there is only one PhysioDom-Box and one TV screen. The choice of the Beneficiary is made using a drop-down list, which is presented on the page of the menus.

III - The five main components of the HHR-HOME

1. The screen of the menus

(See above)



2. The Agenda

The background of the screen is red.

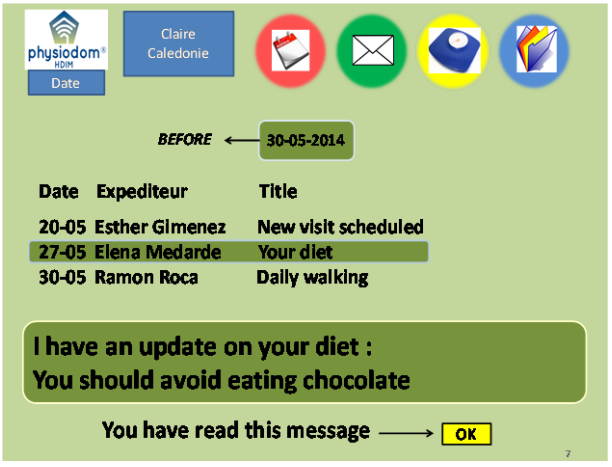
This screen makes it possible to visualize the various home interventions for the beneficiary planned for the selected day, by default the present day.

One can make inquiries to the system from 15 days "BEFORE" to 15 days "AFTER" the present day.

For each intervention the following elements must appear:

- Date / Time of the beginning of the intervention / Task (category of the intervention)

In the lower field: description of each intervention, the intervening Professional, the descriptive of the services delivered.



3. The mailbox

The background of the screen is green.

This concerns messages received at home.

This screen allows displaying messages received by the PhysioDom-Box, coming from the Professionals.

Only the last 20 messages will be displayed with the following elements: Date / Sender / Title of the message.

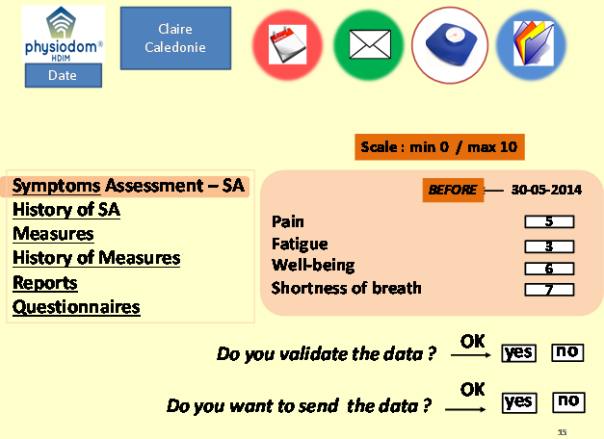
The content of each message can be visualized, and the warning signal on the menu screen will be turned off, once the reading of all the messages.

4. The HHR1

The background of the screen is yellow.

This chapter contains two main parts focusing on:

- The data acquisition: Symptoms assessment / History of the symptoms / Measurements / History of the Measurements
- Information and feedback of the Network: Questionnaires (scores)/ Reports from the Professionals.

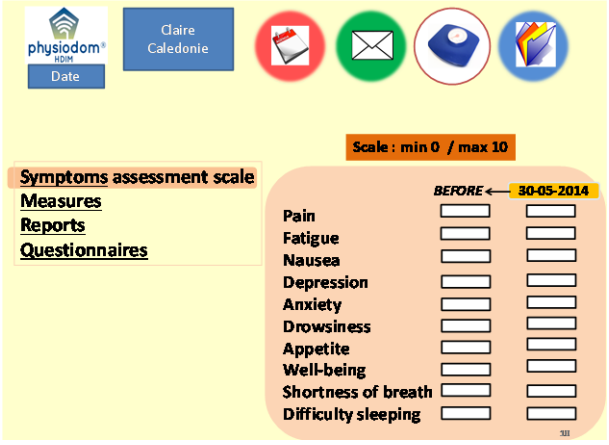


Symptoms assessment

Displays the list of "symptoms" with the fields in which the Beneficiary can enter a value translating his personal evaluation of the symptoms.

For each symptom, the beneficiary must enter a value (ranging between 0 and 10). To help him with this task, the last value entered is displayed with the corresponding date in the column "Before".

When the recipient has filled out the fields, he must validate the data entries through the function "Send".

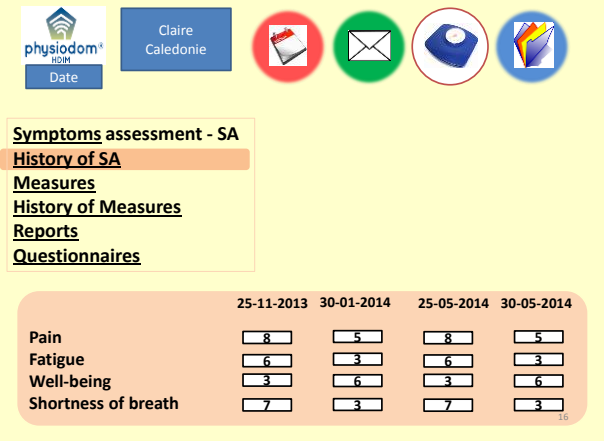


The data are sent to the server and the list will disappear from the screen. One cannot renew the entry of the same variable for the next 24h.

The list will remain active as long as the beneficiary did not completely fill out his obligations over a three days period. The coordination will be alerted. Three days later, if the list isn't totally filled up, the system send a new list to be filled in by the beneficiary with a message from the coordination:" please don't forget to fill in the list of the symptoms"

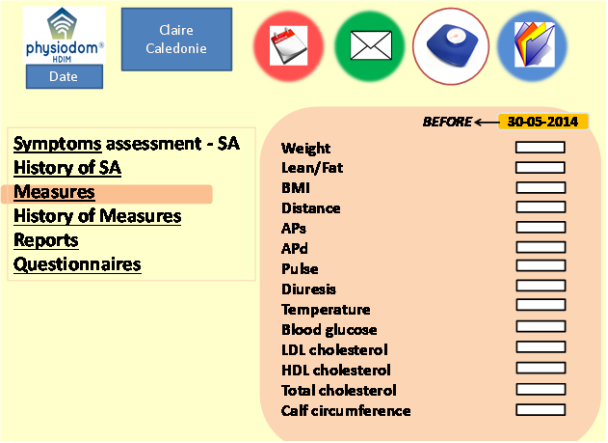
Then the old list is deleted to make place to succeeding lists.

The list of these symptoms can be programmed using the HHR-PRO.



History of the Symptoms Assessment scores

Upon selection of "History of SA", a field will open containing the last figures (maximally five) of the scored symptoms, with the corresponding dates.



Measurements

The management of the measurements is quite to that of the symptoms. But the screen doesn't display automatically the list under "BEFORE".

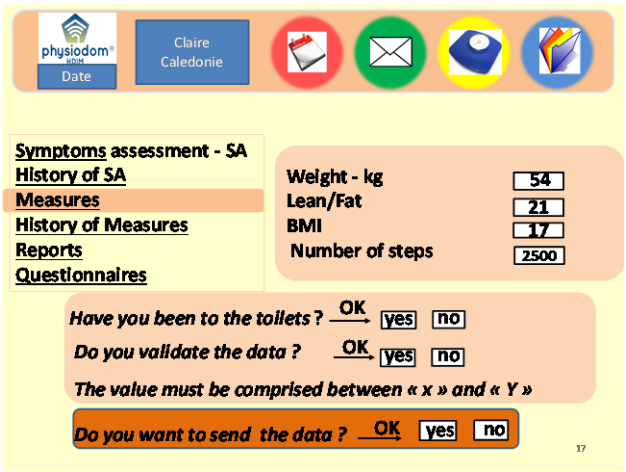
The last measurement should be displayed until the HHR-PRO sends the order of new measurements. In that case the fields to be filled will be emptied.

The beneficiary fills out each measurement (manually or automatically thanks to the connected objects: balance, tensiometer).

If a value entered by the recipient is outside the range of the possible values for this variable (max and min defined on the HHR-PRO), the system informs the beneficiary (see message on the screen).

The validation of each entry, by the beneficiary, is mandatory.

Message – "Do you validate the data" with two possible answers –« Yes » or « No »:



- If answer is "No" the entry will be deleted. The beneficiary can start the procedure again

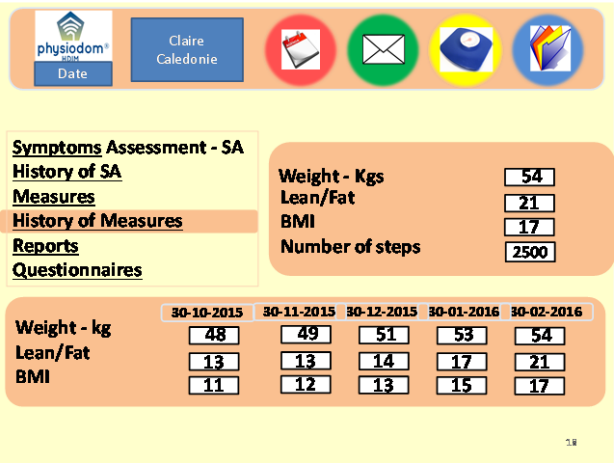
- If the answer is "Yes", the measurement will be validated and the data is displayed in the dedicated field.

When the recipient has filled out the fields, he must validate the input through the button "Send". The data are sent to the server and a message confirm the sending: "Your data are sent to your Personal Record".

The warnings of the menu page are removed.
One cannot renew the entry of the same variable for the next 24h.
If the recipient hasn't filled in all the fields and actives "Send" a message is displayed on the screen: "You must fill in all the fields".

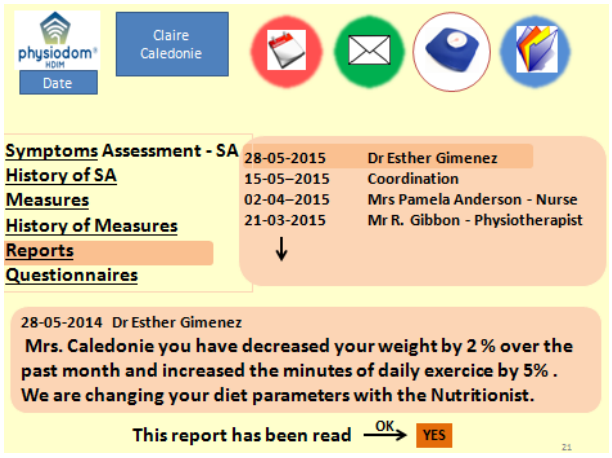
The list will remain active as long as the beneficiary did not completely fill out his obligations over a three days period. The coordination will be alerted. Three days later, if the list isn't totally filled up, the system send a new list to be filled in by the beneficiary with a message from the coordination:"please don't forget to fill in the list of the data". Then the old list is deleted to make place to succeeding list.

Once the entire list of measurements has been sent, the items "Measurements" will disappear from the screen. "Measurements" will reappear by order of the server when new data will be entered.
The list of variables to be measured at home can be programmed using the HHR-PRO.



History of the measurements

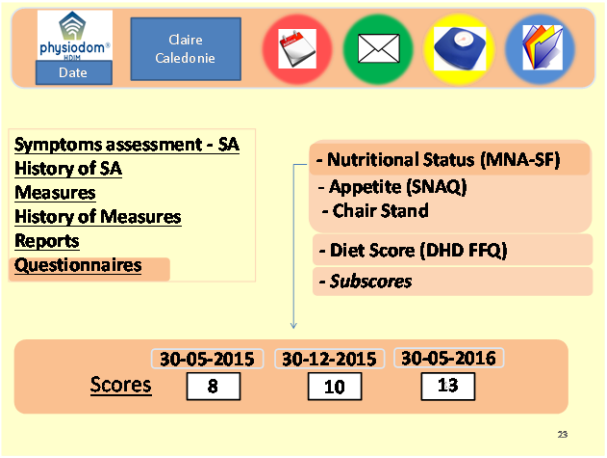
The history of the measurements should allow the display of the 5 most recent results with the dates corresponding to each value.
The history can be obtained by selecting "History of Measures"+ the selected measurement (here: weight-kg). Weight, Lean/Fat, BMI are linked and always presented together.

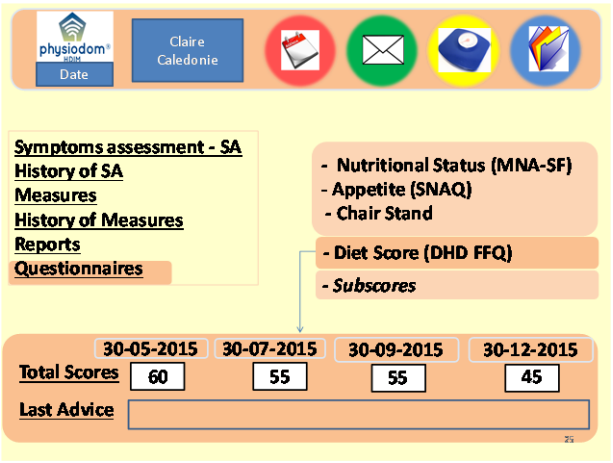


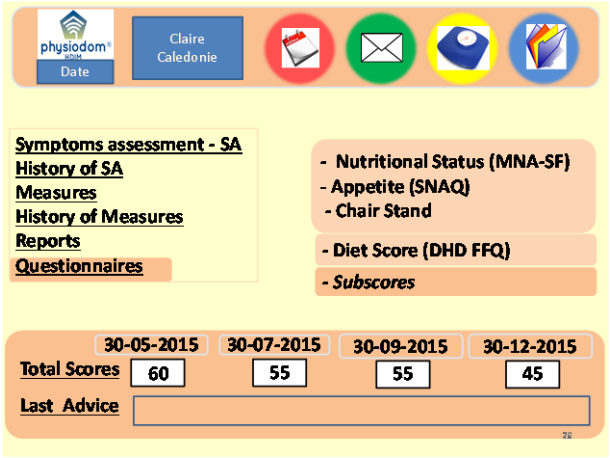
Reports

This chapter allows displaying the reports written in the HHR-PRO by the professionals of the health care and social services, with the following elements: Date / Sender and Contents which are displayed in the lower field.
The content of each report can be visualized, and the warning signal on the menu screen will be turned off, once the reading of all the reports.
The alarm signal disappears on the page of the menus.

One can select a new report without an acknowledgement.
The reports are kept for 60 days max and one can display the 20 last reports.
One can have access to preceding reports by selecting the scroll-down arrow, in the column with the dates.







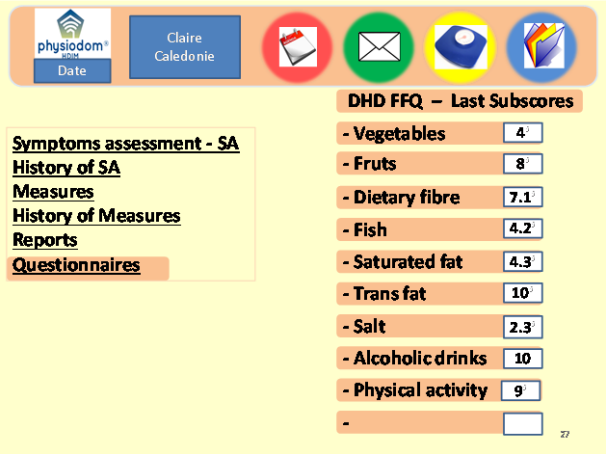
Questionnaires

This chapter presents the list of the 3 questionnaires – Appetite (SNAQ) / Nutritional Status (MNA SF) / Diet Score (Eetscore)
For each questionnaire, the scores upon evaluation by a professional or the beneficiary are displayed in the HHR-PRO.
The Chair Stand results are placed here.
The system makes it possible to visualize maximally the last 4 scores with the corresponding dates.

The Eetscore is a questionnaire specifically designed to monitor the Dutch dietary intake. It is filled out either by a professional or by the beneficiary using specific software.

The results will be presented as 10 "Subscores", which can be summed up to obtain an overall score with a value between 0 and 100. On the TV screen, the last four overall scores will be displayed with an advice corresponding to the most recent score.
Upon selection of the field "Subscores", the screen presented below will be opened.

The 10 "Subscores" will be displayed, corresponding to the last Eetscore data entry. Each “Subscore” has a value between 0 and 10, expressed to one decimal place.

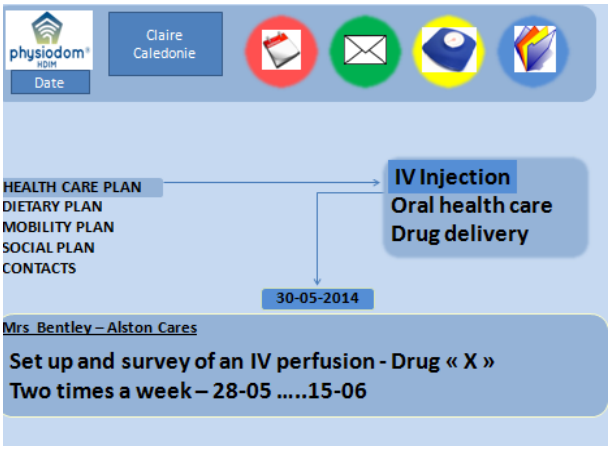


Advices for each "Subscore" can't be displayed on the TV screen. They will be consulted by the Professionals and the Beneficiaries on other devices - PCs, tablets, iPhones.

5. The HHR2

Combines the entire set of prescriptions realised at the level of the HHR-PRO: Healthcare plan / Dietary plan / Activity (Mobility) Plan / Social Plan, and the Personal and Professional Contacts.

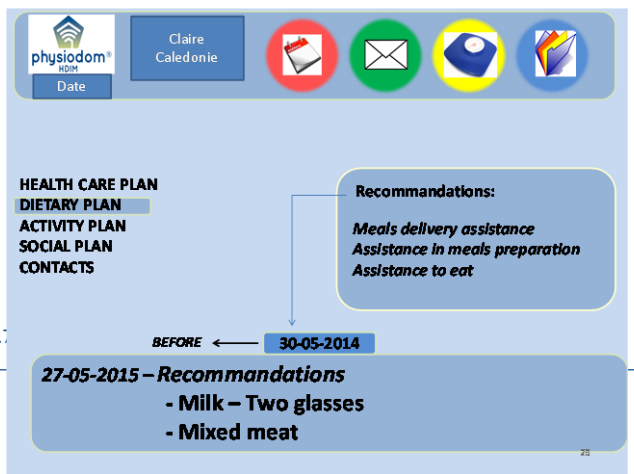
Health Care Plan



For each of the main group of services of the list: Nursing / Physiotherapy / Chiropody / Hygiene / Drug delivery, of the HHR-PRO, we will directly display the list of the prescribed services – ie: IV injection + Oral health care for Nursing + Drug delivery and eventually, the recommandations (short text).
For each prescription are displayed: Professional involved / Object / Frequency/ Starting and End date.

Dietary Plan

- The recommendations made to the beneficiary will appear in the lower part of the screen, upon selection of a meal.

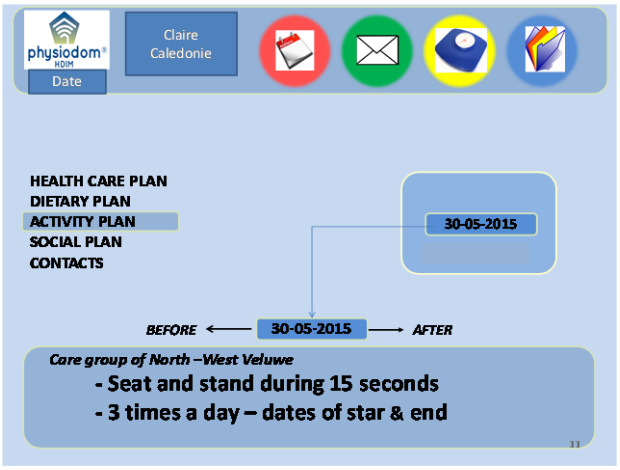


The Recommendations which come from the "Daily Diet Recommendations table" can be visualised over a period of 30 days "BEFORE" the current date.

- Below the Recommandations we can see the titles of the services which provide an assistance to - the “Meals delivery”, the “Meals preparation” or an “Assistance to eat”.

The selection of a title – “Assistance to eat” will display the content of the lower field, with the following elements: Professional designated to the service / Frequency / Object / Time.

The Recommandations can be looked upon over a period of 30 days – “BEFORE” the current date.

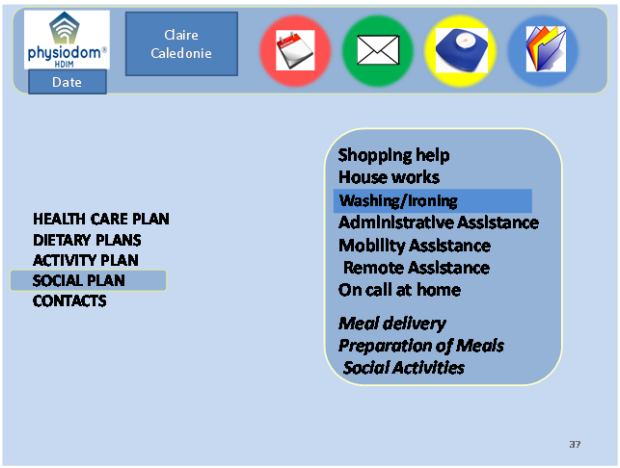


The others Assistance Services: “Meals delivery assistance”, “Assistance to meals preparation”, are managed in the same way.

Physical Activity Plan

Allows visualising the prescriptions made to the recipient

Each prescription, joined with the relevant recommendations, will appear upon activation at the lower part of the screen, together with: the professional implied / the current date.



The prescriptions can be looked upon over a period of 30 days – “BEFORE” the current date

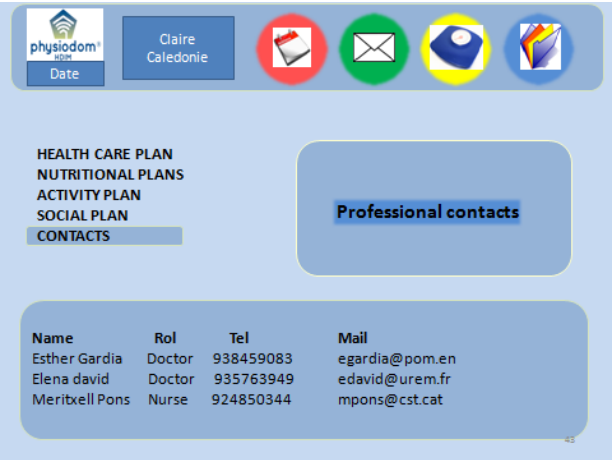
Social plan

Should allow to visualize the different services prescribed to the beneficiary by the social care professionals in the HHR-PRO.

On the TV screen will be displayed: the Basic social services / the Dietary services / the Social Activities.

For each service, the selected prescriptions will be displayed together with: the date / the name of the Professional implied / the Frequency / When in the Day / Week.

If the Beneficiary wants to know the social services prescription “Before” or “After” the current date, he will have to consult the “Agenda”.
A message could be displayed on the TV screen when “Before” and “After” are selected.



Contacts

After selection of an item, the list of the Professionals contacts – will be displayed in the lower part of the screen with: Surname and First name / Role / Telephone number / email address

IV – Notes

1 – The screens are presented here, as examples to illustrate the text and their design aren’t mandatory. In this way colours on the screens and navigation, basics of PhysioDom, will be adapted, function of the technical requirements and of the results of the Pre-Pilot period.
But, concerning the content, the complete agreement is needed between each screen and the HHR-PRO designed following the PhysioDom rules.
2 – The technical support section - Users interface for language choice / Network status for 3G management / PhysioDom box identity for the matching with the HHR-PRO, will be presented in detail in the Specification and Architecture document – D2.2

Test Report

I. Introduction

This document is aimed to show and explain the test procedure in place at Viveris Technologies facilities in order to validate:

- The Sub-systems of Physiodom-HDIM project: HHR-Pro and HHR-Home
- The data communication between sub-systems
- The Bluetooth connected devices

This document is also aimed to show the test results of the latest released version of HHR-Pro and HHR-Home software.

The full D2.3 Test Report is composed of several documents:

- *PhysioDom [Pro v.1.0.5][Home v.1.0.5].xlsx*
  - A quick summary of all test results

- *PhysioDom FullSystem [Pro v.1.0.5][Home v.1.0.5].docx*
  - Test cases description and results on HHR-Home and Communication between HHR-Home and HHR-Pro

- *PhysioDom HHR-Pro Validation V1.0.5 CROME PC & NEXUS 9.docx*
  - Test cases description and results on HHR-Pro using Chrome on PC and on a Nexus 9

- *PhysioDom HHR-Pro Validation V1.0.5 FIREFOX PC.docx*
  - Test cases description and results on HHR-Pro using Firefox on PC

- *PhysioDom HHR-Pro Validation V1.0.5 SAFARI iPad.docx*
  - Test cases description and results on HHR-Pro using Safari on an iPad

II. Test Strategy

1. Software Releases

Following the V-Cycle steps of a software development, each partner (Télécom Santé and Sirlan) provides a software release to Viveris Technologies in order to be integrated and validated.

Based on the test results of the previous release, both entities (Viveris and Télécom Santé for HHR-Pro; Viveris and Sirlan for HHR-Home) define together :

- A release date for the next version of the software
- The content of the next version (bug fix, new features, …)

Naming convention

The naming convention used for this project follows the Semantic Versioning Specifications: MAJOR.MINOR.PATCH

- MAJOR version when you make incompatible changes,
- MINOR version when you add functionality in a backwards-compatible manner,
- PATCH version when you make backwards-compatible bug fixes.

Major Version 0 has been used only during development phase.
Major Version 1 is now used as the software is ready for production.

Software delivery procedure

For HHR-Home, released software are downloadable from a ftp server
For HHR-Pro, an image of the released software is pushed directly on IDS server by Télécom Santé.

2. Test procedure

Integration

This first step of the validation process is aimed to bring together all subsystem into one.
Integration can be split in two:

- The update of each subsystem with the latest software released version,
- The setup of each subsystem to ensure the functionality of the entire system.

Acceptability

Acceptability is the process of finding if the software version contains any major issue causing a refusal of the release.
Main points checked during this acceptability phase are:

- HHR-Pro
  - Access to the web application (login, main menu access, navigation, …)
- HHR-Home
  - Access to sportal
  - HHR-Home displayed on a TV screen
  - Navigation using remote control
- System

- C

ommunication between HHR-Pro and HHR-Home

At the end of this acceptability phase, the release can be accepted or refused. If refused, the partner in charge of the software development is asked to fix the issue as soon as possible. If accepted, the validation process can start.

Validation

The validation process is composed of two different phase:

- Test of HHR-Pro sub-system
- Test of HHR-Home sub-system + communication with HHR-Pro

The validation process always starts by the verification that issues announced as fixed on the software release are really fixed.
The second step of validation process concerns the non-regression: a set of test cases covering the entire functional scope is performed.

Each test case result on a specific classification:

Result	Description
OK	Test consistent with the expected result
NA	Unexpected behavior, test not applicable
NOK	Test not consistent with the expected result
NT	Not testable due to a specific issue

3. Issue Ticketing System

Each Test Case with status “NOK” results in the creation of an Issue ticket assigned to developer. Each ticket refers to a unique issue seen on a specific released software.
Based on the list of opened tickets, the content of the next software release is defined. Thus, developers have the list of issues to fix.
For each software release, developers have to change status of each fixed issue to “Resolved”. This allows testers at Viveris to verify that issues are well resolved.

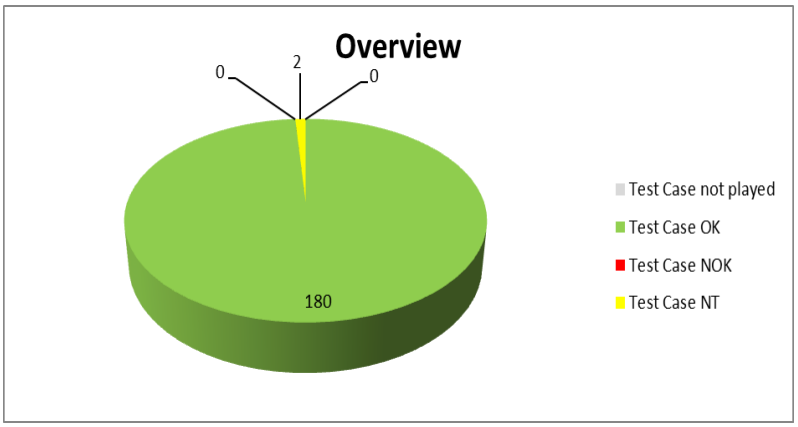
III. Test Strategy

1. Results

All tests have been performed on HHR-Home v.1.0.5 and HHR-Pro v.1.0.5

Chrome v38 on Nexus 9, Chrome v43 on PC

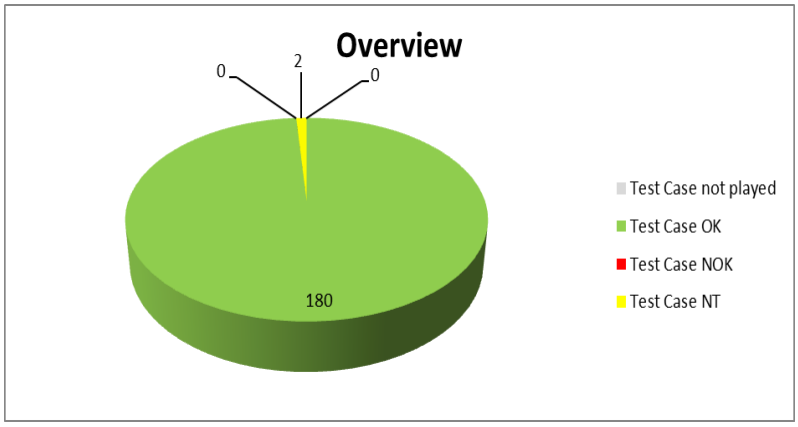
Results	
Total Test Case	**182**
Test Case played	**182**
Test Case not played	**0**
Test Case OK	**180**
Test Case NOK	**0**
Test Case NT	**2**



The two Test Cases “Not Testable” are linked to functions not yet developed : Active Services and Agenda

Firefox v38.0.5 on PC

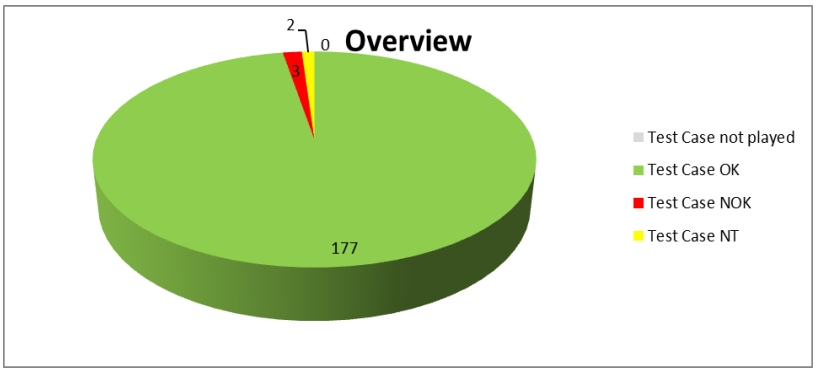
Results	
Total Test Case	**182**
Test Case played	**182**
Test Case not played	**0**
Test Case OK	**180**
Test Case NOK	**0**
Test Case NT	**2**



The two Test Cases “Not Testable” are linked to functions not yet developed : Active Services and Agenda

Safari 8.0.2 on iPad

Results	
Total Test Case	**182**
Test Case played	**182**
Test Case not played	**0**
Test Case OK	**177**
Test Case NOK	**3**



The 3 Test Cases “NOK” are linked to bug issues #403 assigned to TélécomSanté for resolution. Explanation of the issue: If at least 1 mandatory field is empty when clicking "save", an offset appears on touch screen coordinates.

The two Test Cases “Not Testable” are linked to functions not yet developed : Active Services and Agenda

IV. Annexes

- *PhysioDom [Pro v.1.0.5][Home v.1.0.5].xlsx*
  - A quick summary of all test results

PhysioDom [Pro v.1.0.5] [Home v.1.0

- *PhysioDom FullSystem [Pro v.1.0.5][Home v.1.0.5].docx*
  - Test cases description and results on HHR-Home and Communication between HHR-Home and HHR-Pro

PhysioDom FullSystem [Pro v.1.0

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  - Test cases description and results on HHR-Pro using Chrome on PC and on a Nexus 9

PhysioDom_HHR-Pro _Validation_v.1.0.5 C

- *PhysioDom HHR-Pro Validation V1.0.5 FIREFOX PC.docx*
  - Test cases description and results on HHR-Pro using Firefox on PC

PhysioDom_HHR-Pro _Validation_v.1.0.5 F

- *PhysioDom HHR-Pro Validation V1.0.5 SAFARI iPad.docx*
    - Test cases description and results on HHR-Pro using Safari on an iPad

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_Validation_v.1.0.5 S

End of the document