

# MANDATORY TECHNICAL SPECIFICATIONS

for  
Development, Integration  
& Implementation  
of

# SIAHDPC

**General specifications**

The platform must be developed and integrated according to these requirements:

- This platform should remain documented. Existing platform must be developed and integrated according to developing standards. Existing platform is developed in PHP, Html, CSS, Javascript and uses MySQL Database.
- Modifications and integrations should be designed on evolutionary mode to accommodate the possible future expansion of the system or meet future requirements arising.
- To ensure portability of the system to multiple platforms
- The platform must remain secure, data intervention from third party should be prevented with the highest standards of security. Patient data must be always secure, encrypted and private.
- To embed security measures against the data hacking/ tempering, data access, and data in transit etc
- Any change to be traceable as a result of recording all interventions/changes made by each user account.
- Enable filtering and quantification of nominal values and quantities by all indicators
- The system shall provide the capability to back-up database data.
- The system should keep log of all the interventions from each account.
- The system shall keep a log of all the errors.
- The system shall be available all the time.
- The systems codebase and the project as a whole must be transferred to QTH, then QTH will take the ownership of the source code.
- The source code should be well written; it must have documentation.
- The application must have no proprietary dependencies.
- Data encryption is a must on transferring the data between User and platform and must be securely stored on our system.
- Uploads should be encrypted from the server before the upload starts, the encrypted files then will be uploaded to the server which knows the encryption key
- Must be user-friendly and this is achieved by the creativity of the company but is well appreciated by the applicant

Essential features:

- The platform must be able to export the database and backup it depending on the filter options.
- The platform should have a chat bot that would serve for customer care support box
- The platform should have Crossover features which improve and help online user experiences

- The platform should be able for Communication Ways: Clients & Doctors can connect through in-app chat, in-app calls, or video sessions.
- Execution Plan & Deliverables: The developing company must provide a detailed execution plan with deliverables list.
- Feedback: It must open to everyone and engage users into mutual communication. Users should be able to leave suggestions, rates, and reviews.
- Search: It must have system of search and filters.
- The platform would be able to set the GAS, ICF, ICD10 internal standard codifications

## Module Requirements

Patient Management System has most of these modules. The development and integration phase should complement the modules with new features as well as create the necessary modules as an added value of the application. The following modules are the high-level requirements that this system satisfies:

- Admin Module
- User Registration Forms
- Calendar Appointments
- Communication Ways
- Identifying the Needs
- Evaluation and Diagnostics
- Treatment Goals Planning
- Treatment
- Review
- Reflection
- Financial Module
- Logistic Module
- Library, Data and Reports

## User Registration Forms Accounts, Attributes & Privileges

Administrative Staff Members will be responsible for determining user privileges. User privileges should be segregated by individual or group or other settings. These settings should be within the Administrator Module in order to navigate and control the responsibilities.

| Categories |       |                |               |         |                       |            |
|------------|-------|----------------|---------------|---------|-----------------------|------------|
| Client     | Staff | Academic Staff | Medical Staff | Student | External collaborator | Researcher |

The platform should include different types of user accounts. Each user account will have different type of attributes and privileges. All users will interact on the same platform.

|                           |             |  |
|---------------------------|-------------|--|
| Regular Registration Form | Name        | Short Paragraph                        |
|                           | Surname     | Short Paragraph                        |
|                           | Birth date  | Calendar view option                   |
|                           | Sex         | Dropdown menu                          |
|                           | Phone       | Prefix (0) ___-____-____               |
|                           | Email       | Email domain detection                 |
|                           | Password    |  |
|                           | Username    | short paragraph; space bar not allowed |
| ID                        | Primary Key |  |

Client should confirm some statements if he interested to go further

|                          |   |
|--------------------------|---|
| Client Registration Form | Informed consent e-approval                         |
|                          | Informed consent e-approval (student participation) |

If the client continue with further steps in the clinic then the reception staff must complete and update the client data and details. Most of them are Personal, Heteroanamnestic and socio-economic data except of Chronic condition and other medical data

|  |                          |               |
|--|--------------------------|---------------|
| Client Registration Form – Reception Staff | Blood Group              | Dropdown menu |
|  | Antigen                  |               |
|  | Allergies                |               |
|  | Chronic health condition |               |

while, for different staff will be present the different attributes that are attached to the basic attributes of each of the users:

|  |   |                            |
|--|---|----------------------------|
| Administrative, Medical and Academic Staff And External collaborator | Discipline  | Dropdown menu              |
|  | Roles involved  | Dropdown menu; Check Boxes |
|  | <input checked="" type="checkbox"/> I agree to the code of ethics and the protection of confidentiality |                            |

|                   |  |
|-------------------|--|
| Registration Form | Put as a hyperlink the ethical codes of each profession. |
|                   | NOTE: will be a prerequisite for opening an account      |
|                   | Load the contract. Declare!                              |

Student registration should be done automatically through the API by calling only his ID otherwise we must register students also.

## Calendar Appointments

This platform contains calendar appointments from different users: from the client to the staff of this clinic.

Calendar appointments must be flexible to hours or days in schedule. Appointments in the calendar should be modified in duration, the possibility should be created for appointments lasting a few minutes or hours. The client has the right to decide on the appropriate schedule of visits, but it is up to the receptionist to confirm these appointments.

The appointments in the calendar will notify all the actors of the cases when they are verified.

The calendar module must be implemented according to the rules and work flow of the center.

## Communication Ways

Communication channels such as chat box must be added to this platform. This will be used to help clients with navigation and accessing the site more easily. That could serve for customer care and support.

The platform should be able for Communication Ways: Clients & Doctors must have the opportunity in the future to connect through in-app chat, in-app calls, or video sessions. It would be good to have any suggestions on the selection of these applications to be integrated

## Identifying the Needs

The case manager has access to customer data. The client's first contact is with the case manager, this contact should be through an online communication channel which must be incorporated into the platform.

The case manager takes the history of the case and fills it in directly on the platform in the Narrative Report. Creates the space for the narrative report, Creates the space for clinical doubts according to the ICF, Creates the space for Limitations or environmental aids, Creates the space for Determination of the hypothetical diagnosis according to the ICD.

- Since students are an active part in all steps and have access to all steps of the evaluation process, a space must be created where: Narrative reports, qualifications and diagnosis according to the student in each space of each professionals

Student reports should not be seen by other professionals and serve for the reflection and evaluation phase by the clinical mentor or the internship manager or the professor of the subject who should have access to this space.

Students are not allowed access to the professional's data during the process until the time when the submission is made.

Because students should not be influenced by the evaluations of professionals

The internship manager takes care of the students' comments and evaluates the student's performance through a form that must be included in the platform.

## Evaluation, Diagnostics, Treatment and Goals Planning

It is up to the case manager to decide which professional of the field should evaluate he presented cases.

Each professional who accepts the case must perform a monodisciplinary assessment and the system remains to assign the diagnosis according to ICD 10.

- Since students are an active part in all steps and have access to all steps of the evaluation process, a space must be created where: Narrative reports, qualifications and diagnosis according to the student in each space of each professionals

Student reports should not be seen by other professionals and serve for the reflection and evaluation phase by the clinical mentor or the internship manager or the professor of the subject who should have access to this space.

After the monodisciplinary examination, the interdisciplinary team is assembled by the case manager to compile the interdisciplinary report and this report now remains the final joint report and acceptable to the client as well.

Space must be created for setting objectives and activities according to the SMART method by the interdisciplinary team, including the GAS approach

All the therapists who have done the client's evaluation must set their objectives during the therapy that they will develop in the model created above.

The objectives are set for a certain time and in the platform system, the possibility of setting deadlines with the traffic light system should be created, depending on when the multidisciplinary team decides.

Notification from the platform when it arrives at the specified time If it is reached before the deadline, it is allowed to change the activity

Every 3 months, the objectives must be reviewed by the multidisciplinary team, (or the time limit is set by the team)

Create a system of collecting points to determine if the objective has been reached.

Create the possibility that each activity has a narrative part in case the therapist needs to write.

Activities must be generated for each session in such a way that there is not only one possibility of change.

Create the final treatment plan based on GAS

The customer data management module presents the following options:

|              |            |                    |                       |
|--------------|------------|--------------------|-----------------------|
| General data | Assessment | Planned objectives | Add treatment session |
|--------------|------------|--------------------|-----------------------|

General data includes details obtained from the registration phase. The evaluation includes the overall interdisciplinary report and the monodisciplinary reports. Planned targets are organized as described in the previous step (Planning targets and treatment plan). The "Add treatment session" button automatically opens the new page of the new treatment session in the discipline of the therapist that he has in his profile

Therapists can offer additional recommendations/notes regarding planning objectives/goals.

After the completion of the treatment plan timeline, the interdisciplinary team meets to review the achievement of the objectives together with the client, case manager and student, and a report of the current situation is created.

The eventual assessment that the team needs to objectively assess the client's condition is done.

A new common plan for continuation of the treatment can be defined, redefining the objectives and activities or only the activities, it remains at the discretion of the team. If the team assesses that the objectives have been achieved, then the final report is written and uploaded to the system where the client has access and it is called a closed case.

## Library, Data, Reports, Review and Reflection

By means of libraries, data and reports, the results of the client are displayed in order to set various graph options which can be used to extract descriptive data on the results from the client data to be used for research purposes.

Set a period of 1 month for an automatic email questionnaire with which we can keep in touch with the client after completing the therapy at the center. The researchers/institute will be responsible for the data.

After the revision phase by the therapists, the client is given the opportunity to provide feedback regarding satisfaction with the services and approach.



Create a place on the platform where the customer can add his comments After receiving a feedback from the client, the case manager invites a meeting with the multidisciplinary team, the service coordinator and the student for a final reflection.

Must create a space where the Case Manager can summarize the comments from everyone, create a report on the feedback. Set the option to upload the report