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## TOOL TO SUPPORT HOME HOSPITALIZATION OF COVID PATIENT

### Second Report

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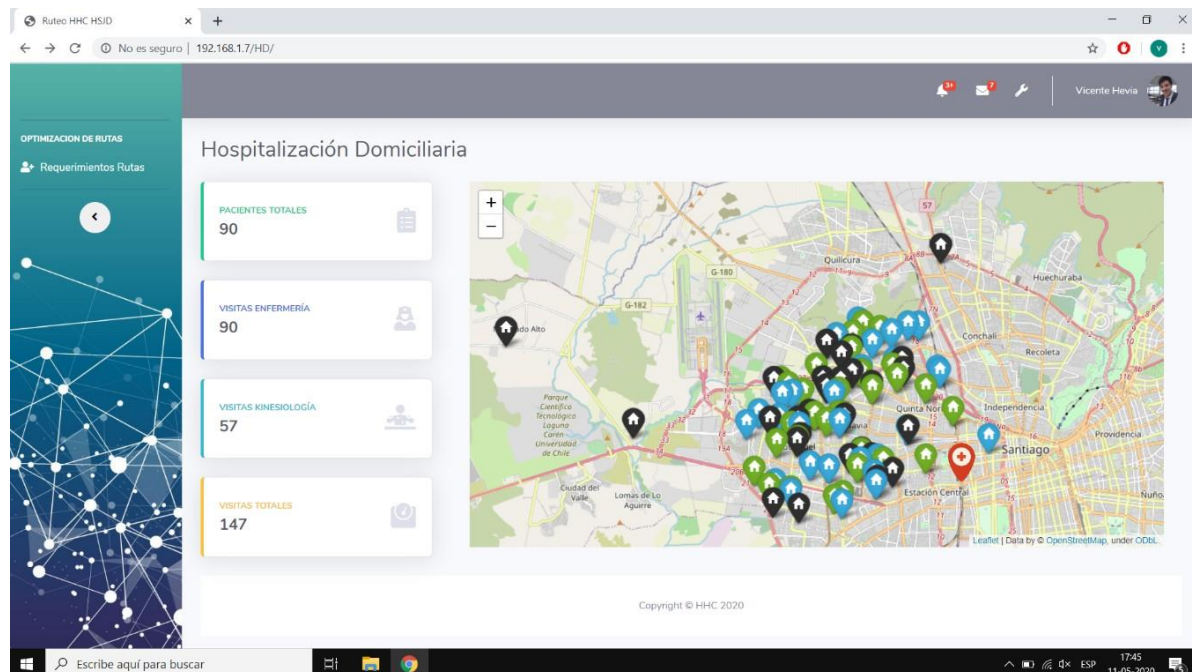
### Summary

The purpose of this report is to detail the progress of the VIDHA project, currently in the implementation phase at the San Juan de Dios Hospital (HSJD) in Santiago, and part of the Metropolitan Health Service (West) healthcare network. The report is divided into each of the functional modules that the tool presents.

#### 1.1 Home Module

The purpose of the home module is to have a panoramic view of the number of patients admitted to the service, as well as to visualize the number of visits scheduled by the different units (nursing and physical therapy). Additionally, a map is shown with the location of each patient admitted to the unit, differentiated by the color of the group to which they belong.

*Illustration 1: Home Page of HH Route Management Platform*

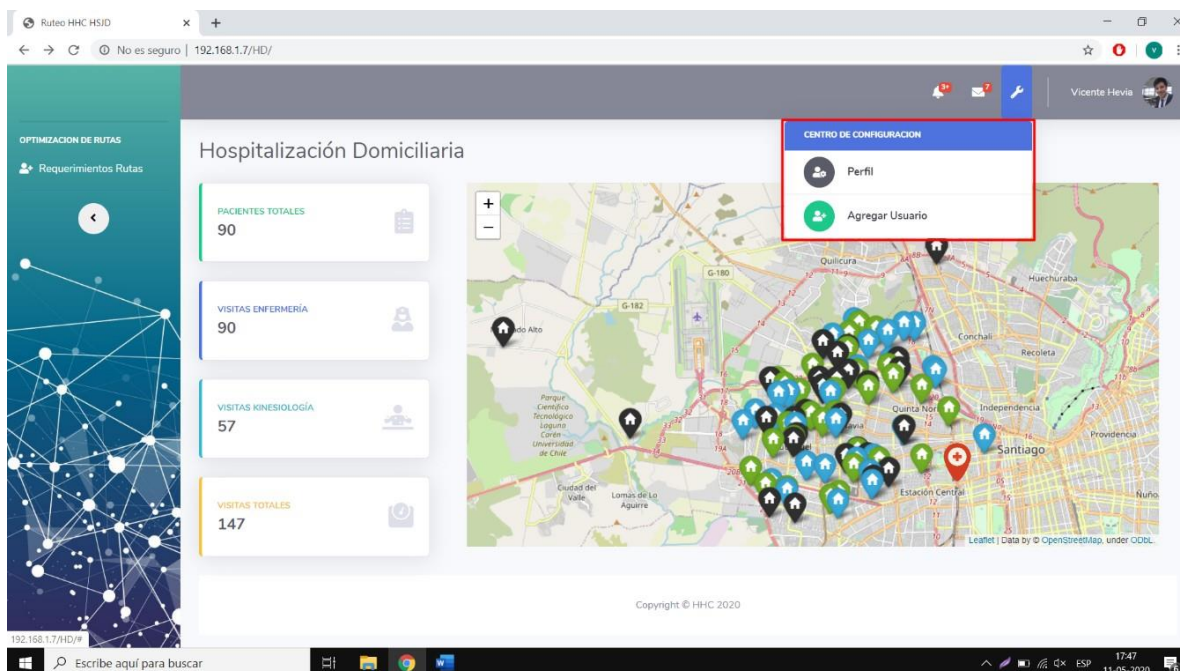


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## 1.2 Configuration Center Module

The configuration center has two tabs, the first corresponding to the display of the profile of the connected user with the option of being able to edit the user's personal information. The second is for the creation of new users, which would correspond to the teams in charge of patient visits. This allows nurses and physical therapists can access the route display version.

*Illustration 2: Configuration Center*



Source: Prepared by the authors of the report

The development of some of the module's functionalities is still pending, such as access to data modification and access to the different profiles (in the case of nursing, physical therapy, and medical teams, the "Visitor" profile, which consists of viewing only the routes created. The other profile corresponds to "Router", which is responsible for verifying scheduled patients, scheduled teams, and their corresponding schedules for routing on day X.

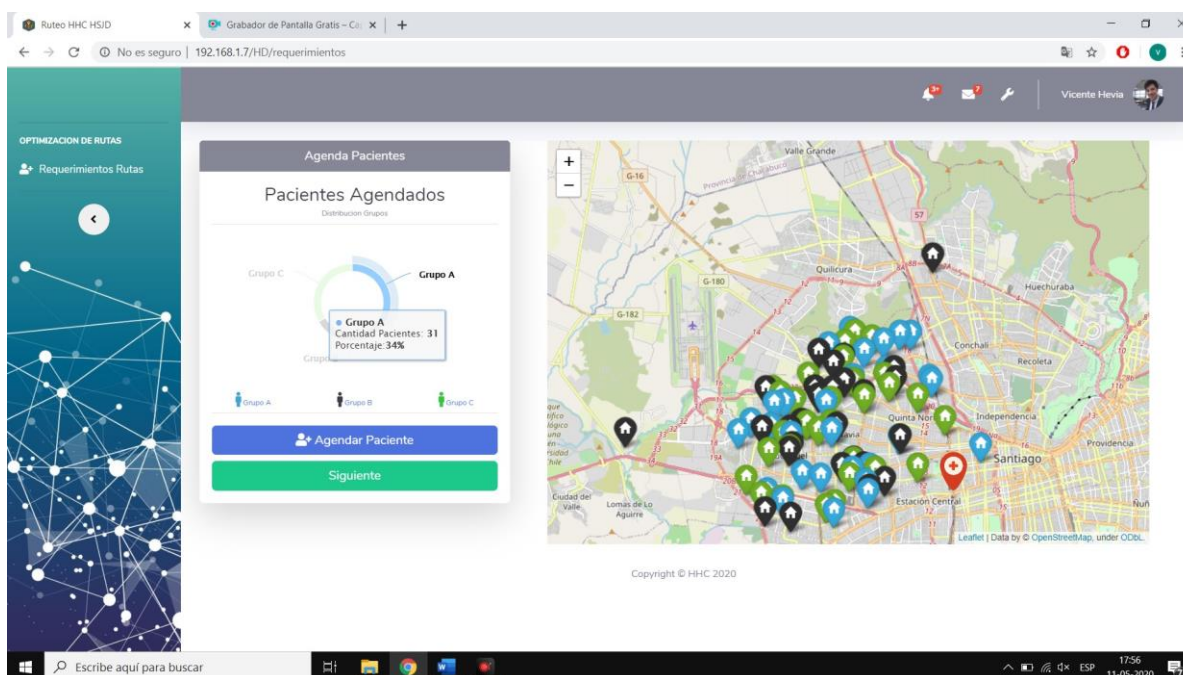
## 1.3 Route Requirement Module

The route requirements module is made up of three parts, which are developed linearly in order to generate a directional flow to the creation of routing.

### 1.3.1 Patient Agenda Module

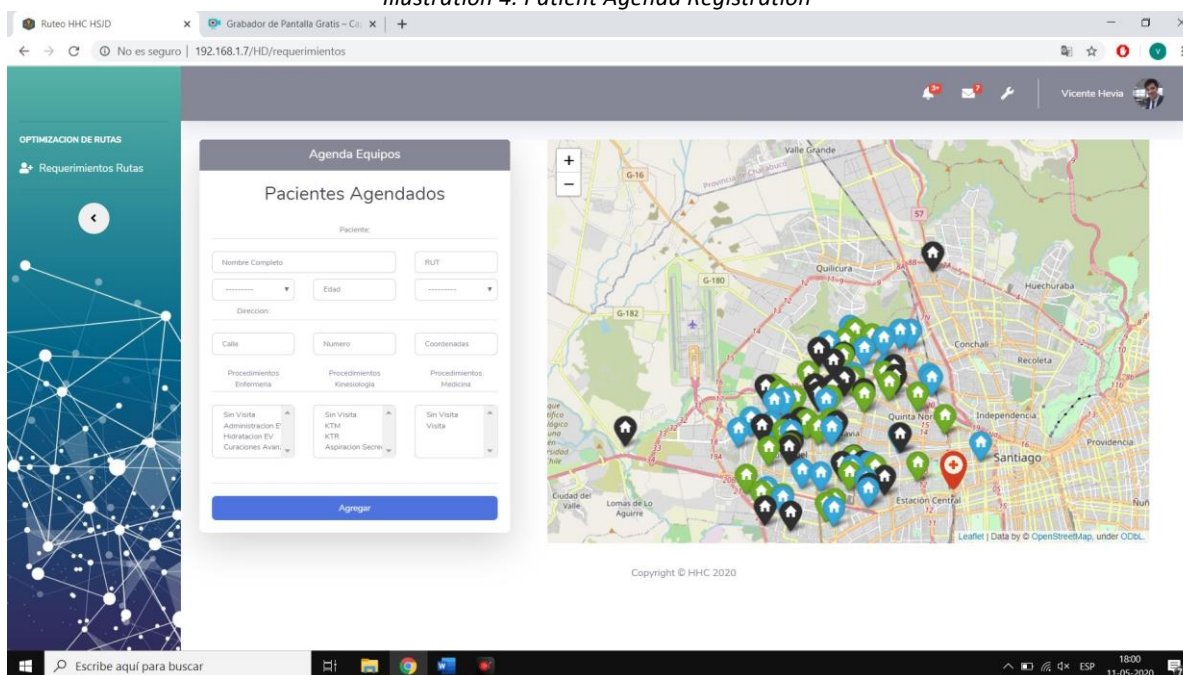
Patient Agenda corresponds to the first part of the routing process of home hospitalization visits, where demographic data of the patient is recorded in addition to the clinical data corresponding to the procedures to be performed by each of the teams, whether they are doctors, nurses, or physical therapists, for the day routing needs to be generated. These can be modified (modify scheduled procedures), deleted, or used simply to search for a patient within the universe of each group in order to quantify the number of visits made.

Illustration 3: Patient Agenda Module



Source: Prepared by the authors of the report

Illustration 4: Patient Agenda Registration



Source: Prepared by the authors of the report

### 1.3.2 Team Agenda Module

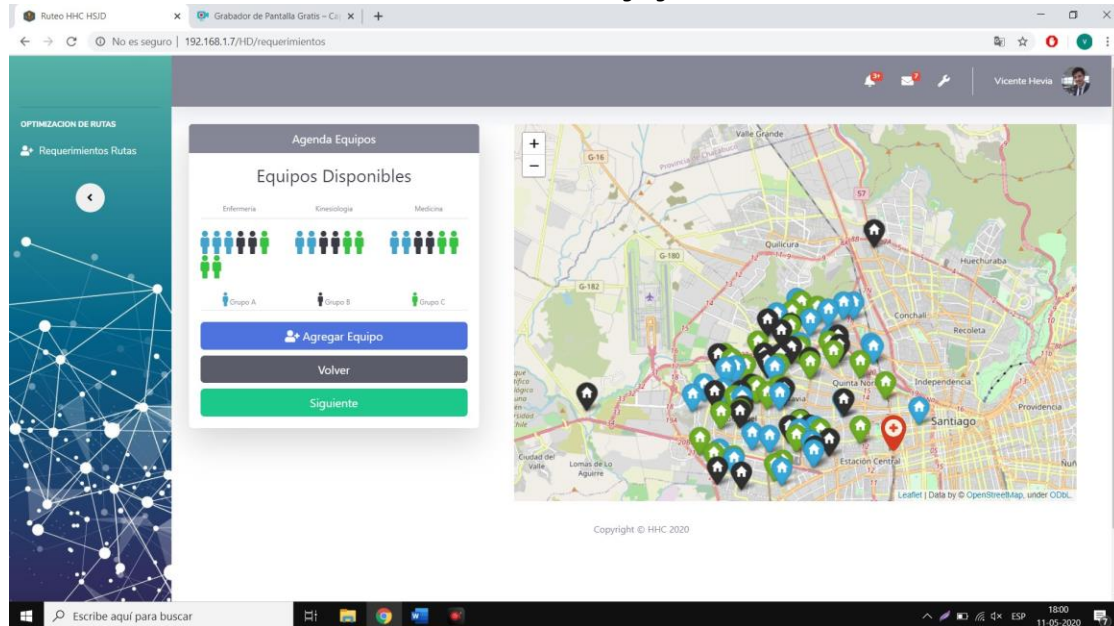
This section seeks to quantify and register all of the teams, whether medical, nursing, or physical therapy, who will make the visits along the planned routing. This registry consists of basic information on the teams such as the group, the group to which they belong, the type of day assigned (day shift or 4<sup>th</sup> shift), in addition to the time corresponding to

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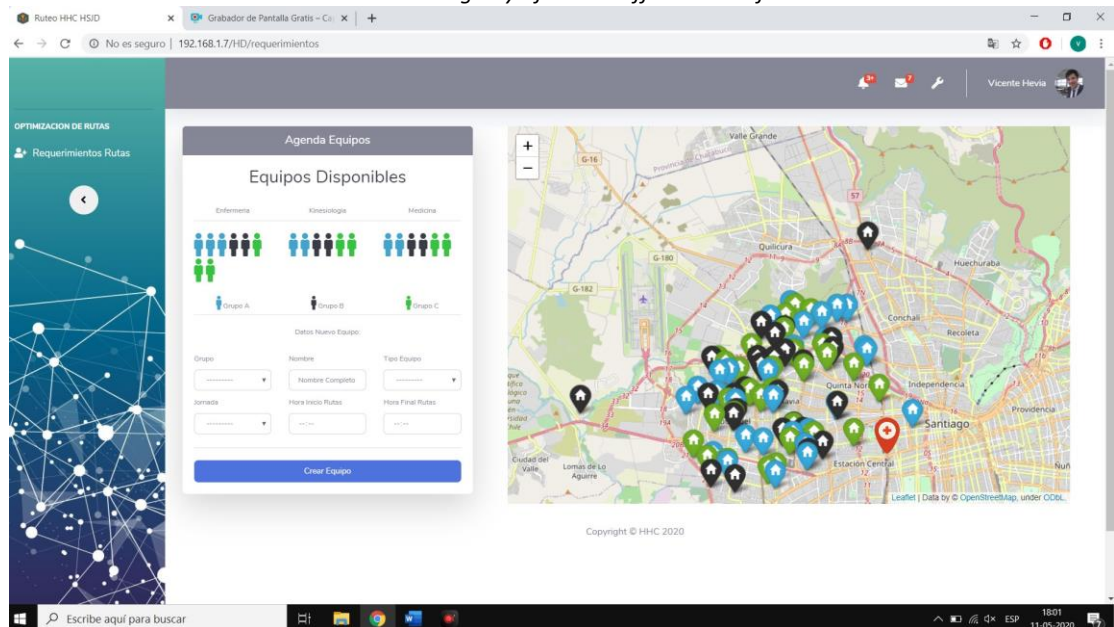
the visit of patients, as shown in Illustration 3. There is also the possibility of editing and deleting equipment depending on the needs of the demand for visits.

*Illustration 5: Team Routing Agenda Module*



Source: Prepared by the authors of the report

*Illustration 6: Registry of New Staff Members for Routes*

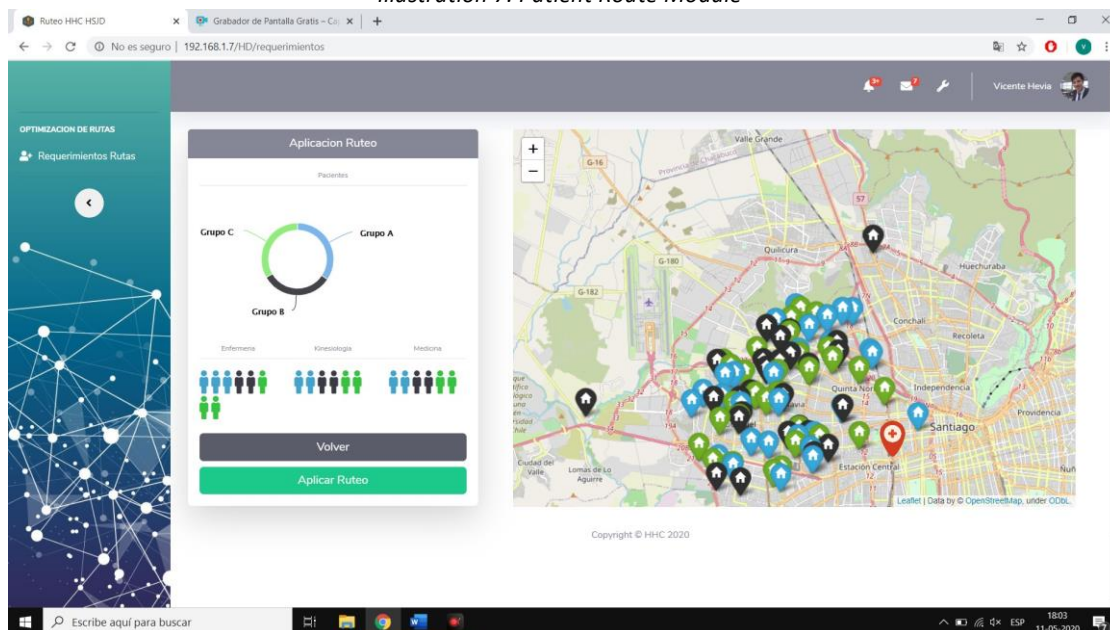


Source: Prepared by the authors of the report

### 1.3.3 Patient Route Module

The routing of patients begins with a short confirmation of the data entered previously, where the number of patients scheduled for routing is displayed, and in parallel the number of members available per group for routing. It is then necessary to press “apply routing” in order to start processing and assigning patients to routes.

Illustration 7: Patient Route Module

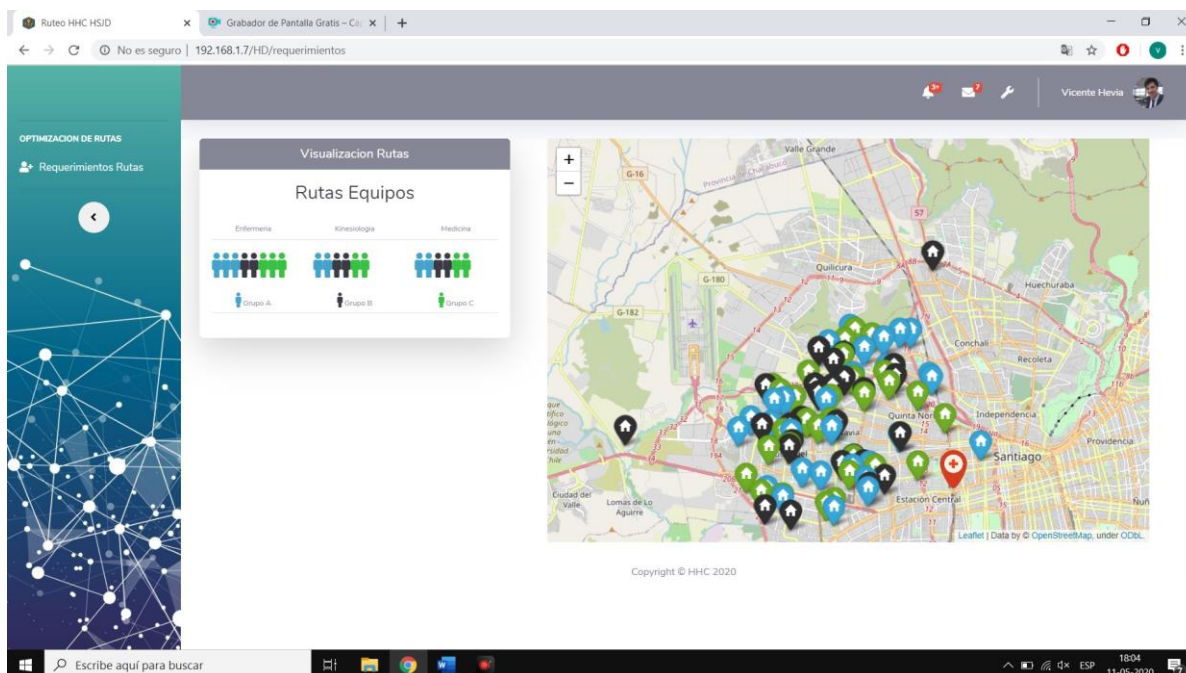


Source: Prepared by the authors of the report

#### 1.4 Patient Route Visualization

The display of the routing of patients consists of an intuitive interface in which the teams are shown for each of the classes, marking the group of membership by color. By going over each of the icons, it is possible to see the name of the team and when you click, you can see the route assigned to the selected team.

Illustration 8: Route Visualization Module

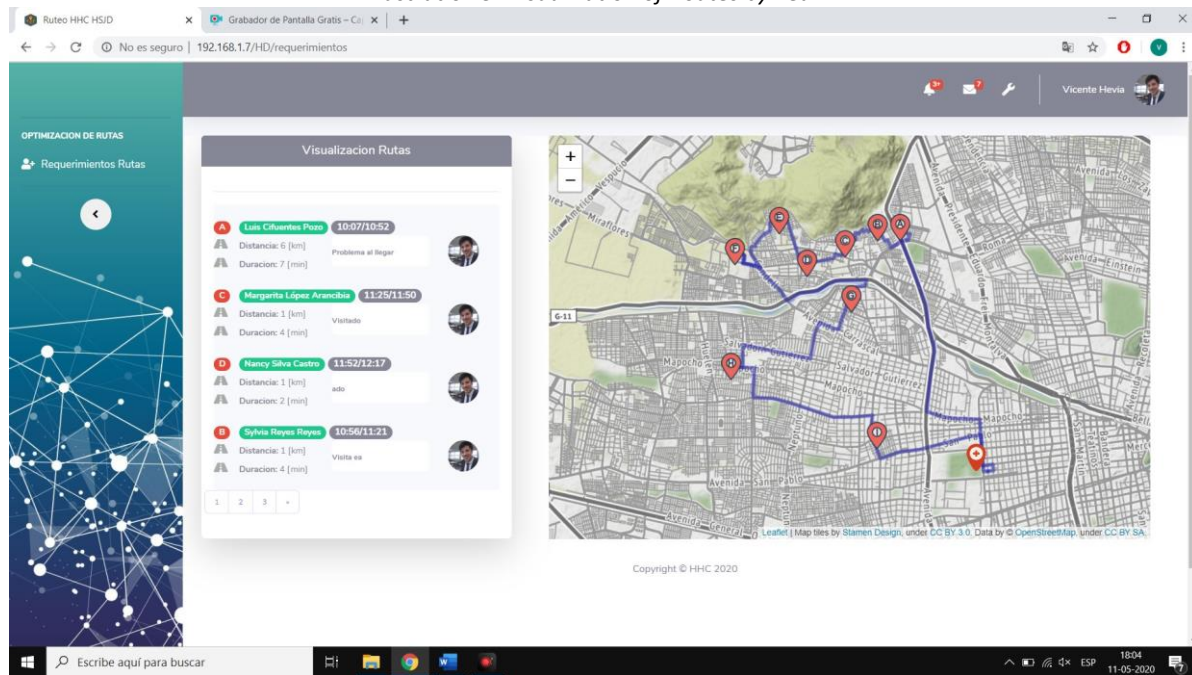


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## 1.5 Visualization of Routes by Team

The route of each team is displayed in two parts. The one on a timeline shown on the left side of the screen, where basic data of the visit to be made is shown, as well as times associated with the route and the procedures associated with each patient. On the right side, a map is displayed with all the patients that must be visited by the team, arranged in alphabetical order, in addition to the possible route to take to minimize the associated route time.

*Illustration 9: Visualization of Routes by Team*



Source: Prepared by the authors of the report

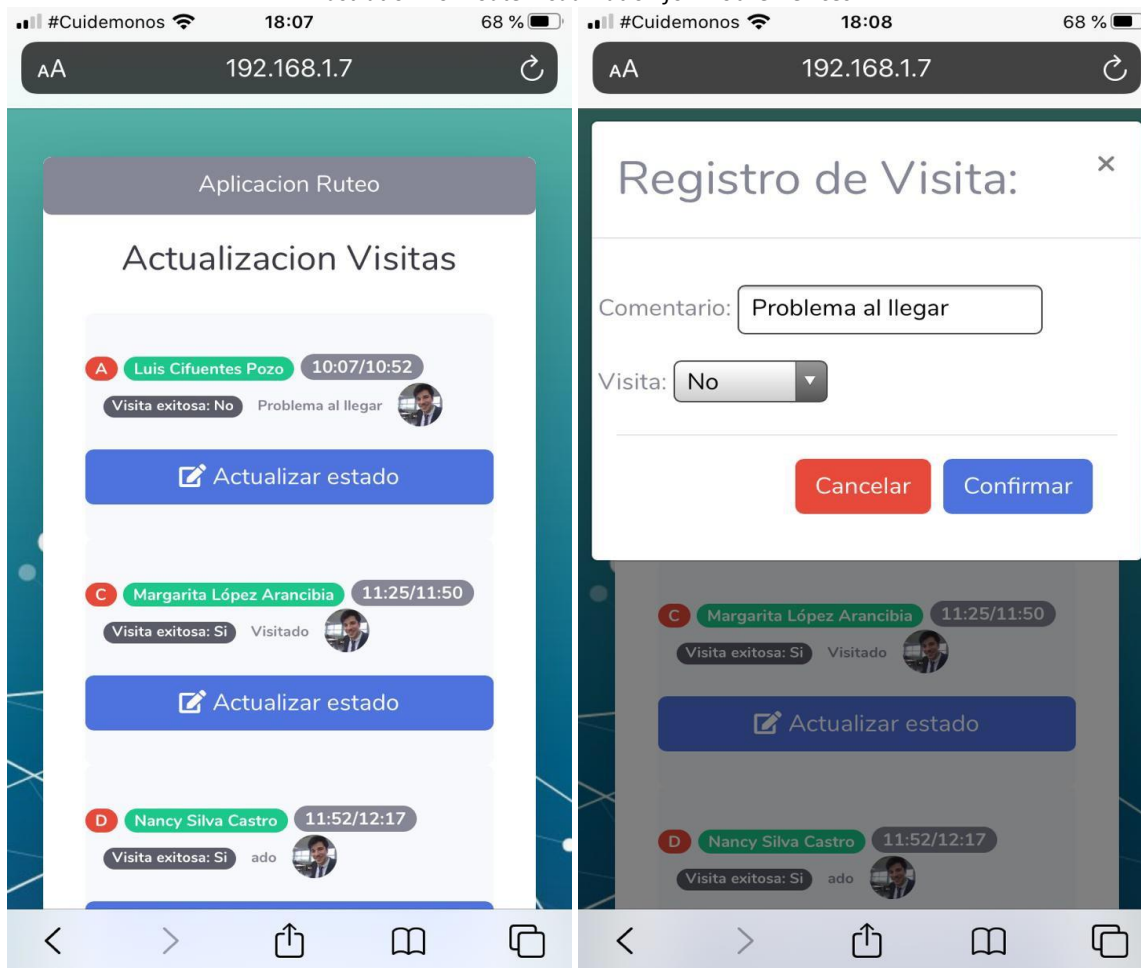
It is still necessary to develop the access profiles in this module since visitors should ideally have direct access to the assigned route without the possibility of seeing and registering in routes of other equipment.

### 1.5.1 Route Visualization for Mobile Devices

Access to mobile routing consists of an interface where it is possible to see the routing assigned to each team. Each user has the power to change the status of each of the routing visits as they are made, allowing them to generate comments that are displayed both by the team and by the route managers located in the home hospitalization unit.



Illustration 10: Route Visualization for Mobile Devices



Source: Prepared by the authors of the report