Installation Overview in AKTH Nigeria

GNUHealth was installed on OpenSUSE Leap 15.3 on VirtualBox via Windows10 host machine for the purpose of managing Medical Microbiology test results.

Installation and configuration of institute was successful, system users were added, gnuhealth can now be access from the computers on the network using Windows Tryton client.

Background of the Hospital

The Institute where gnuhealth was installed is decentralize settings, where different software applications are deployed for different purposes.

Hundreds of patients are visiting the hospital on daily basis.
Patients basic information are collected in the records office at the general out patient department (GOPD).
Each patient is assigned with a unique hospital number (unit Number *in this example: 80xxxx*), this unit number is what records officer is using to retrieve patient folder in case of revisit, and the number goes along any request of the individual patient (ie. Lab test, xray and others), see attached lab form https://paste.opensuse.org/29814996.

Among the patients, similar names (both surname & othername) are commonly found, the patient unit number is used to differentiate those similar names.

Microbiology Lab

Because of the nature of the hospital (see flowchart https://paste.opensuse.org/82473828),
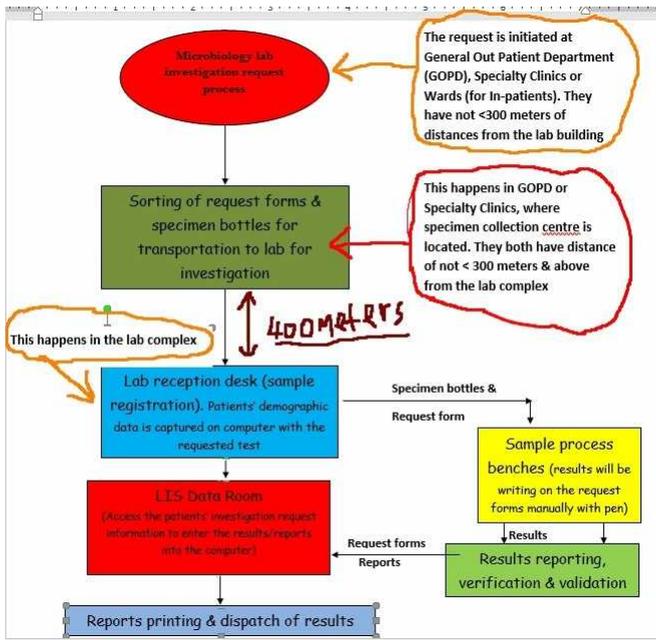
only a paper lab request form is directed to the laboratory for investigation, see above lab form https://paste.opensuse.org/29814996.

A lab number will also be generated at the reception to assigned for an individual specimen going to the lab. Therefore, a laboratory staff has to initiate a lab request at that lab reception in the computer for any request directed to the lab. This will allow a staff in the Lab computer room (LIS) to retrieve that patient request and input his results on the software for printing.

Challenges

>>On the request forms, patients' date of birth cannot be attained because only age is on the request forms sent to the lab, and some request forms are sent with 'Ad', written as adult on the age field.

When Ad is written on the request form, we keyed in A on the DoB field, gnuhealth accept but nothing appears at age field on patients record.

GNU Health expects a date format because it will use it for calculating the age of the patient

>>When adding a new patient to the Patients module, lists of all patients with similar names are showing (see below adding a patient name https://paste.opensuse.org/55877373). this may cause confusion on which name to select between names on the list.
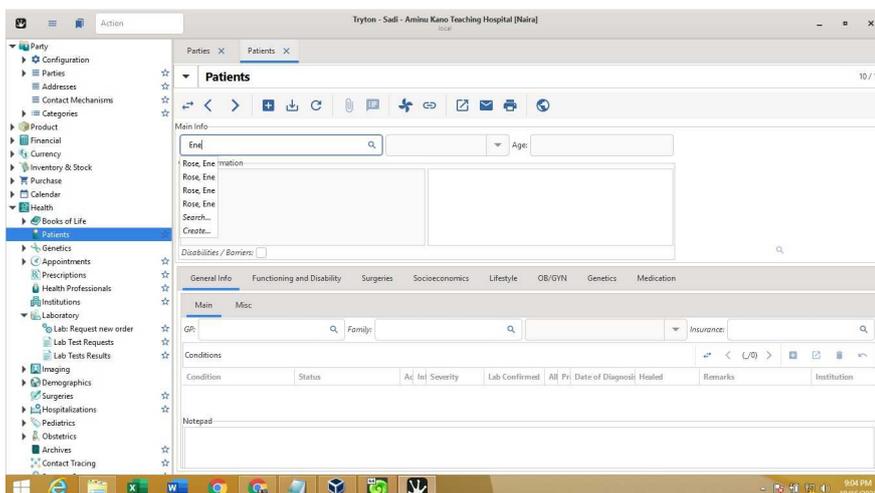
This will just give you a hint that there are already patients with same names. Consequence: just click on search and a search form with a different federation id will pop up (see below right) Or: use the tab to switch to the list view and you get the name plus age plus PUID (see below left)
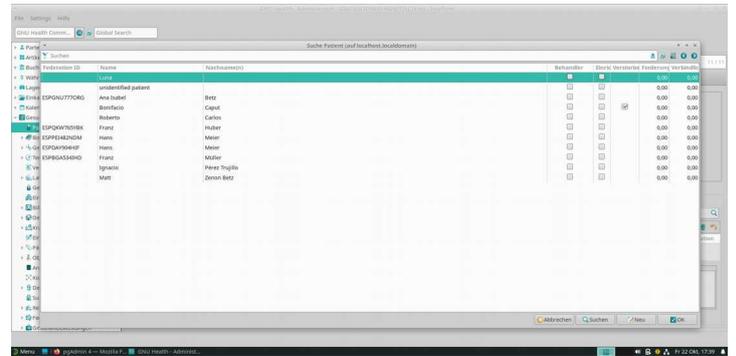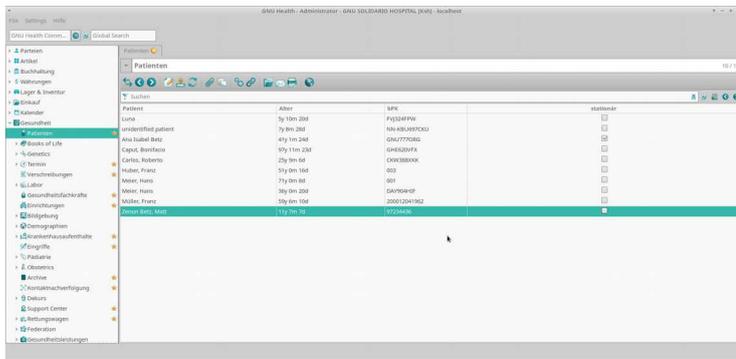
>>The lab number generated at the reception do not have space in gnuhealth, and we try to use gnuhealth lab order number or Test ID, but both numbers do not display at a point of making the request, they only shown on Lab Test Requests module & Lab Tests Results module respectively.

In view of the workflow on this kind of environment (<mark>see attached workflow</mark>

 https://paste.opensuse.org/82473828<mark>)</mark>, those numbers cannot be use to retrieve a request for the results to be entered, since the numbers don't show when making the request.

>>In a situation when two same names (i.e Rose Ene) requesting same lab request (ie. both swab mcs), <mark>see lab test request</mark> https://paste.opensuse.org/42612665.
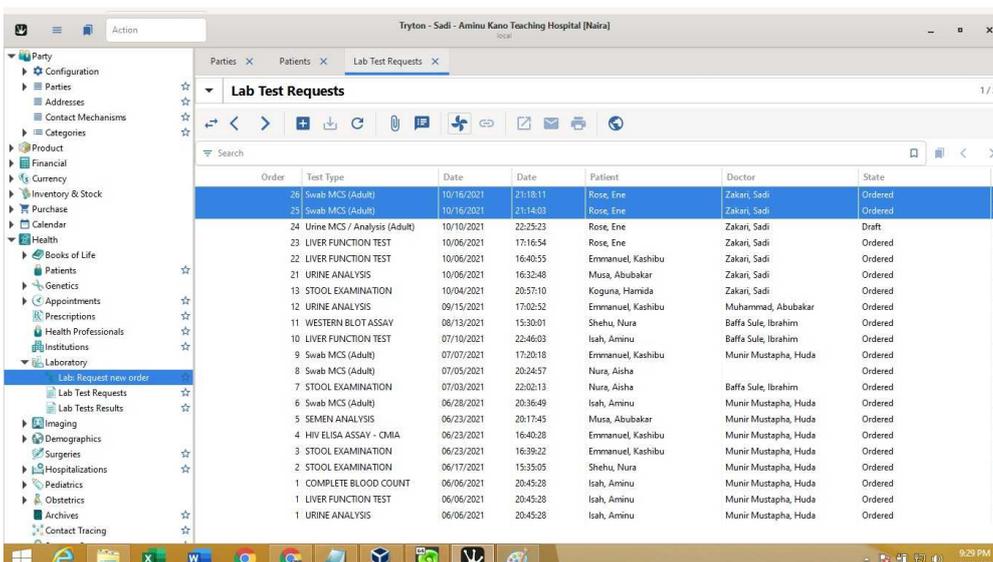
Those two names will not be differentiated at a point of entering the patients' results, especially when those similar names are many on the system.

I agree that this is a little bit confusing, at least to me. Let us consider a case where a patient Rose Ene, born 1.2.2000, is the first time in the GODP. She is already registered as Party and as Patient by the health_frontdesk, where a PUID was assigned (here e.g. IHQ203WOU) and a Federation ID (here e.g. ESPIHQ203WOU). An ID-card-QR is printed with her name, gender, DoB and PUID and QR-code.
I would recommend that this card would be printed as one paper card and as one label, put at your paper lab request (29814996.). She sees now the demo_doctor, where the doctor identifies her again asking for her name and her DoB as it is written on her ID-card and paper request.

The patient complains about a pain at her left ear which is inflamed. We assume that the doctor has no computer, so she just fills in the paper form. The demo_doctor orders a swab of the left ear with microscopy and culture. The swab has to be taken at the lab. The doctor says Good-Bye to the patient and sends her back to the GOPD reception, together with the paper form request.

The health_frontdesk makes a copy of the paper request, makes a new appointment for discussing the results with the patient and explains the way to the lab to the patient.

The patient goes to the lab, showing her ID-card and giving the paper form request to the lab staff.

The doctor in charge at the lab sees the patient, identifies her with the ID-card and decides if the ordered test on the paper form is appropriate.

Then he makes the request as demo_doctor (Lab:Request new order) and also assigns the correct Service. Then he sends the patient back to the lab reception desk.

The staff there opens as demo_lab LabTestRequests with OrderNumber (e.g.) 19 and Creates the LabTestOrder with State Ordered. The demo_lab opens now LabTestResults where the ID TEST019 shows up as draft. The staff demo_lab prints now Code39-barcode-label (with TEST019, name and PUID) and puts the label onto a tube and prepares the gathering of the specimen.

The patient is sent to the doctor in charge again who makes the swab and puts the swab into the tube which is labeled with the Code39-barcode. The patient is sent home now.

The TEST019 is processed further and the results are put into the data fields by the lab staff. The record still remains Draft. When it is finished the lab staff tells the doctor in charge that the test is ready.

The demo_doctor checks the results and clicks Done. If he is sure that everything is correct then he clicks Validate.

Alternatively the validating can be done by another person, e.g. the medical head of the lab. Be aware that it has to be a health professional who is allowed to click Done or Validate.