

საპარტუკელუო პაროჩო, ჯანვართელროზისა  
და სოთიელური დანჯიხის სავინისტრო



MINISTRY OF LABOUR, HEALTH  
AND SOCIAL AFFAIRS OF GEORGIA



# Ministry

Ministry of Labour, Health and Social Affairs

11 Department

5 Agency

5 LEPL



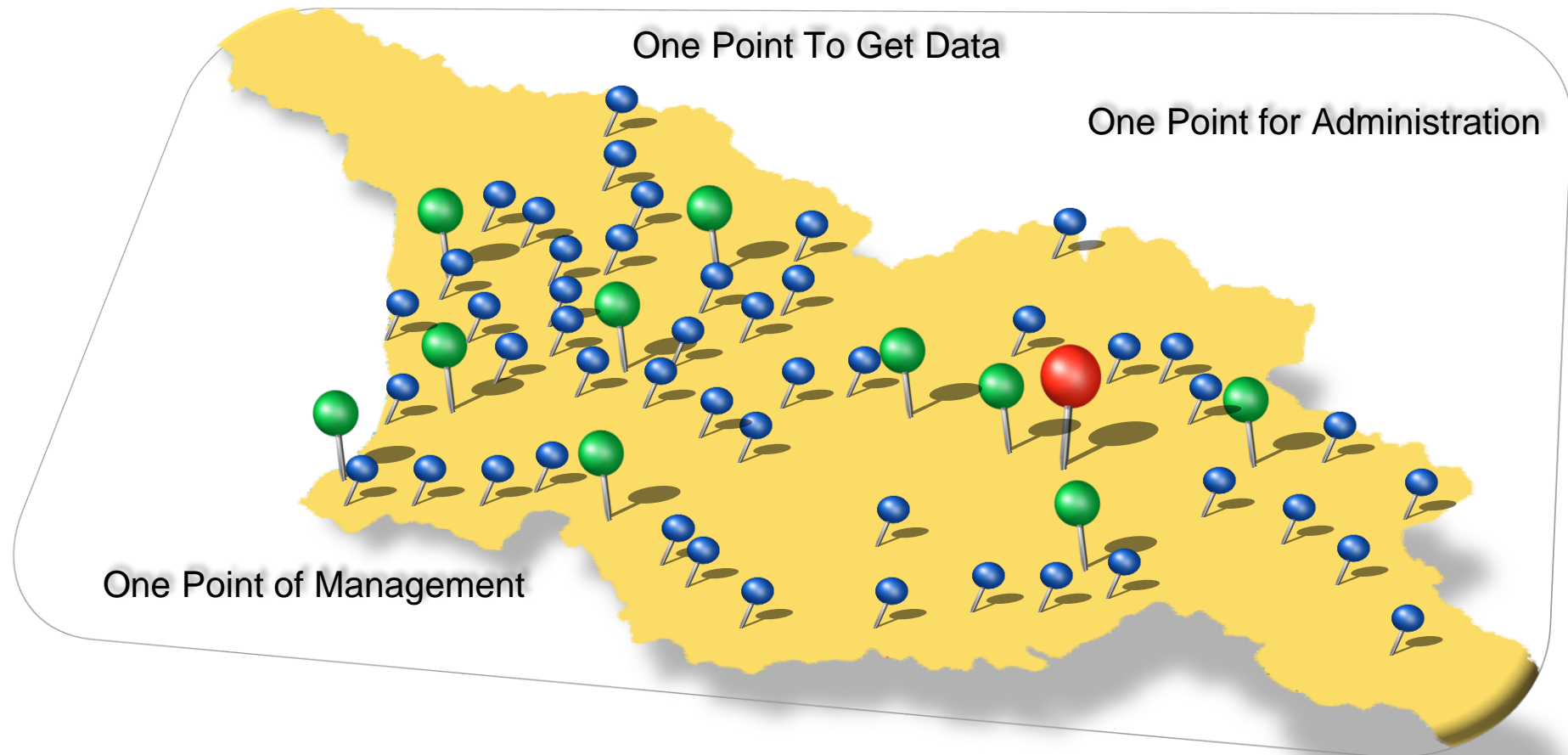
20 Regional  
Office

62 District Office

# Network

MoLHSA's Global Network (GGN)

20 Regional and 62 District Offices, 3400 Employee



## Georgia Health System – Quick Facts

Mix of state and private funded schemes covering 98.3% of population.

### Total Population

4.48 million

### State Funded Healthcare Schemes (beneficiaries):

- Universal Health Care Program (UHC) – 2M
- State funded health insurance program – 1.5M
- Other state funded healthcare programs – 232K

### Private/corporate Schemes:

- Private voluntary health insurance – 653K
- Health Insurance Companies – 12

### Health Service Delivery Capacity:

- Hospitals – 267
- PHC Units – 390
- Rural doctors – 1400

# eHealth Modules (HMIS)

ehealth.moh.gov.ge

The dashboard displays a grid of service modules. A large white box highlights the following data:

- Target Group – 198,539
- Basic Benefit Package – 1,492,665
- Veterans Package - 665

Below this, a row of four colored tiles represents different programs:

- Psychiatric Care Program – 29,959
- Dialysis Program – 1,926
- Contingent of rural Doctors – 1,320,000
- საინფორმაციო რესურსები

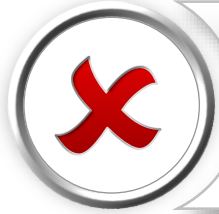
The bottom row contains four more tiles with icons and labels:

- ფარმაცევტული საკმანობა
- სასარგებლო ბმულები
- სამედიცინო მედიაცია
- ინფექციურ დაავადებათა მონიტორინგი და მართვა

On the right side of the dashboard, a yellow map of Georgia is partially visible.

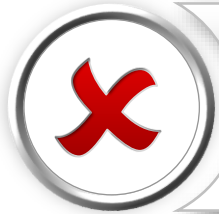
# Rationale for Building the HMIS

## Problems



### 1. Data quality and standardization issues

- Double data
- Different Standards



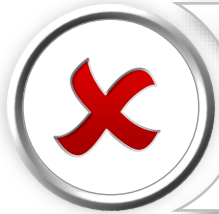
### 2. Information asymmetry and fragmentation

- Defferent Data Flow
- ...



### 3. Limited data for informed policy

- Decision-making
- ...

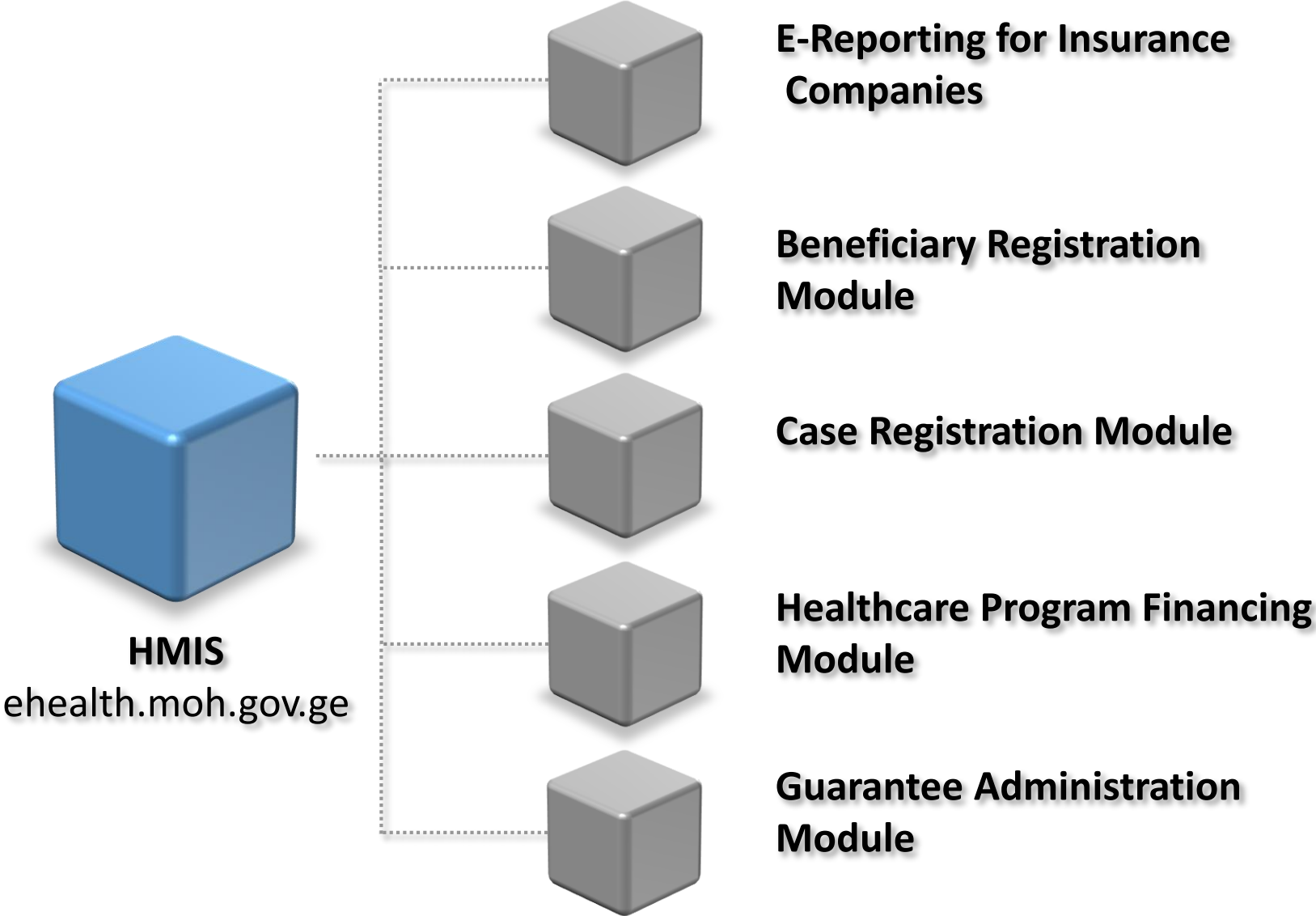


### 4. Limited administrative resources

- ...Need For Optimization
- ...

# HIMS eHealth Module

With SubModules



# Why HMIS Matters?

## Purpose of HMIS

- 1 Evidence-based decision and policy making
- 2 Standardized and transparent processes including service quality
- 3 Improved effectiveness and control of healthcare programs, cost reduction

## System Benefits

- 4 Common standards  
Real-time information exchange
- 5 Organized financial and medical data
- 6 Statistics and analysis



# HMIS Coverage and Impact

## Users of the HMIS

- 80% of hospitals and PHC units
- 100% of rural doctors
- >39K doctors registered
- 7000 active unique users

## Unique patients served

1,794,548 patients

## Fiscal impact (last 5 months)

- >\$16M reimbursed to health facilities
- >93K beneficiary duplications eliminated resulting in savings of \$61K

EMR

# cEMR Project Objectives

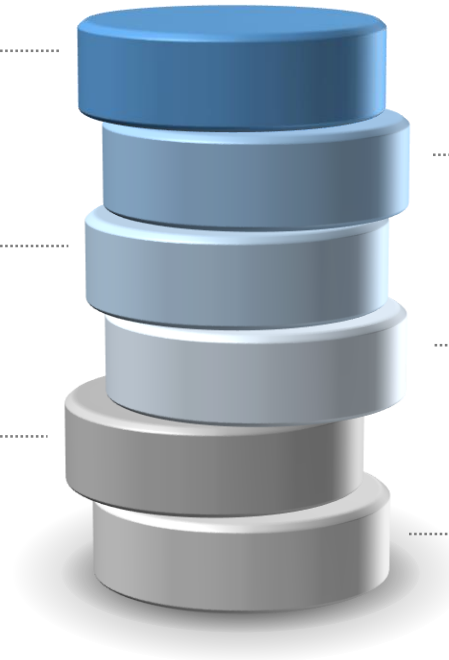
Phase -1

Deliver an effective solution that can be replicated

6. Provide Train the Trainer Training

4. Create a foundation GP portal as defined in workshops

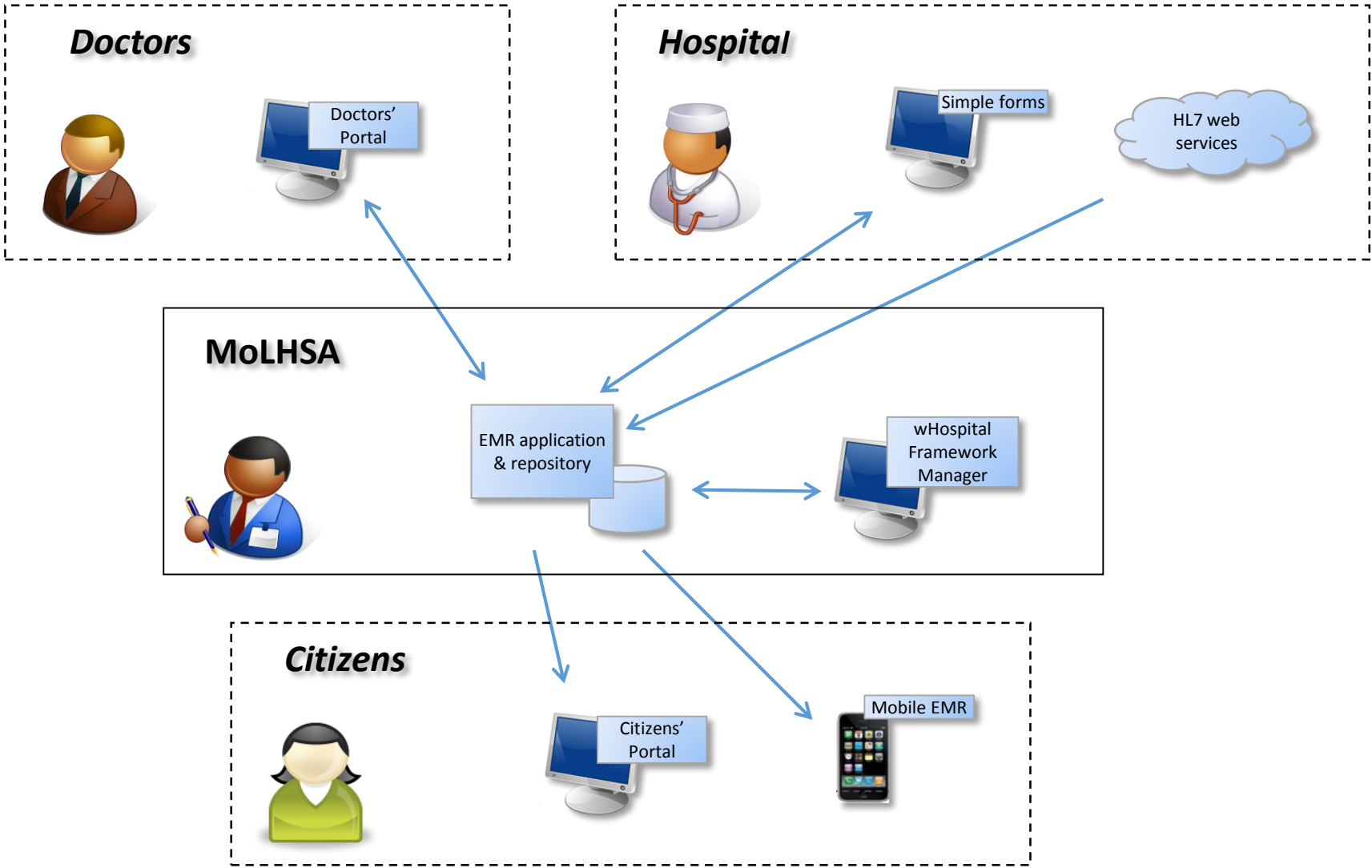
2. Enable the collection of patient-related activity data



5. Create a foundation EMR Citizen read only view of a citizen's medical record that can be accessed using their mobile device.

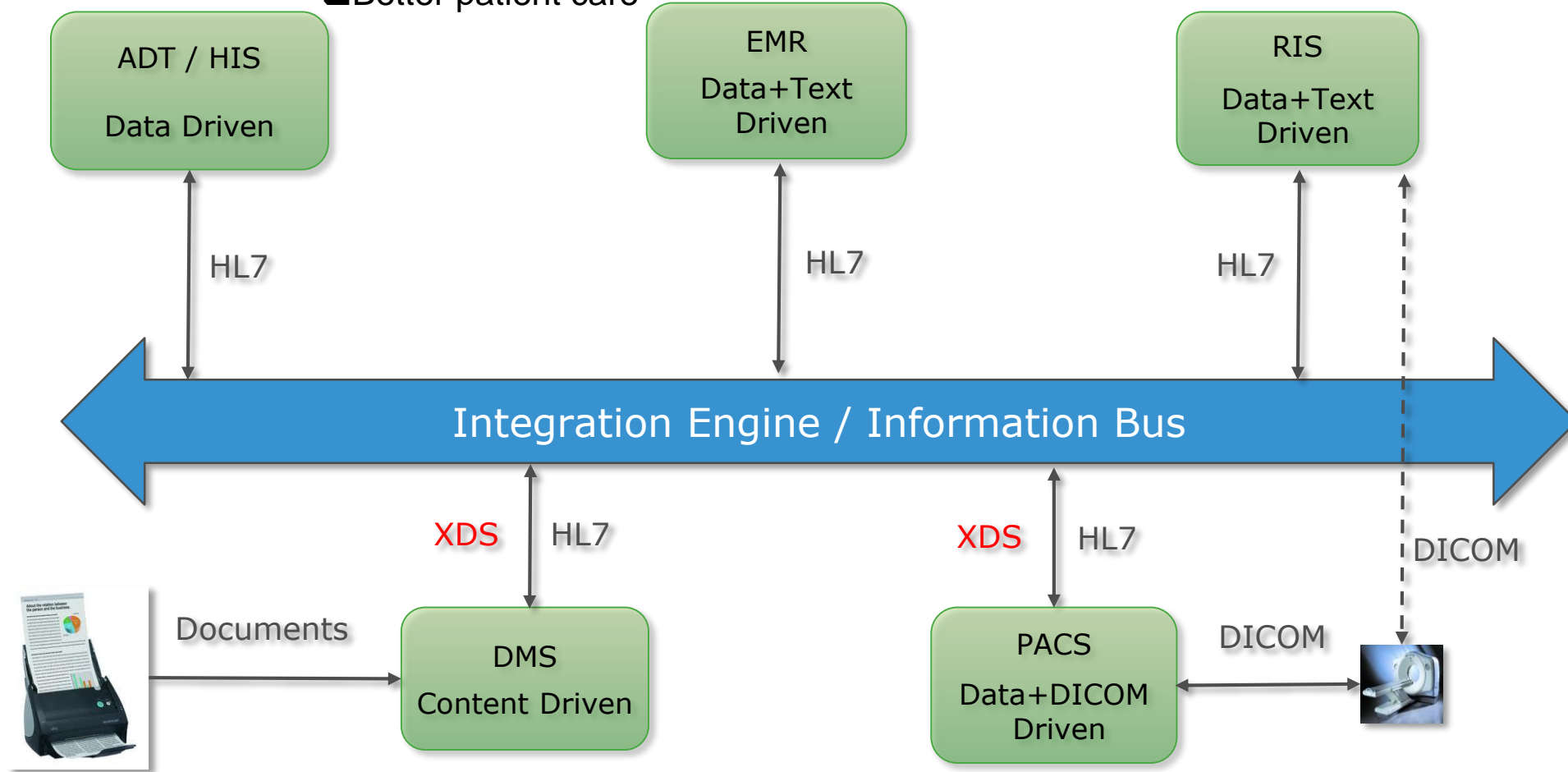
3. Create a foundation Citizen portal as defined in workshops

1. Develop a system to store electronic medical records (EMR)



If everyone can share the information electronically

- ❑ Better access to patient information
- ❑ Reduced administration costs
- ❑ Better patient care



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- **GP Portal**

- Insertion of new patients into the patient list for the Operational Unit
- Search and selection of patients already in the Operational Unit Patient List
- Patient Consent Management
- Patient Authorisation Management
- Appointment Scheduling
- Patient Clinical Forms Functionality
- Patient Clinical View Functionality
- Patient Lab Results Functionality
- Patient Visit Functionality
- Document Versioning and Audit Trail





Doctor

Patient's summary

Visit

Laboratory

Clinical view

Payers

Problems

Functional Status

Family History

Social History

Allergies and Adverse Reactions

Medications

Immunizations

Vital Signs

Results

Procedures

Encounters

Plan of Care

### Hanging

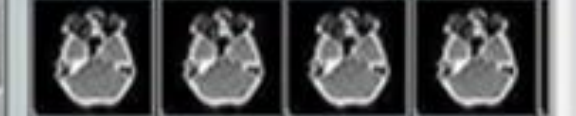
- Study CT2005091307005
- 4 DisplaySets
- Study CT20060606114406
- 8 DisplaySets

### Current Set

**Default CT**  
 Overview (1 - 4)  
 Display Set (1/4) - 2 Objects



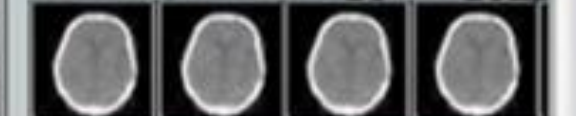
Display Set (2/4) - 12 Objects  
 Series 2 05.09.2005 10:08:30 CT HEAD Ba  
 5 of 12 Images - Columns: +/- Rows: +/- Sh



Display Set (3/4) - 10 Objects  
 Series 3 05.09.2005 10:08:30 CT HEAD Ce  
 5 of 10 Images - Columns: +/- Rows: +/- Sh



Display Set (4/4) - 80 Objects  
 Series 4 05.09.2005 10:09:53 CT HEAD Pe  
 5 of 80 Images - Columns: +/- Rows: +/- Sh



DEMO CT, MULTI, (F)  
 01.01.1945  
 PatID: J4DEMO, X0006  
 20100512144233\_9

J4Care Test Hospital  
 16.07.2008 10:02:00  
 Head Perfusion (Adult)  
 Topogramm 1.0 T20x  
 KM



SerNr: 1  
 ImgNr: 1  
 SL: 1.0  
 TP: 313.0  
 GT: 0.0  
 KV: 130.0  
 mAs: 67  
 VOI: C/W 20.0/190.0 - WINDOW1 [Image]

Room 1  
 SIEMENS  
 Emotion 6

DEMO CT, MULTI, (F)  
 01.01.1945  
 PatID: J4DEMO, X0006  
 20100512144233\_9

J4Care Test Hospital  
 16.07.2008 10:02:00  
 Head Perfusion (Adult)  
 CerebrumSeq 9.0 H31x  
 KM

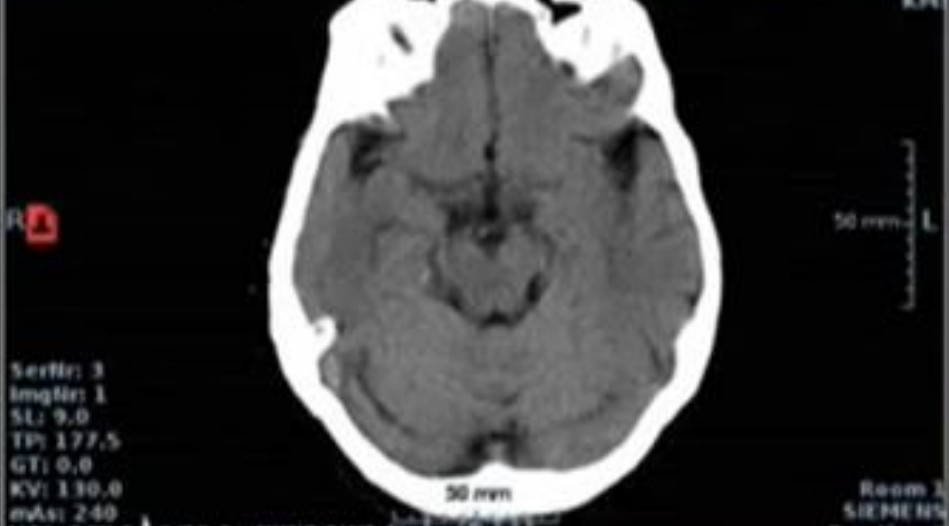


SerNr: 3  
 ImgNr: 1  
 SL: 9.0  
 TP: 177.5  
 GT: 0.0  
 KV: 130.0  
 mAs: 240  
 VOI: C/W 50.0/80.0 - WINDOW1 [Image]

Room 1  
 SIEMENS  
 Emotion 6

DEMO CT, MULTI, (F)  
 01.01.1945  
 PatID: J4DEMO, X0006  
 20100512144233\_9

J4Care Test Hospital  
 16.07.2008 10:02:00  
 Head Perfusion (Adult)  
 CerebrumSeq 9.0 H31x  
 KM

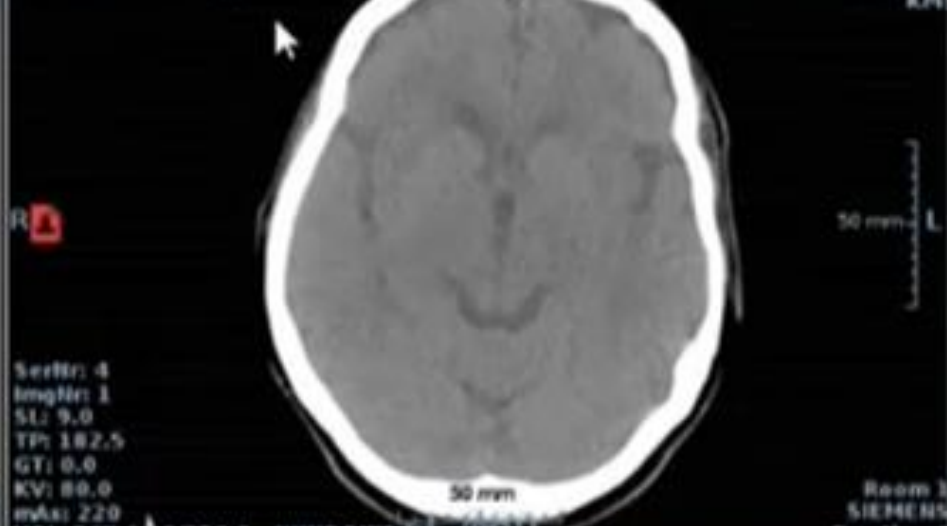


SerNr: 3  
 ImgNr: 1  
 SL: 9.0  
 TP: 177.5  
 GT: 0.0  
 KV: 130.0  
 mAs: 240  
 VOI: C/W 50.0/80.0 - WINDOW1 [Image]

Room 1  
 SIEMENS  
 Emotion 6

DEMO CT, MULTI, (F)  
 01.01.1945  
 PatID: J4DEMO, X0006  
 20100512144233\_9

J4Care Test Hospital  
 16.07.2008 10:02:00  
 Head Perfusion (Adult)  
 Perfusion 9.0 H31x  
 KM



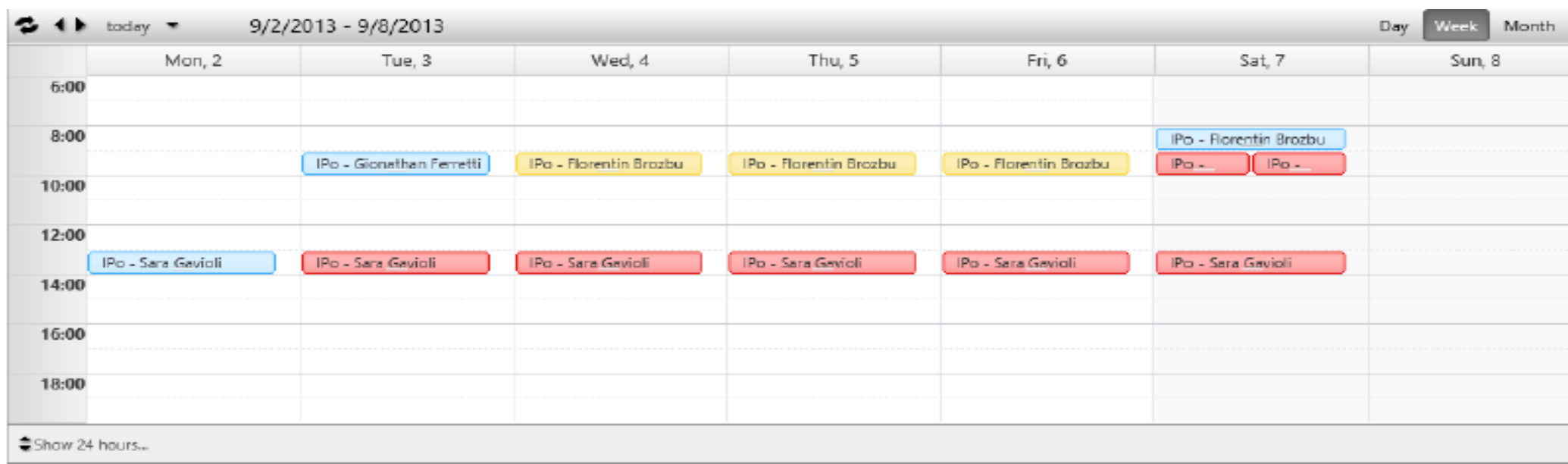
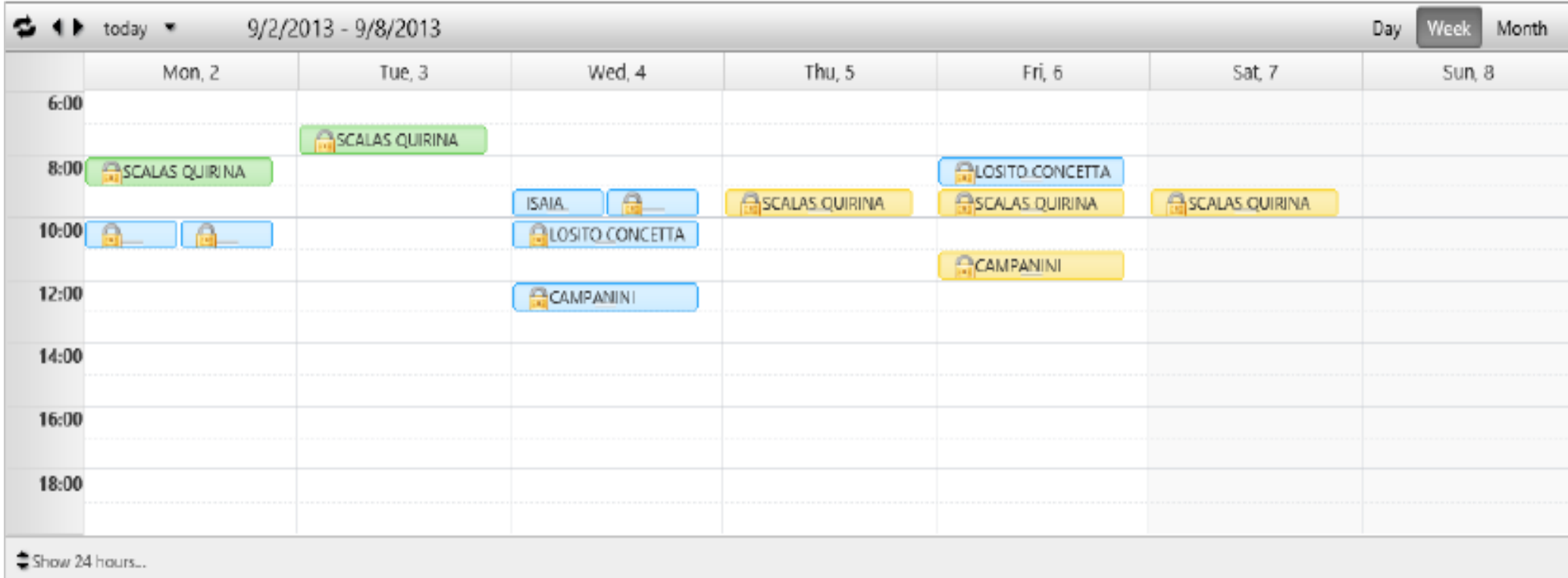
SerNr: 4  
 ImgNr: 1  
 SL: 9.0  
 TP: 182.5  
 GT: 0.0  
 KV: 80.0  
 mAs: 220  
 VOI: C/W 50.0/80.0 - WINDOW1 [Image]

Room 1  
 SIEMENS  
 Emotion 6

IMAGE SEQUENCE HISTORY REPORTING

OVERVIEW WORKFLOW BID HELP






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- **Hospital Portal**

- Inpatient Admission and Discharge
- Outpatient Patient List
- Patient Consent Management
- Patient Authorisation Management
- Patient Summary Functionality
- Patient Clinical View Functionality
- Patient Laboratory Functionality
- Hospital Forms Functionality




 Doctor ▾ Hospital forms Patient's summary Laboratory Clinical view

Consult note

Request consultancies

Discharge Summary

 Doctor ▾ Hospital forms Patient's summary Laboratory Clinical view

Form100

PatientEventTimeLine

Summary

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- **GP / Hospital Portal - Benefits**

- Usage of system ensures compliance with MoLHSA regulations
- Avoids possibility of misdiagnosis / mis-prescribing
- On-line access to information about doctor/ patient encounter – With patient consent or directly in case of emergency
- Allows visibility of previous encounters to enable better health management, disease prevention, treatment and rehabilitation
- Support effective administration practices



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- **MoLHSA Portal**

- Centralised system
- Ensure compliance with regulations
- Collation of statistical data
  - Epidemiological
  - Operation unit
- Creation of new forms
- Able to view patient records and monitor the quality of services





Shatberashvili Nanuka

## Search patient

Green Teresa (EXT729150279) ×

Id	HospitalName	IDOperationalUnit	OperationalUnitName	ActivableFrom	ActivableTo	DurationInHours	TokenType	IsUsed	TimeStampExpiration	IsDeleted
130	TestPolyclinic	25	Family Doctor - Nanuka Shatberashvili	15.10.2013 14:44:48	31.12.9999 23:59:59	2147483647	G	<input checked="" type="checkbox"/>	31.12.9999 23:59:59	<input type="checkbox"/>
131	TestHospital	14	Test_InPz	15.10.2013 14:46:58	15.10.2013 14:46:58	30	L	<input checked="" type="checkbox"/>	16.10.2013 20:46:58	<input type="checkbox"/>

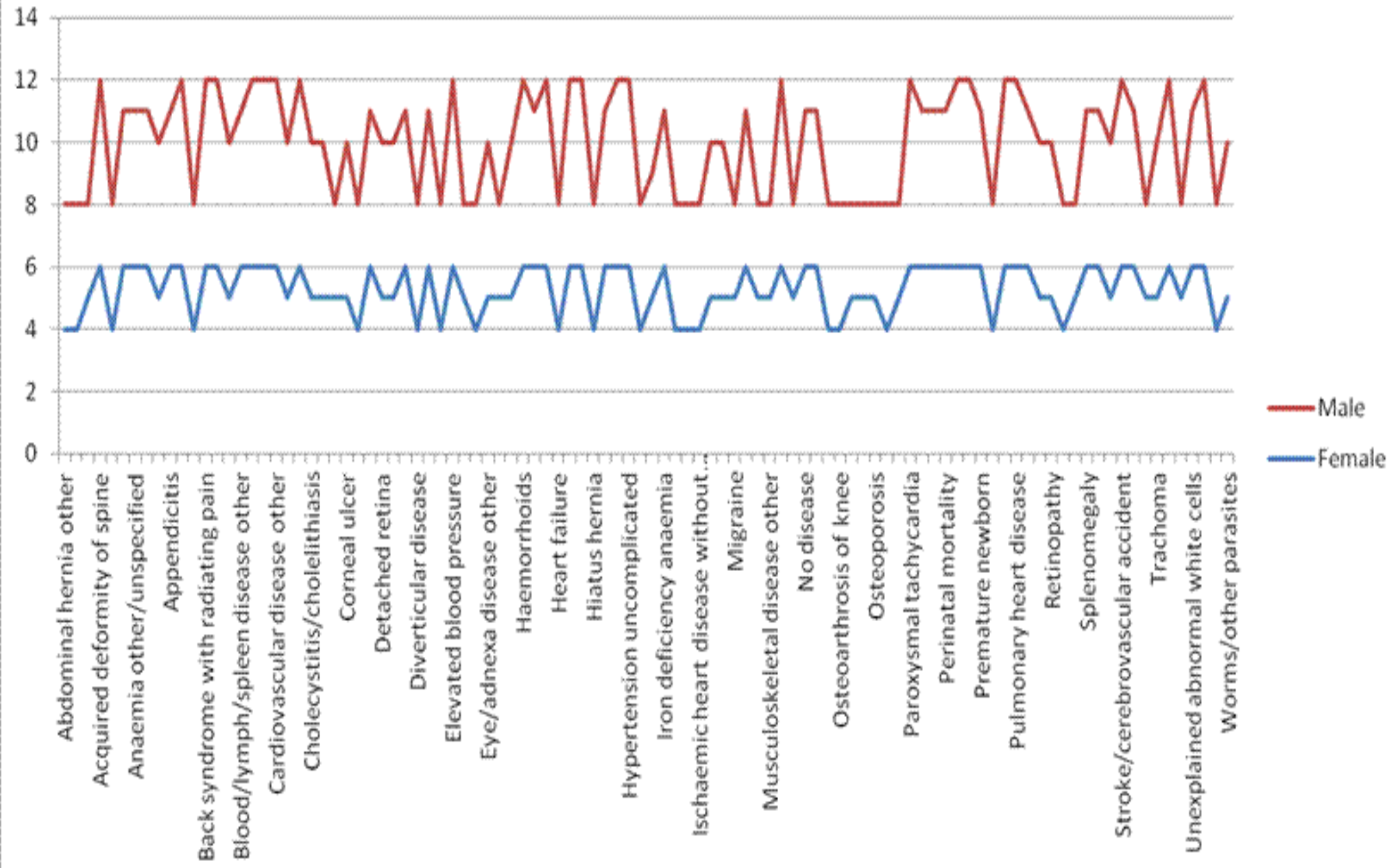
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- **MoLHSA Portal - Benefits**

- Enables users from different agencies or departments to view unified patient history
- Single source of information
- Improved HealthCare Management
  - ❑ Information to improve decision making
  - ❑ Information to improve Regulatory compliance

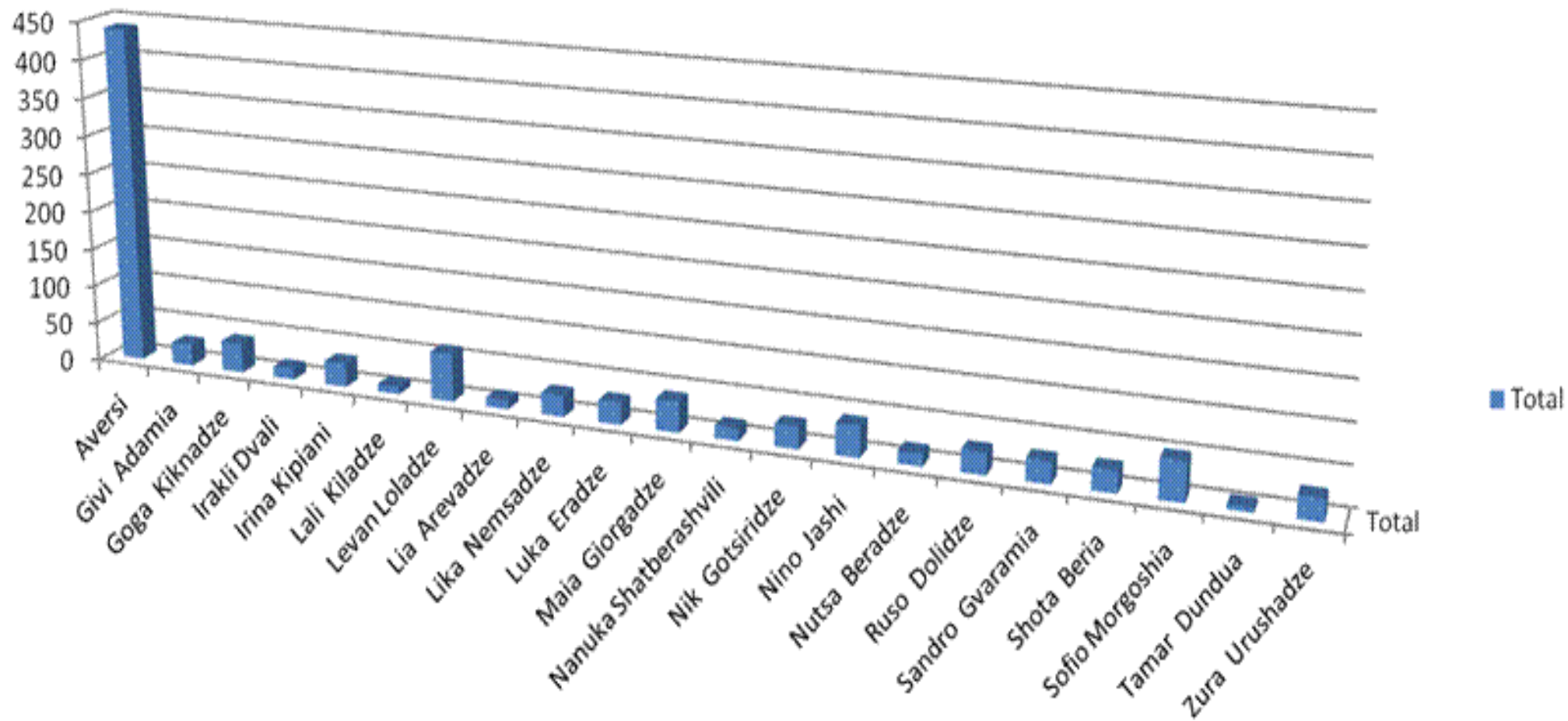


## Diagnosis by Gender





# Visits by HCP





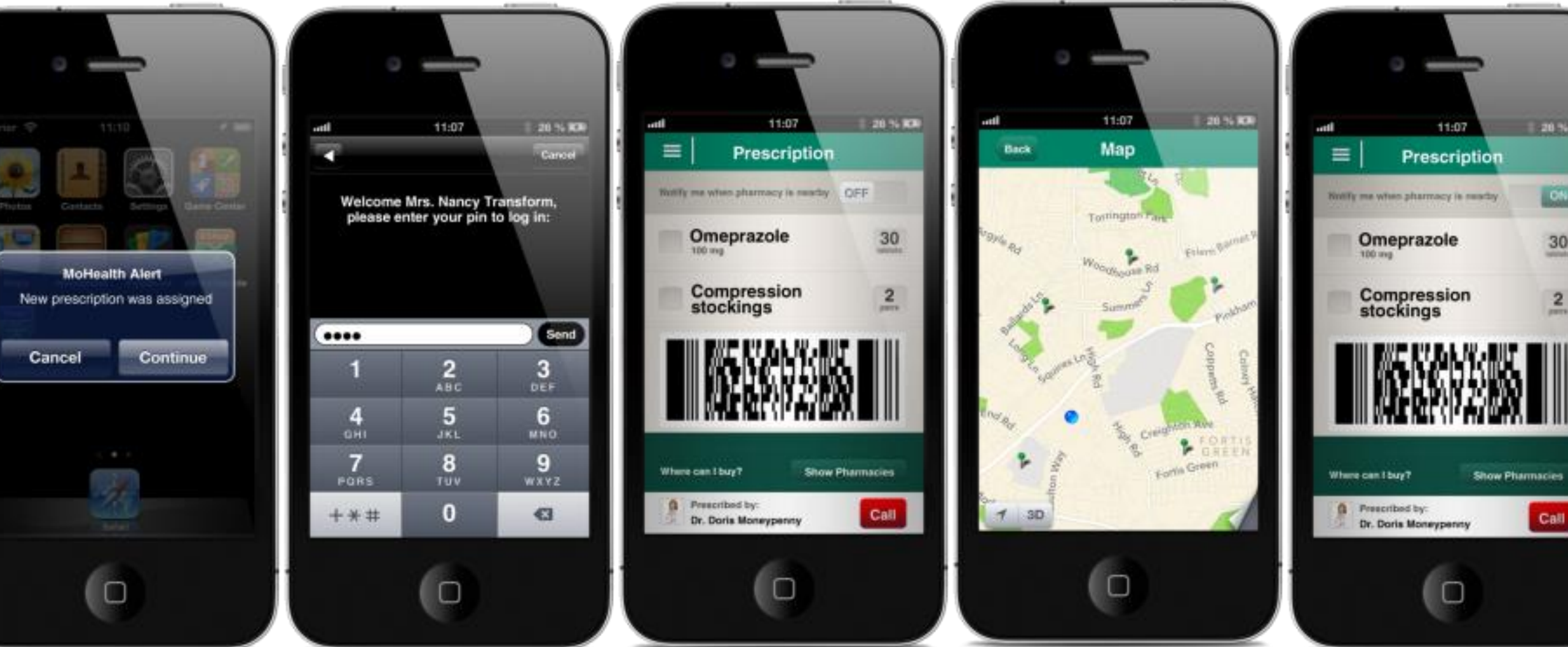
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- **Citizen Portal**

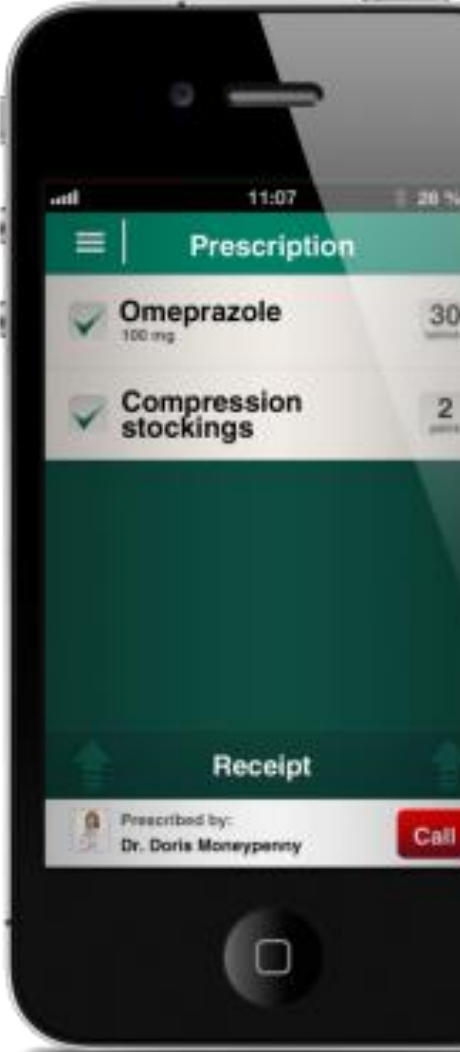
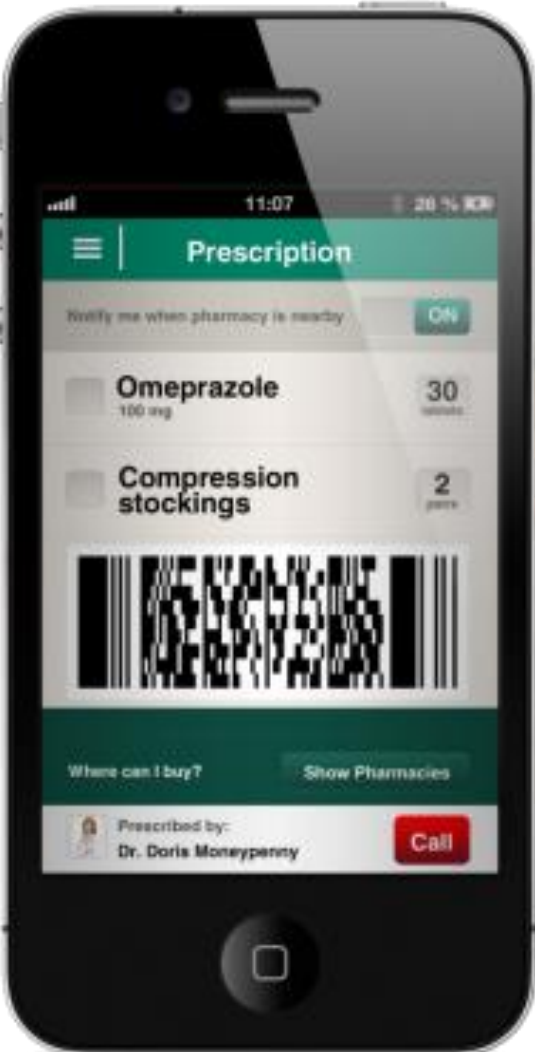
- Patient cEMR Summary
- Patient cEMR details for each Operational Unit attended
- Lab Results Viewer
- Document Viewer
- Surveys
- Mobile Application Configuration
- Manage Consent
- Manage Authorisation



# Prescription Issued to Citizen, Accessed on Phone, Data pulled from HIP, GPS and Maps linked to Dispensary Locations



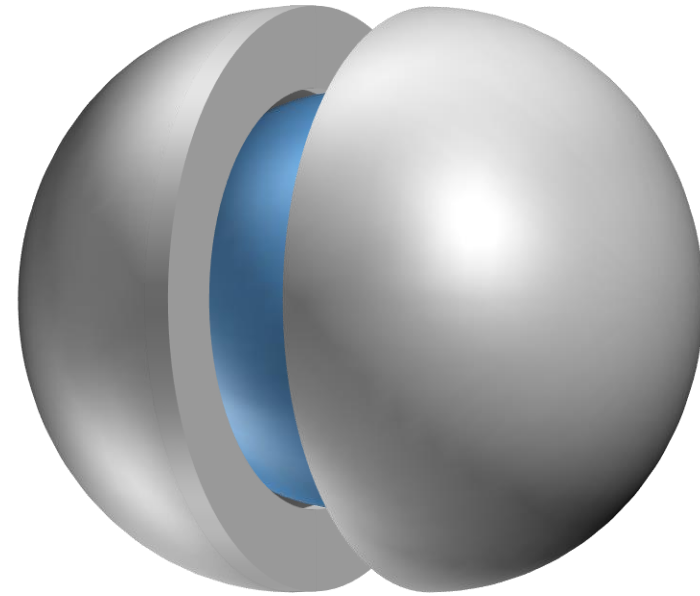
# Arrived at drug dispensary, Fulfilled by Chemist, Contactless Payment, Written back to Central EMR, Receipt Stored on Device



# Strategy on 2014-2015 years

## Integration

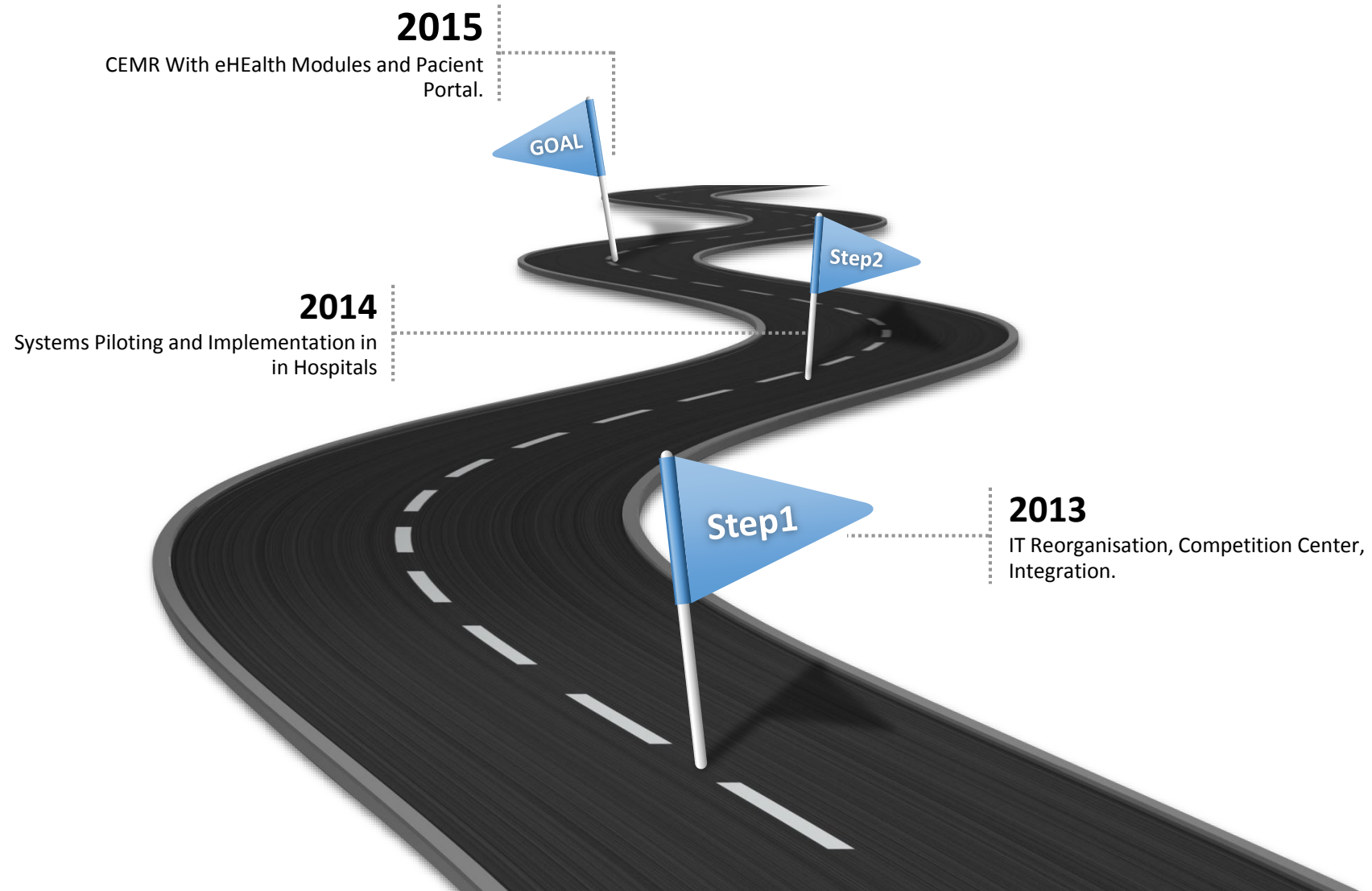
- HIMS Modules  
Synchronization with  
cEMR.
- One Integration  
Framework and  
Standard.
- eHealth Information  
Management System.



HIMS + Standards+ CEMR

# Steps and Goal

## Roadmapping





Thank You



2014 წლის განმავლობაში საქართველოში სულ 1.46 მილიონი ცალი მობილური ტელეფონი გაიყიდა, რომლის საერთო ღირებულებამაც \$148 მილიონი ანუ 335 მილიონი ლარი შეადგინა. საშუალოდ მობილურის ღირებულებამ \$101 ანუ 227 ლარი შეადგინა, რაც იმას ნიშნავს, რომ საქართველოში შეძენილი მობილურების გარკვეული ნაწილი სმარტფონებია.

საქართველოს მოსახლეობა უკანასკნელი მონაცემებით 3.7 მილიონს შეადგენს, რაც იმას ნიშნავს, რომ გასულ წელს მობილურების გამოცვლა ქვეყნის მოსახლეობის 39%-ს შეეძლო.

SMSTo: [0702787527](tel:0702787527)

Kom ihåg din tid 2015-01-13  
08:10 på Falun blodcentral .  
Vid förhinder ring [023-492154](tel:023-492154).

Mvh

Blodcentralen

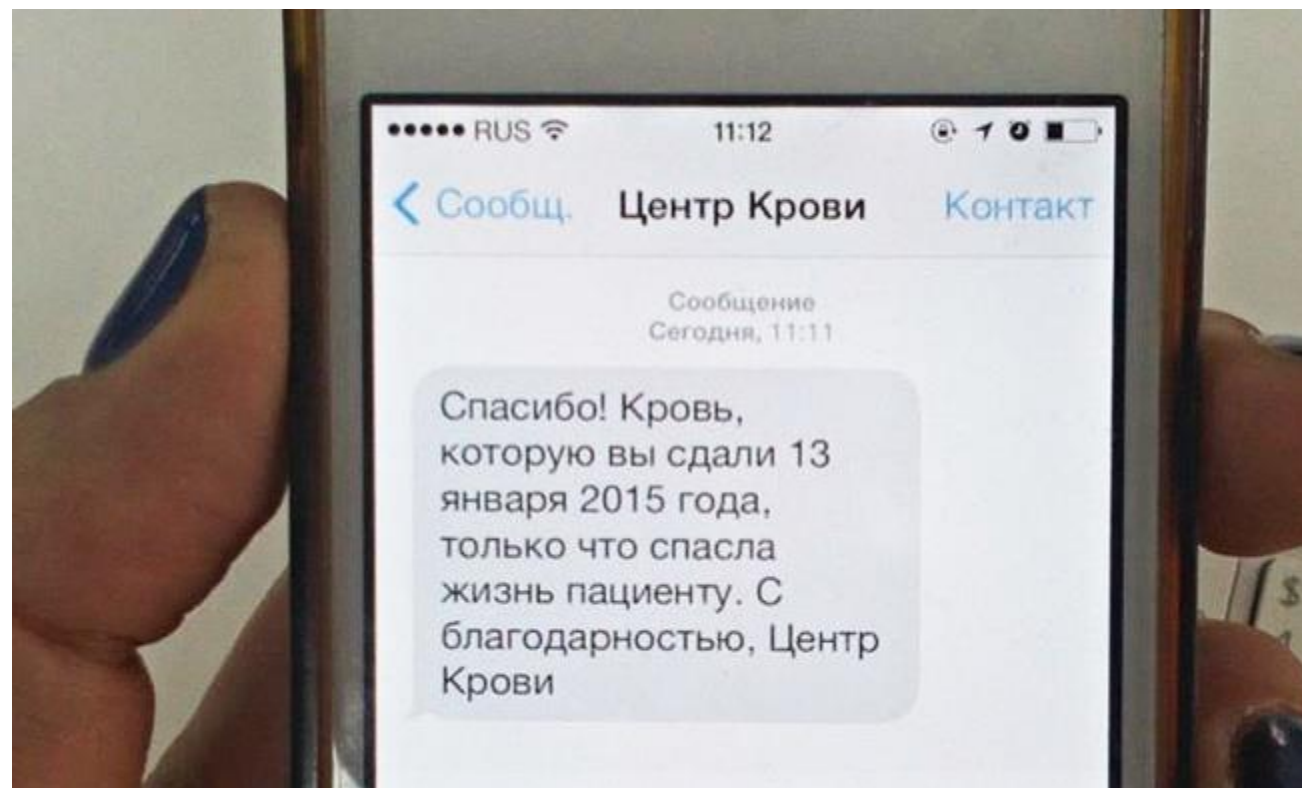
fre 23 jan 05:28

Tack! Det blod du lämnade  
den 13 januari 2015 har nu  
kommit till nytta för en patient.  
Mvh Blodcentralen

idag 09:37

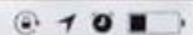
Tack! Det blod du lämnade  
den 26 maj 2015 har nu  
kommit till nytta för en patient.  
Mvh Blodcentralen

Skicka



••••• RUS

11:12



< Сообщ. Центр Крови Контакт

Сообщение  
Сегодня, 11:11

Спасибо! Кровь,  
которую вы сдали 13  
января 2015 года,  
только что спасла  
жизнь пациенту. С  
благодарностью, Центр  
Крови