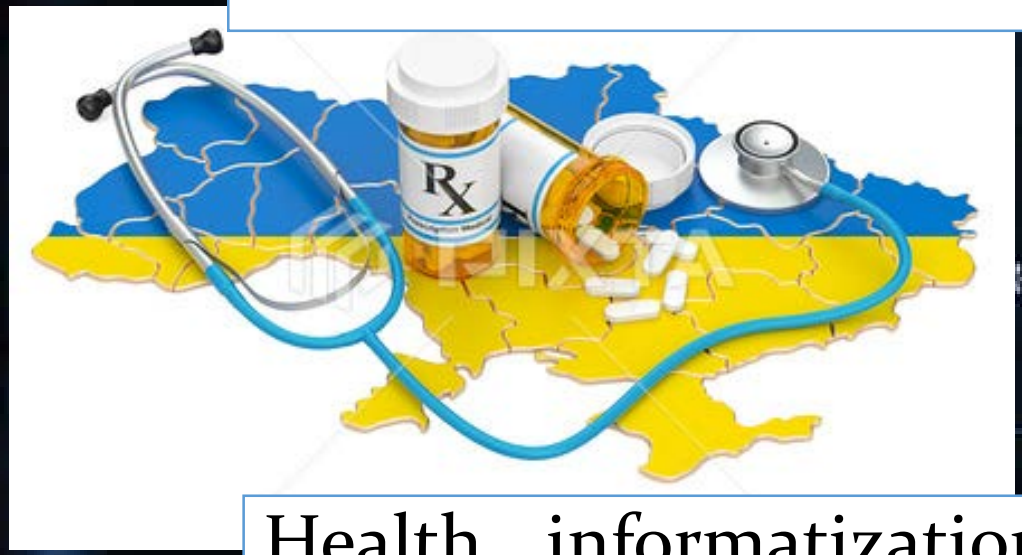
HEALTH DATABASES. ORGANIZATION AND CONDUCTING OF STATISTICAL RESEARCH IN PUBLIC HEALTH.

INTRODUCTION

- Statistical surveys are based on certain, developed in the process of many years of practice and scientifically grounded principles, rules and techniques that make up the statistical methodology.
- In conducting a statistical survey, the most important role is played by a clear sequence of statistical operations, continuity, interdependence and conditioning based on proper grouping.

Health informatization of Ukraine - the process of providing information needs of citizens, specialists, institutions, institutions and organizations, state and local government bodies, other individuals and legal entities in the health care sector through the use of informatics.



Health informatization in Ukraine integrates organizational, scientific, technical, economic, social and other resources into a single system. The main purpose of informatization is to provide general support for the effective functioning of the healthcare system.

MEDICAL INFORMATION SYSTEMS

eHealth is an electronic health care system that enables the exchange of health information and the implementation of the public health guarantee program.

THE eHealth SYSTEM CONSISTS OF:

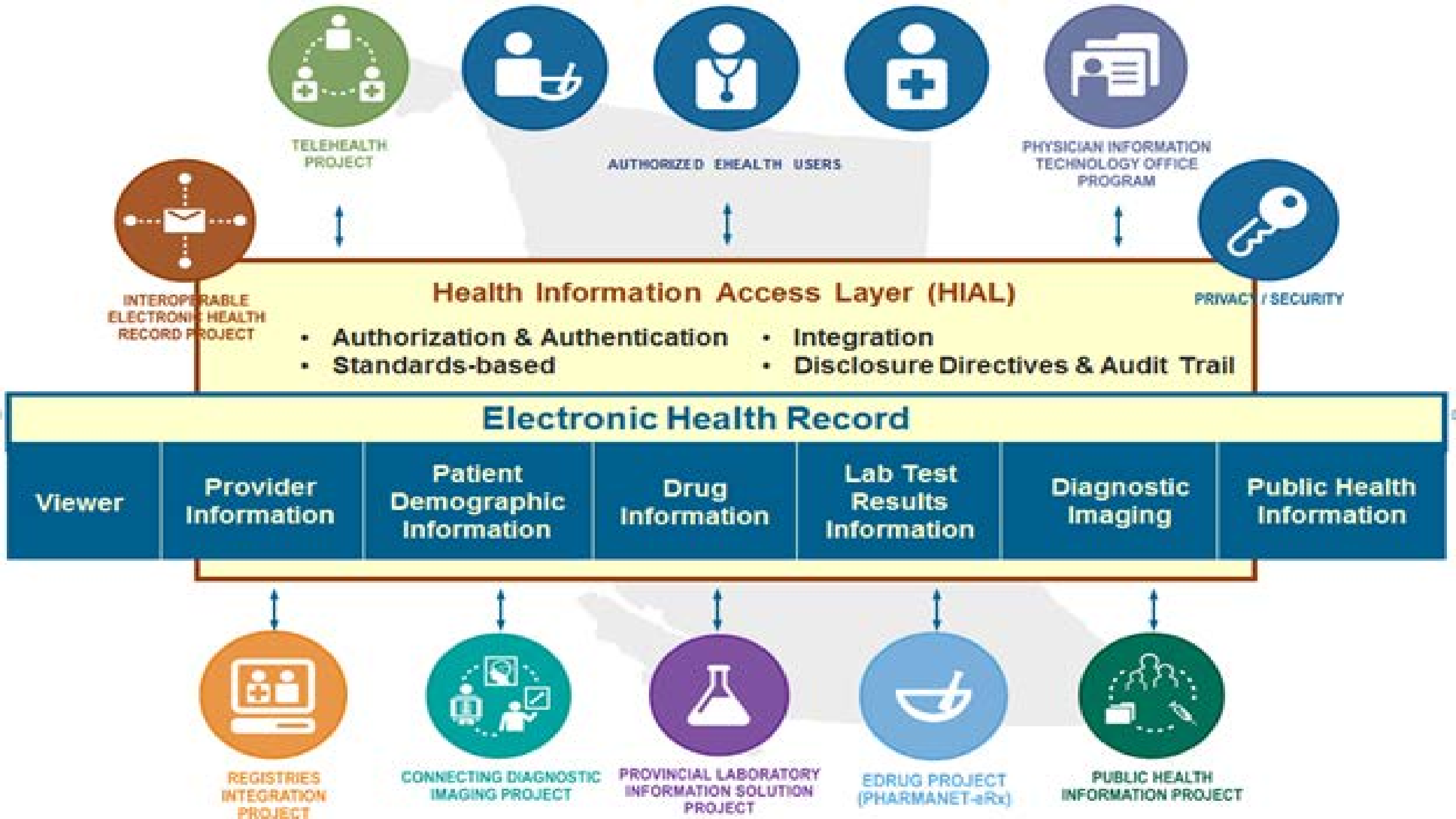
- **Central Database** - Administrator of SE “EHealth”

- **Electronic Medical Information Systems** are systems that enable automation of the work of medical institutions with the central database

eHealth

SYSTEM OBJECTIVES:

- record of contracts between doctors and patients
- access to information regarding each patient's health


TELEHEALTH PROJECT
AUTHORIZED EHEALTH USERS
PHYSICIAN INFORMATION TECHNOLOGY OFFICE PROGRAM
INTEROPERABLE ELECTRONIC HEALTH RECORD PROJECT
PRIVACY / SECURITY
Health Information Access Layer (HIAL)
• Authorization & Authentication
• Standards-based
• Integration
• Disclosure Directives & Audit Trail
Electronic Health Record
Viewer
Provider Information
Patient Demographic Information
Drug Information
Lab Test Results Information
Diagnostic Imaging
Public Health Information
REGISTRIES INTEGRATION PROJECT
CONNECTING DIAGNOSTIC IMAGING PROJECT
PROVINCIAL LABORATORY INFORMATION SOLUTION PROJECT
EDRUG PROJECT (PHARMANET-eRx)
PUBLIC HEALTH INFORMATION PROJECT

MEDICAL INFORMATION SYSTEM

information system for automation of medical institution

They are classified according to different characteristics.

I. Depending on the degree of automation of information collection and processing processes, information systems are divided into automated and automatic.

- In automated systems, part of the information collection and processing operations are performed by a person.
- Automatic systems allow the complete exclusion of humans from the processes of gathering and processing information.

MEDICAL INFORMATION SYSTEM

information system for automation of medical institution

They are classified according to different characteristics.

II. Depending on the type of information base, information sistem are divided into data-processing and knowledge-processing systems.

Second type systems are expert systems. Their functioning is substantially based on the knowledge obtained from the experts, and the results of the operation are close to those of the analytical activities of the experts.

MEDICAL INFORMATION SYSTEM

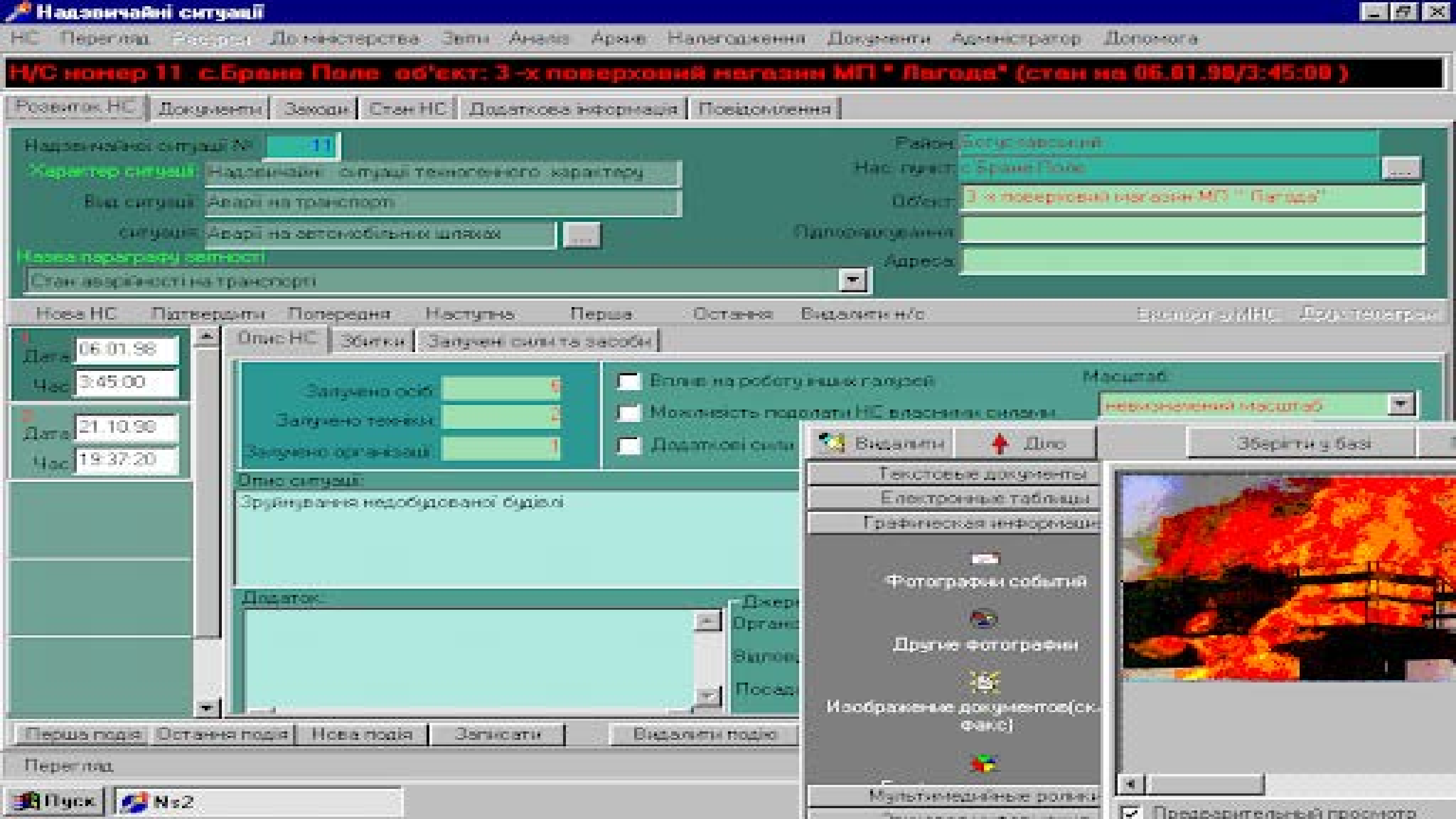
information system for automation of medical institution

They are classified according to different characteristics.

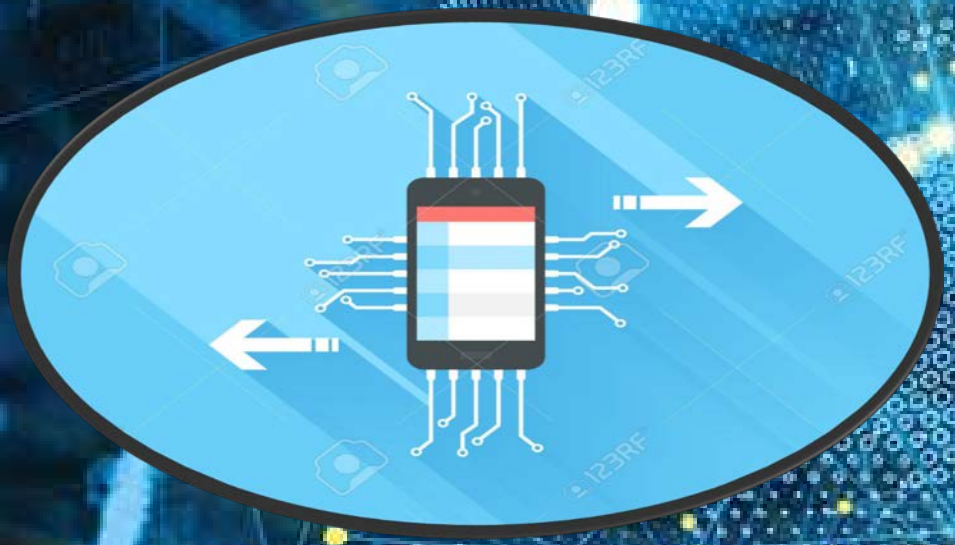
III. Depending on the type of tasks to be solved, information systems can be divided into the following groups:

- information and reference - automated search systems, measuring systems;
- information-logical - diagnostic systems; forecasting systems; monitoring systems;
- control or automated control systems.

- The information logic system is designed to transform information in such a way that new information that is missing from the information array can be obtained.
- In management systems a fundamentally new function is implemented - decision-making.
- The most widespread in medical institutions are information retrieval systems, which, depending on the nature of the information are divided into factual and documentary systems.


Надзвичайні ситуації
НС Перегляд Розвиток До міністерства Звіти Аналіз Архив Налагодження Документи Адміністратор Допомога
Н/С номер 11 с.Бране Поле об'єкт: 3 -х поверховий магазин МП " Лагода" (стан на 06.01.98/3:45:00)
Розвиток НС Документи Заходи Стан НС Додаткова інформація Повідомлення
Надзвичайної ситуації № 11
Характер ситуації Надзвичайні ситуації техногенного характеру
Вид ситуації Аварії на транспорті
ситуація Аварії на автомобільних шляхах
Назва параграфу звітності
Стан аварійності на транспорті
Район Богуславський
Нас. пункт с.Бране Поле
Об'єкт 3 -х поверховий магазин МП " Лагода"
Підпорядкування
Адреса
Нова НС Підтвердити Попередня Наступна Перша Остання Видалити н/с Експорт з МНС Друк телеграм
Дата 06.01.98
Час 3:45:00
Дата 21.10.98
Час 19:37:20
Опис НС Збитки Залучені сили та засоби
Залучено осіб 6
Залучено техніки 2
Залучено організації 1
Вплив на роботу інших галузей
Можливість подолати НС власними силами
Додаткові сили
Масштаб
невизначений масштаб
Опис ситуації:
Зруйнування недобудованої будівлі
Додаток
Видалити Діло Зберігти у базі
Текстовые документы
Електронные таблицы
Графическая информация
Фотографии событий
Другие фотографии
Изображение документов(ск. факс)
Мультимедийные ролики
Перша подія Остання подія Нова подія Записати Видалити подію
Перегляд
Пуск
№2
Предварительный просмотр

MOBILE DATA PROCESSING



There is a distinction between internal mobility (mobile data collection devices and hospital information systems are used directly during daily patient crawl) and external mobility (remote access to documented patient information).

Centralized databases that store documented medical information should be open to remote connections.

The need for secure data transmission and logging increases the requirements for storage solutions.

Paper documents, forms

Document photo

Mobile client application
taking picture and image preprocessing

Preprocessed document photo

Data capture server
recognition and data extraction

Recognized data

Mobile client application
Data verification and approval

Verified data

Processing/storage server
Data processing and saving to CRM, ERP or other system

Processed result

Mobile client application
Success page

ELECTRONIC CASE HISTORIES

Electronic patient histories document patient treatment information. Such a document is maintained throughout the life of a particular person. In addition, the holder of an electronic medical history may access his or her medical records at any time, and may grant access to this document to any person he / she trusts. The healthcare facility must keep electronic medical records using database systems that support confidential transactions and remote access to storage.

3 LIFESTYLES & HABITS

patient name

How many hours of television do you watch a day? ☐ < 1 ☐ 1-3 ☐ 3-5 ☐ >5

Do you usually snack while watching television? ☐ yes ☐ no

How many hours per day do you use a computer at work or home? ☐ < 1 ☐ 1-3 ☐ 3-5 ☐ >5

How many hours per day do you ride in a car or other vehicle? ☐ < 1 ☐ 1-3 ☐ 3-5 ☐ >5

How often do you exercise? ☐ daily ☐ 3x's/week ☐ 2x's/week ☐ 1x/week ☐ I don't exercise

How long do your exercise work outs last? ☐ >1 hour ☐ 1 hour ☐ 30 minutes ☐ < 30 minutes ☐ NA

What are your exercise activities? (mark all that apply) ☐ I don't exercise

☐ walking ☐ swimming ☐ weight lifting

☐ stretching/flexibility ☐ yoga/Pilates ☐ resistance bands

☐ running/treadmill/rowing/climbing ☐ group exercise classes ☐ other_____

Do you take a multi-vitamin? ☐ yes ☐ no If YES, what brand do you take?

List any other nutritional supplements you are currently taking.

supplement	reason	supplement	reason
1.		3.	
2.		4.	

How often do you use tobacco? ☐ never ☐ daily ☐ weekly ☐ monthly ☐ yearly

How many servings of alcohol do you drink each week? ☐ 0 ☐ 1-2 ☐ 3-5 ☐ >5

How many servings of coffee do you drink each week? ☐ 0 ☐ 1-2 ☐ 3-5 ☐ >5

How many servings of soda do you drink each week? ☐ 0 ☐ 1-2 ☐ 3-5 ☐ >5

4 FAMILY HISTORY

Mark the following conditions as they pertain to your immediate family. n=never p=previously c=currently

diabetes	n p c	mother	n p c	father	n p c	brother	n p c sister
heart problems	n p c	mother	n p c	father	n p c	brother	n p c sister
kidney problems	n p c	mother	n p c	father	n p c	brother	n p c sister
cancer	n p c	mother	n p c	father	n p c	brother	n p c sister
headaches	n p c	mother	n p c	father	n p c	brother	n p c sister
back pain	n p c	mother	n p c	father	n p c	brother	n p c sister
obesity	n p c	mother	n p c	father	n p c	brother	n p c sister
poor conditioning	n p c	mother	n p c	father	n p c	brother	n p c sister

5 CONDITIONS

Mark the following conditions as they currently pertain to you.

alcoholism	☐ yes ☐ no	epilepsy	☐ yes ☐ no	low back pain	☐ yes ☐ no	polio	☐ yes ☐ no
anemia	☐ yes ☐ no	goiter	☐ yes ☐ no	measles	☐ yes ☐ no	rheumatic fever	☐ yes ☐ no
appendicitis	☐ yes ☐ no	heart disease	☐ yes ☐ no	mental disorder	☐ yes ☐ no	tuberculosis	☐ yes ☐ no
arthritis	☐ yes ☐ no	HIV positive	☐ yes ☐ no	mumps	☐ yes ☐ no	venereal infection	☐ yes ☐ no
cancer	☐ yes ☐ no	influenza	☐ yes ☐ no	pleurisy	☐ yes ☐ no	whiplash	☐ yes ☐ no
				pneumonia	☐ yes ☐ no	whooping cough	☐ yes ☐ no

6 INJURIES

patient name

List any auto collisions that you were involved in, either as the driver or passenger, below. Begin with the most recent.

type of collision	type of treatment received	date of collision
1.		
2.		
3.		

List any job injuries that you experienced below. Begin with the most recent.

type of job injury	type of treatment received	date of job injury
1.		
2.		
3.		

List any sports injuries that you experienced below. Begin with the most recent.

type of sports injury	type of treatment received	date of sports injury
1.		
2.		
3.		

List any other injuries caused by falls or impacts. Begin with the most recent.

type of injury	type of treatment received	date of injury
1.		
2.		
3.		

7 HOSPITAL / MEDICINE

Have you had breast implant surgery? ☐ yes ☐ no

Have you had knee or hip replacement surgery? ☐ yes ☐ no

Do you have a pacemaker? ☐ yes ☐ no

Do you have any other implantable medical devices in your body? ☐ yes ☐ no

Mark all of the following procedures as they pertain to you.

vaccinations	☐ yes ☐ no	tubes in ears	☐ yes ☐ no	rectal surgery	☐ yes ☐ no
tonsillectomy	☐ yes ☐ no	appendectomy	☐ yes ☐ no	sinus surgery	☐ yes ☐ no
gall bladder removal	☐ yes ☐ no	female/male surgery	☐ yes ☐ no	hernia surgery	☐ yes ☐ no
back surgery	☐ yes ☐ no			thyroid surgery	☐ yes ☐ no
				stomach surgery	☐ yes ☐ no

List any prescription or over-the-counter medications you are currently taking.

medication	reason	medication	reason
1.		3.	
2.		4.	

Have you ever had a lapse of memory? ☐ yes ☐ no Were you ever knocked unconscious? ☐ yes ☐ no

List any broken bones or dislocations that you had.

Have you ever had a spinal tap or spinal injection? ☐ yes ☐ no

Case

Home theater universal remote is not working

Closed

Status
Closed

Contact Name
Jessie Stokes (jessiestoke...

Assigned To
Mark Hale

Summary | Details | Updates | Activities | Documents | Services | Projects | Emails 2 | Invoices | Esign Docur

SLA Name
Standard SLA

SLA Status
Fulfilled

SLA Time Remaining
- 14 day 21 hours 35 minutes

First Respons

Key Fields

Priority	Urgent
Product Name	
Created Date	21-05-2019 12:19:04
Source	CRM
SLA Status	Fulfilled

Interactions

Mark Hale
Home theater universal remote is not working. ...

Chris Tellmore
@MarkHale I have asked @EthanLucas to send a field service agent to take a look at the issue ...

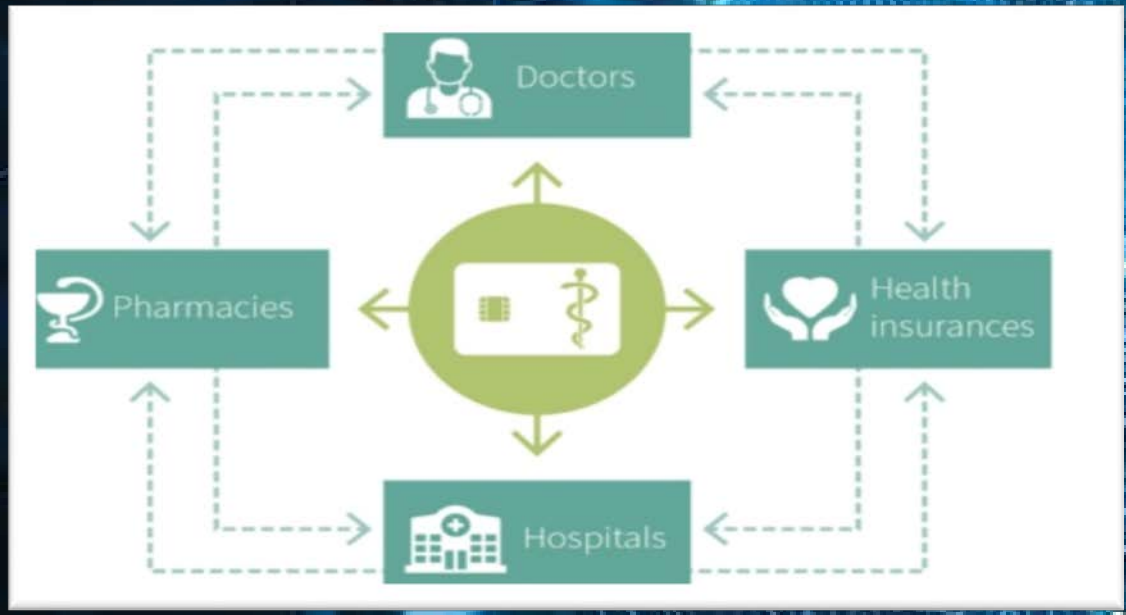
Mark Hale
@ChrisTellmore Thanks for the update, I will inform the customer about this.@EthanLucas FYI. ...

ELECTRONIC RECIPES

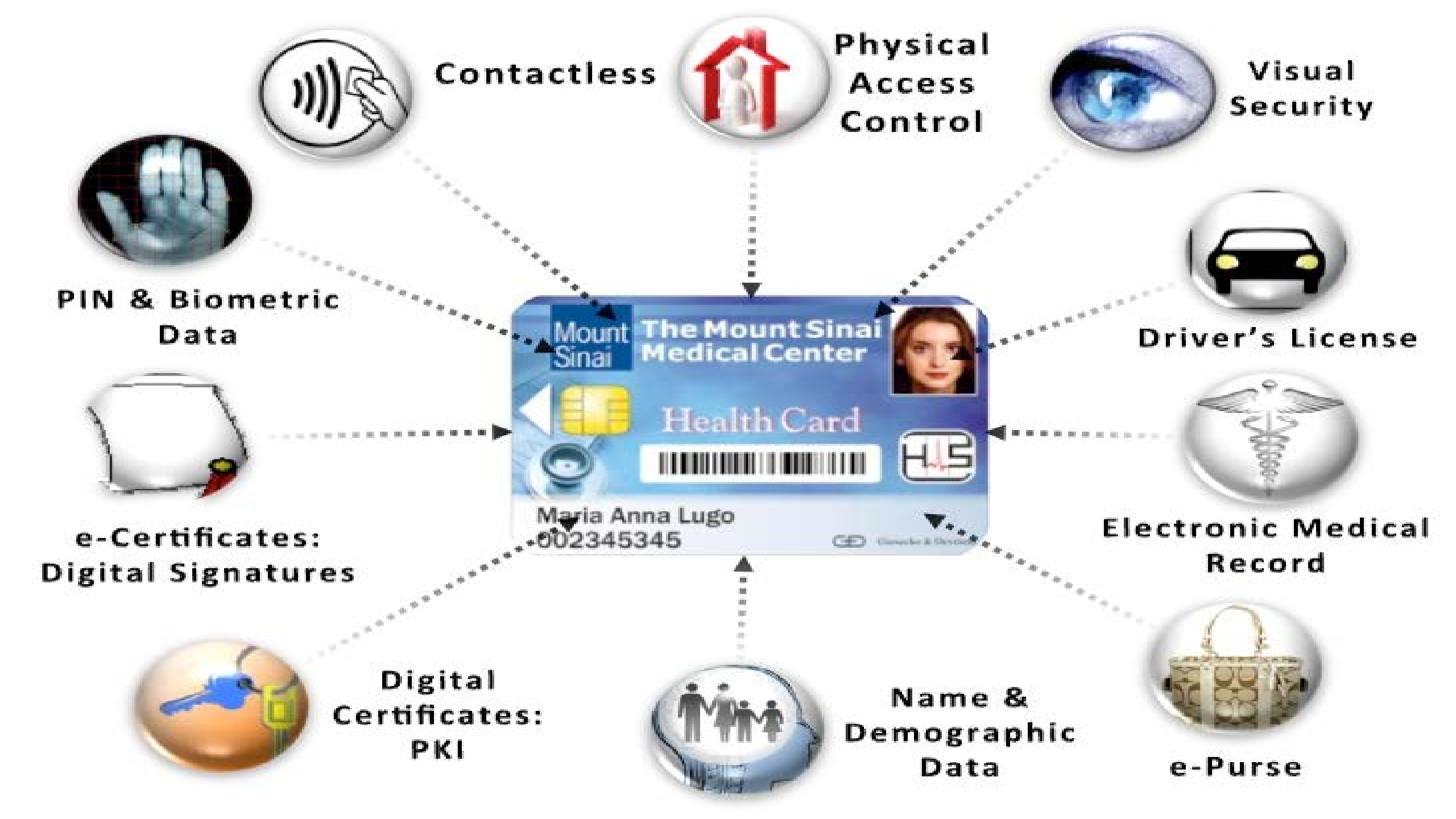
Central prescription databases allow you to compare the side effects of drug use. In addition, the prescription can be tested for compliance with the diagnosis and the correct dosage of each drug. The database must handle a large number of clients at the same time, as several groups of participants may need access at the same time. Electronic recipes can only contain limited amounts of data, so solutions such as smart cards can help identify users and guarantee their safe storage and access to their information.

FLATRON
1181
C09BA02 - tablett
enalapril 20.00MG
D.S 1tbl. x 1
RETSEPT
3000160320
90%
Tavaline
Avalik
C09BA02 - tablett, enalapril 20.00MG,
hüdroklorotiasiid 12.50MG
N56
0.00 originaali
D.S 1tbl. x 1
Kaja Pohla
17.07.2010
6067715
18.01.2010 D05490
Kaja Pohla
Registrikood 46901290286
KORDUV
RETSEPT
A 9489239

ELECTRONIC MEDICAL CARDS



Electronic medical records play an increasingly important role in the transmission and authorization of medical information. These documents can be accessed more easily, reducing the cost of processing data in doctors' offices, hospitals, pharmacies and health insurance funds.


Contactless
Physical Access Control
Visual Security
PIN & Biometric Data
Driver's License
Mount Sinai
The Mount Sinai Medical Center
Health Card
Maria Anna Lugo
002345345
e-Certificates: Digital Signatures
Electronic Medical Record
Digital Certificates: PKI
Name & Demographic Data
e-Purse

e-health
Search
A-F
G-L
M-R
T-Z
HN
Medical Record
Date :
Patient name :
D.O.B./Age :
GP Name :
Address :
Tel :
Blood Group :
Weight :
Height :
First admission date
Previous medical history
Medication
Home
Schedule
Health plan
Appointment

ПАЦИЕНТ
ЕЛЕКТРОННА ЗДРАВНА КАРТА
АРИСТОТЕЛ КИРИЛОВ
АЛЕКСАНДРОВ
2612151332
icw
Sagem Orga

Ontario
Health • Santé
JOHN ALAN DOE
5555 - 555 - 123 - XX
1970 - 04 - 07
M
2011 - 02 - 25
2016 - 04 - 07

Gesundheitskarte
SAMPLE
Health Card
Stewens
Christa
27081945
Versichertennummer
31.12.2005
gültig bis
Giesecke & Devrient

eHealthCard
www.ehealthcardindia.com
PERSONAL HEALTH RECORD SYSTEM
Akshay Narkhede
Blood Group : AB+
Valid From : 01/15
1234 5678 1234 5678
Globally Accessible Health Record System

REPUBLIC OF TRINIDAD AND TOBAGO
MINISTRY OF HEALTH
NATIONAL
HealthCard
1345119
JEANNINE TAABEAU-AYOUNG
12 MAR 1975
F
10 JUN 2015
Holder's signature

Statistical surveys are based on certain, developed in the process of many years of practice and scientifically grounded principles, rules and techniques that make up the statistical methodology. Statistical surveys, of course, are based on these data and are formed in the form of a series of successive stages, which in turn fall into a series of statistical operations. In conducting a statistical survey, the most important role is played by a clear sequence of statistical operations, continuity, interdependence and conditioning based on proper grouping. It is not enough to fulfill the requirements or to make a mistake at one of the stages of the study, as a result, to obtain data on the basis of which it is impossible to make the right scientifically valid conclusions.

European Action Plan for Strengthening Public Health Capacities and Services

1. surveillance and assessment of the population's health and well-being
2. identification of health problems and health hazards in the community
3. health protection services (environment, occupation, food safety)
4. preparedness and planning for public health emergencies
5. disease prevention
6. health promotion
7. a competent public health and personal health care workforce
8. governance, financing and evaluation of quality and effectiveness of public health services
9. communication for public health
10. health-related research