# NEOZENSOFT

PUTTING THE RIGHT SOLUTION.
IN THE RIGHT PLACE,
AT THE RIGHT TIME.

**Company Introduction** 

2020.08

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NEOZENSOFT INTRODUCTION 2

"We offer the newest and ultimate technologies to our client"

# NEO X ZENITH X SOFTWARE

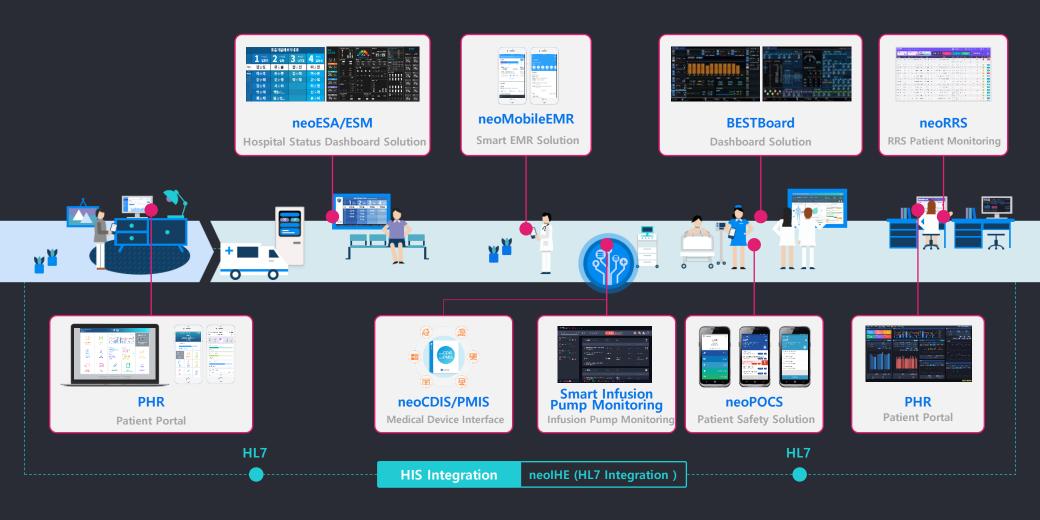
Neozensoft is one of the healthcare IT companies that accomplished successful projects in South Korea and many other countries. Neozensoft has been provided the state-of-the-art healthcare technologies to many clients and it is still moving forward to make a better world through healthcare IT Solution.

Neozensoft's solutions are not like any other systems in this field. We care and strict in security and so we have obtained certification of ISO27001(Information Security Management System), ISO27799(Information Security Management in Health).

# **Smart Healthcare Solution Smart Hospital Solution** Dashboard Solution Interface ICT Consulting ETC.

NEOZENSOFT INTRODUCTION

### Neozensoft provides diverse products to healthcare IT.



NEOZENSOFT HISTORY TIMELINES 5



2019

- [GS-Certification] Patient Safety Solution (neoPOCS GS (Good Software) Grade 1
- [ISO27001] Information security management systems
- [ISO27799] Health informatics -- Information security management in health using ISO/IEC 27002
- InHa Univeristy Hospital CLMA Project



- '2018 Korea Leading Company' Convergence Technology Award
- St. Mary's Hospital in Seoul (nU Mobile EMR project)
- St. Mary's Hospital in Seoul (nU CLMA project)
- Seongnam Citizens Medical Center / PHR / Interface
- Established interface of Glucose device with Roche Korea
- Provided Interface solution to Keimyung University Dongsan Medical Center
- Provided Interface solution to Gachon University Gil Hospital
- Enhanced POCS in Seoul National University Bundang Hospital
- Established BESTBoard in Ewha Womans University Medical center

#### 2017

- '2017 Korea Leading Company' Convergence Technology Award
- Certification of 'INNOBIZ' (Company that has innovated technology)
- 'Youth-friendly Workplace' Ministry of Employment and Labor
- [Smart App-Award] 1st prize on Public section
- [App-Award] 1st prize on healthcare section
- · USA (Aurora Behavioral Healthcare) HL7 Integration, Mobile EMR
- Enhanced Seoul National University Bundang Hospital's web page PHR(Health4U)
- Yeungnam University Medical Center (POCS)
- Established POCS in Pusan National University Hospital
- Established ESA and ESM in Pusan National University Yangsan Hospital

#### 2016

- 'Youth-friendly Workplace' Ministry of Employment and Labor
- '2016 Mobile Technology Award' Hankyung President's Award.
- Accredited as 'Good Company to Invent'
- '2016 Korea Leading Company' Convergence Technology Award
- Patient Safety Management System(neoPOCS) is registered on Program Copyright.
- · Developed Smart Infusion Pump System.
- Chonbuk National University Hospital (Patient Safety Management System).

#### 2015

- · Involved in Saudi Arabia HIS project (2nd)
- Developed HL7 Interface Engine.
- Seoul National University Hospital (Mobile EMR, CDIS)
- Seoul Asan Medical Center (Mobile EMR, POCS, CDIS)
- Yangsan Pusan National University Hospital (E-Consent)



- Involved in Saudi Arabia HIS project (1st)
- Gyeonggi Cerebellar Blood Vessel Center (RTLS system)
- Establishment of affiliated research institute.
- Smart App Award 2014- winner of healthcare field.



- St. Mary's Hospital in Seoul (nU2.0 project)
- Seoul National University Bundang Hospital (BESTBoard, PHR, CDIS)
- Samsung Seoul Hospital (ESA / ESM)
- Central Dementia Center (Application & Homepage)
- Certification of Software provider.
- Launched neoCDIS, neoSMC, neoFramework



- Involved Seoul National University Bundang Hospital (Mobile EMR, BESTBoard, PHR)
- Neozensoft Co., Ltd. Established.

NEOZENSOFT CERTIFICATIONS AND TECHNOLOGY

#### Technologies

#### **HIS Interface Solution**

- neoCDIS/PMIS
- neoIHE (HL7 Integration)
- · Developed International standard HL7 engine.
- Exported to hospitals in Saudi Arabia and U.S.A.
- Provided maintenance continuously.

#### Medical Mobile

#### Solution

- neoMobileEMR
- neoPHR
- neoPOCS

#### · Served Mobile Healthcare first time in South Korea.

- · Customized as users request
- · Patient safety management is engaged based on PDA

(Android OS) first time in South Korea.

#### **Dashboard Solution**

- BESTBoard©
- neoESA/ESM

- · BESTboard is specialized in Medical Staff
- BESTBoard used in Seoul National University Bundang

Hospital where certified HIMSS stage 7.

· Able to customize for each department's

#### Server Management

#### Solution

Provided our own server side M/W

#### Certifications

2019.06	neoRRS (Software Copyright Registered)
2018.08	neoMobileEMR (Software Copyright Registered)
2016.07	neoPOCS (Software Copyright Registered)
2016.02	neoESA/ESM (Software Copyright Registered)
2013.12	neoFramework (Software Copyright Registered)
2013,12	neoSMC (Software Copyright Registered)
2013.12	neoCDIS-ECG (Software Copyright Registered)
2013.11	neoPMIS (Software Copyright Registered)
2013.09	neoCDIS (Software Copyright Registered)















NEOZENSOFT CERTIFICATIONS AND TECHNOLOGY 7

■ ISO27001 • ISO27799



Information Security Management System ISO27001



Information Security Management for Personal Health Information ISO27799 Good Software(GS) Certification



Good Software(GS) 1st grade
Certificate of Software Quality
for Patient Safety Management Solution(neoPOCS)

NEOZENSOFT GLOBAL NEOZENSOFT 8



#### USA

hospital: Aurora Behavioral Healthcare Solution: MobileEMR, HL7 Integration

#### Saudi Arabia

hospital: Ministry of National Guard-Health Affair(Riyadh, Jeddah, Dammam, Madinah, Al-Ahsa) Solution: MobileEMR, HL7 Integration, Dashboard

#### <u>Dubai</u>

hospital: Clemenceau Medical Center in Dubai, UAE Solution: MobileEMR, HL7 Integration

NEOZENSOFT ORGANIZATION 9



NEOZENSOFT SOLUTION INTRODUCTION 10

# Smart Healthcare Solution Smart Hospital Solution

Dashboard Solutio Interface ICT Consulting ETC.

## neoMobileEMR

Working smart with the smartest thing.

neoMobileEMR contains and manages information of patients' data from the EMR. Medical staff can see patient's orders, test results, and medical records. It is powerfully designed to focus on better communication between medical staff.



#### **Optimized patient management**

Medical staff can manage patients anytime and wherever with optimized patient manage through mobile.



#### Improving work efficiency

It is possible to improve work process for medical staff by providing various convenience functions such as consult, schedule, and messenger etc.



#### **Best security**

Neozensoft applies basic security such as MDM, electronic authentication, and VPN and also follows security policies and signal protocols for the messenger.

▶ Projects: Aurora Charter Oak Hospitals(U.S.A), Kingdom of Saudi Arabia Mistry of National Guard Health Affairs, Seoul National University Bundang Hospital etc..





Patient List



Order List



Test Result





Vital Sign



Medical Record









Media



Consult

Messenger

Schedule

**Nursing Note** 

Work Report

Voice Recording

### neoPOCS

The best patient safety management solution.

neoPOCS gives the best patient safety management that is accurate performance of medical staff by using smart device (PDA). The solution provides performance such as medication, blood collection, blood transfusion seamlessly.



#### **Enhancing patient safety**

By matching the patient information and order, this solution will prevent medical malpractice.



#### Seamless integration

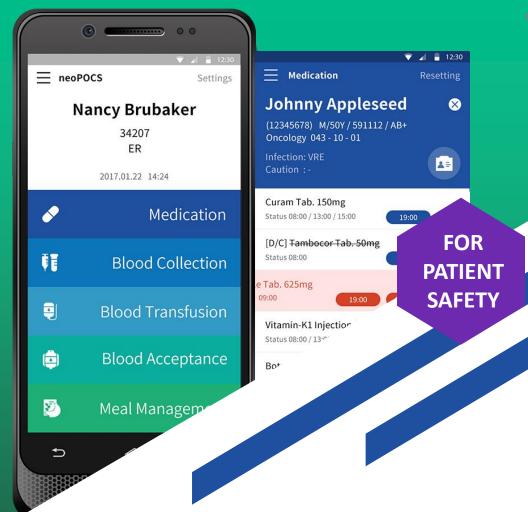
PDA which is connected to Hospital Information System (HIS) will transfer medical staff's performance to HIS seamlessly.



#### **User-Centered solution**

Providing a stable operating environment by using PDA with best User-Experience from Android OS.















Medication

**Blood Collection** 

Transfusion (Co-sign)

Blood Acceptance

Nutrition

Management of **Hospital Property** 



Vital Sign

Preparation of

Surgery







**Editing Order** 





Matching



# PHR (Health4U)

**Personal Health Record** 

From the "Health4U" application, individuals able to access their medical records, steps, weight, blood pressure, blood sugar, sleep and etc.. All of data will be managed by PC and smartphones.



#### Your Health in your hands

Tracking your personal healthcare and medical record in your hands. It helps you to manage your health easily.



#### **Helps better Communication** between Medical staff and patient

Data from Patients will be shared to the medical doctor And Doctors can share or comments to the patients.



#### Connecting wearable devices

Able to collect Activity, Weight, BP, and Sleep information by integrating wearable devices.

















Test Results

Order Information

Medication Reminder













Download



▶ Reference : Seoul National University Bundang Hospital, Seongnam Citizens Medical Center

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Education

Health data At a Glance \*For Physician

Blue Button \*Medical Record

NEOZENSOFT SOLUTION INTRODUCTION 14

# Smart Healthcare Solution Smart Hospital Solution Dashboard Solution

Interface ICT Consulting ETC.

NEOZENSOFT SOLUTION [neoESA/ESM] 15

## neoESA/ESM

View hospital status at a glance.

The solution providing waiting time, ER progress status to patient and quidance through a large screen.



#### **Customized screen**

Depends on hospital work process and environment, medical staff can organize screens as their favor.



#### Remote control

ESM (Electronic Signal Management) supporting administrator program, each screen can be managed by central PC.



Support affordable mini PC
Support mini PC to reduce the cost of installation and achieve maximum effectiveness















Patient Waiting Status

Progress of Test

Doctors Profile

ER Status

Crowdedness Delay Level

Delaying Patient Info

with minimal cost.

NEOZENSOFT SOLUTION [BESTBoard] 16

## **BESTBoard**

Checking patients' every record at a glance.

BESTBoard is a huge screen that provides every detail of patients' information with bed status in Ward / ER / ICU.



#### **Supports communication**

From the huge screen, medical staffs can share patients' condition with more convenience.



#### **Realtime patient information**

Vital signs, Severity and other important values for patients will be displayed on graphs.



#### Better UI for each department

Considering every different part of departments, it shows better UI for each department.















Map View

Patient Info.

Operation Schedule

Statistics M

Medical Staff List ER Crowdedness Level

**NEOZENSOFT SOLUTION** [Smart Infusion Pump]

# **Smart Infusion Pump**

Interface solution for Infusion Pump with EMR

will helps medical staff to work faster and safer



Check amount and other information in realtime Smart Infusion Pump gives data to EMR in Realtime.





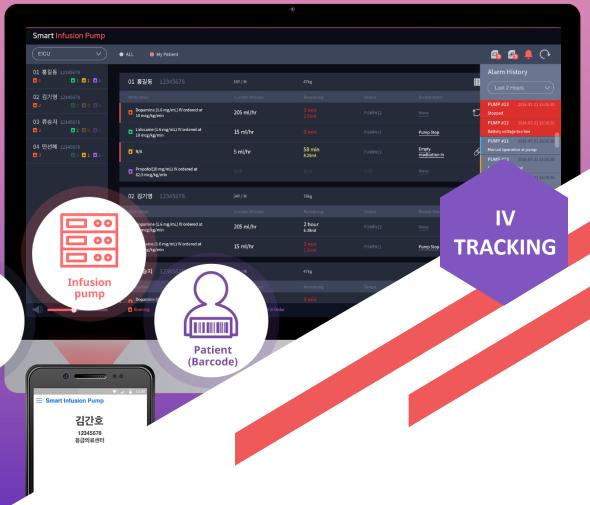
#### Safer in patients' care

Through the Smart Infusion pump, 5 Rights(Right Patient, Medication, Dose, Route, Time)



#### Compliance with HL7 standard

Smart Infusion Pump is following the HL7 standard which is national standard for world wide.















Injection Info

injection change disconnected device device connection

Event Alert

Patient Info.

## neoRRS

The most predictable patients monitoring solution.

neoRRS helps the early response and prevention of risk circumstances by prompt notifying the Rapid Response Team when an abnormal of patients' vital signs and Lab results occur.



Early detection of abnormal value by alarm
When abnormal values occur to the patient,
PC and SMS notification activates to
the medical staff respond promptly.



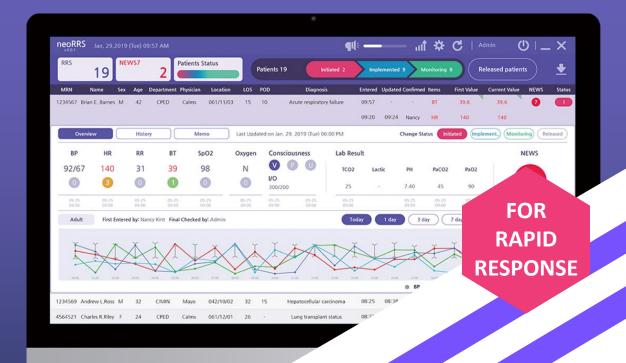
Identifying patient's status through NEWS

National Early Warning Score(NEWS) provides a quick overview of the emergency level of RRS patients.



Efficient patient's management

Graphs display of patients' vital signs and specimen results, notes, and management.





Alert



**NEWS** 





Vital Sign graph







Abnormal Value

Patient List by Status

Statistics

NEOZENSOFT SOLUTION INTRODUCTION 19

# Interface

## neoCDIS/PMIS

See all test results in one.

This solution automatically interfaces all the test results data from the medical devices to Hospital Information System. From this system, medical staff find out the patient's test results as their favor.



#### Systematized data management

Data from the medical devices are matching patient's order and results by automatic and manual.



#### **Provides HL7 standard protocols**

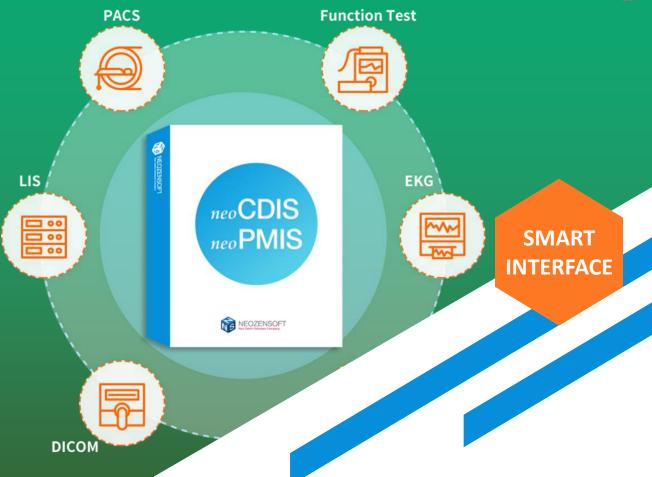
Provides HL7 (International Standard) and varies standard protocols for medical devices.



#### Powerful data security

Preventing fraud from encrypted data and image watermarking.

► Reference: SNUBH, SNUH,, Saudi-Arabia (KASCH, KAMC-R, KAMC-J, KAMC-Eastern), PNUH, GNUCH, JNUH, Seoul Asan Hospital



# neo CDIS

# neo PMIS

**Smart Infusion** 

- Integrate with varies medical devices including ophthalmic devices/ EKG/ DICOM
- More than 300 medical devices
- Patient Monitor/BIS Monitor
- Interface hemodialysis machine/ ventilator/ anesthesia
- Infusion pump interface
- Auto programming, Auto documentation
- CLMA Integration

**SOLUTION** [neolHE - HL7 Integration]

neolHE (HL7 Integration)

Completeness of bi-direction in medical data interface

neolHE is completely providing all of medical data to devices and EMR . As there are many data are interacting between departments in the hospital, HL7 interface is must-have solution for many hospitals.



#### **Provides HL7 interface**

neoIHE is following HL7(Health Level 7), HL7 standard is being used for many medical manufacturers.



#### **Provides diverse protocols**

Provides many diverse protocols

Such as , HL7 Transport Specifications MLLP v2,

SOAP, HTTP, and DICOM .



#### Expanding use of medical data use

As HL7 in structured in certain format. Hospitals can use these medical data to meaningful information.





- Secure data via VPN
- Monitoring HL7 messages
- Integration with Cerner LIS, GE RIS
- Verification of HL7 and provides HL7 engine

**SMART** 

**INTERFACE** 

- Compliance with IHE International
- HL7 Version 2.x
- Provides HL7 specification

NEOZENSOFT SOLUTION [neoSMC]

# neoSMC (Server Framework

#### Server framework

neoSMC is a high-performance transaction server middleware framework for C/S and Web applications. It supports various databases and provide formats according to system environment of web service creation and connection through IIS.



#### Provides stable server platform

Use stable serplatform such as Micorsoft .NET WCF(Windows Communication Foundation) , COM+.



#### Easy to maintain by integrated server

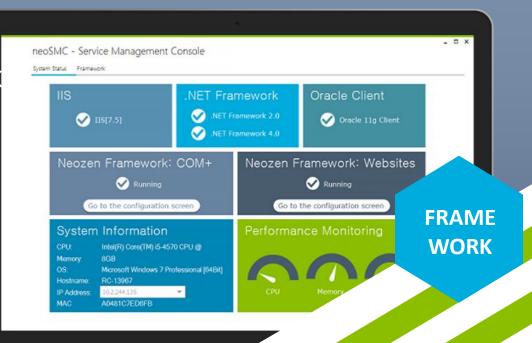
As servers are maintained individually, noeSMC can Provides as integrated server which leads to maintaining in one program.



#### Efficient work environment

From the Intuitive UI, Users can work efficiently in COM+, Status of IIS, searching on DB query





- Stable dataflow in MTS environment and transaction
- Apply WCF, COM+
- Dataset, JSON, RESTful, XML, HL7 output format
- Engine status and messages processing status with stats
- Add and removeable Webservice XML Query/Procedure
- Download in Excel file

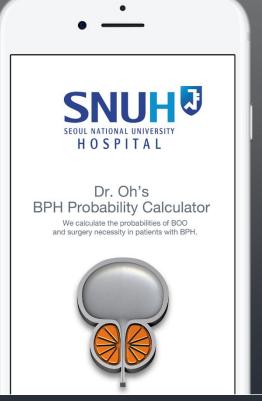
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# ICT Consulting

# **Healthcare Mobile Solution**







# **Healthcare Display Monitoring Solution**



\* copyright @2012 by SNUBH



Patient tracking system

Seoul National University Bundang Hospital

Patient status (Kiosk)

Samsung Seoul Hospital (ER) Kiosk

**NEOZENSOFT** 

We offer the best and reliable healthcare technologies based on experiences with many clients.

**South Korea** 

SNUH 🗗 분당서울대학교병원

SNUH 서울대학교병원





고려대학교안암병원

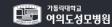


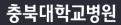


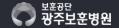






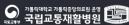


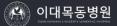




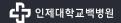
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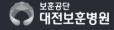




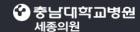






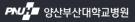




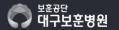














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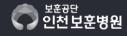
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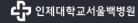






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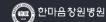


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