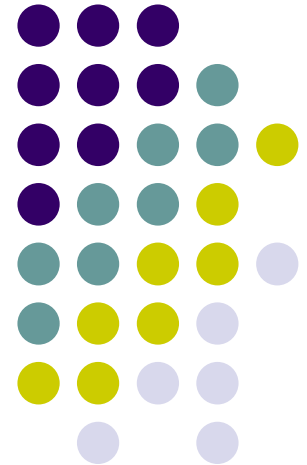
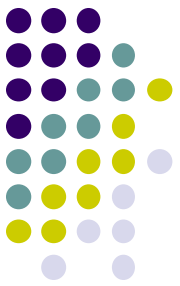


Advanced **Integrated** Hospital e-Registration Solution

4/13/2015



Citizen is King / Service is Queen

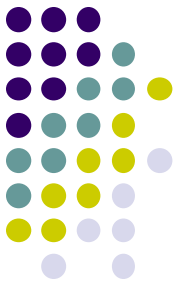


Excellent Hospital Registration Service

- Citizens
- Doctors/Nurses
- Government/Hospital Executives
- Hospital Staff



Successful e-Registration System Implementation – 5 Hospitals in Vysocina Region, Czech Republic



■ Proven solution in Czech Republic and Asia

- Czech Republic successful e-Registration system implementation and operation service in Vysocina Regional Hospital with **“2011 Best e-Government Service”** prize awarded in Nov. 2011

(1) 2010 – 2011 System creation

(1) 2011/06: Jihlava Hospital system operation started

(2) 2012/02: Pelhrimov Hospital, system operation started

(3) 2012/06: Trebic, Nove Mesto na Morave and Havlickuv Brod Hospital, system operation started

(4) 2014/12: Integrate with local GP system operation started

(5) 2015: Integration with mojeID



e-Registration System
- The Best e-Government Service 2011 Award in Czech Republic -
- A Cooperative Project of Vysocina Region, Czech Republic and
Institute for Information Industry (III), Taiwan -



- More than **30 hospitals** implemented with e-registration system in Taiwan and Asia.

www.eambulance.cz

A. Solution Benefits



A.1 Citizens

A.1.1 Make appointment any time, places, devices

A.1.2 Know doctor expertise, schedule and hospital news easily

A.1.3 Reminding appointment

A.1.4 No more long waiting for diagnosis or treatment

A.1.5 Make appointment to multiple city hospitals

A.1.6 Referring from Clinic/GP system

A.2 Doctors/nurses

A.2.1 Know up-to-date patient appointment list and symptoms

A.2.2 Flexible setting session maximum registration no

A.2.3 Make patient next appointment to any of hospitals

A.2.4 Know patient visiting pattern by gender, age,..

A.2.5 Know attended, canceled, no show patient no

A.3 Gov. / hosp. executives

A.3.1 Offer versatile appointment services to citizens

A.3.2 Know patient visiting pattern by age, gender, area, profession, etc..

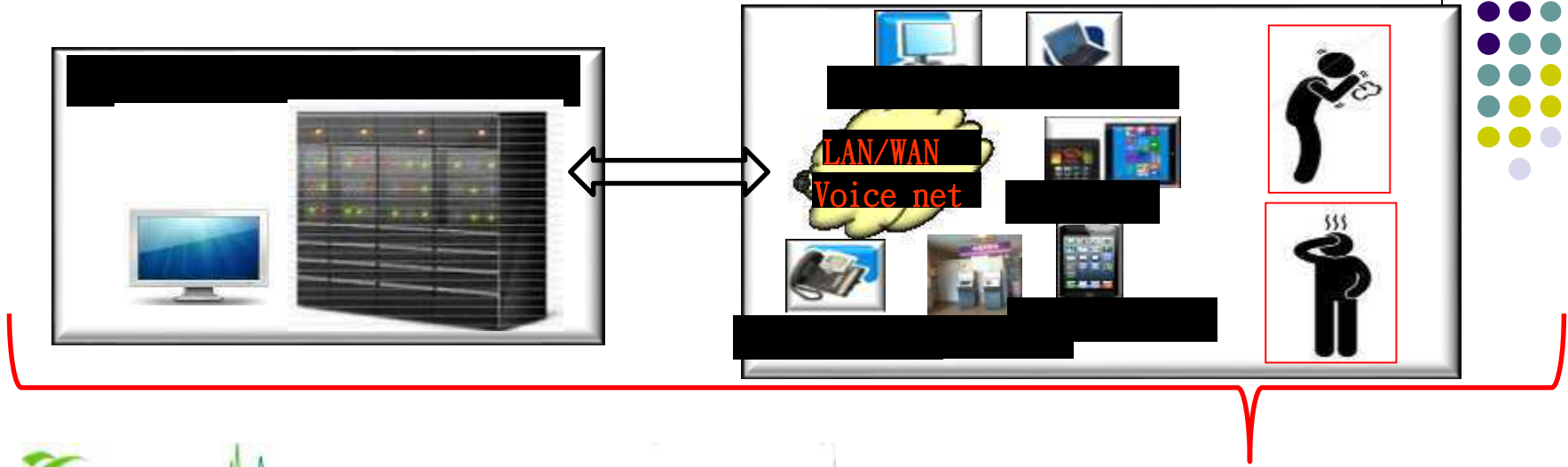
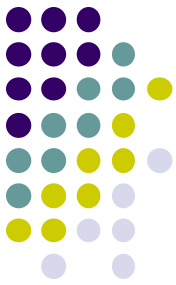
A.3.3 Know patient service loading(number) by hospital, unit, doctor, time interval, etc.

A.4 Hospital counter staff

A.4.1 No need to re-type patient demographic data, etc.

A.4.2 No need to generate patient visiting statistic report manually

A.1.1 Benefits : Citizens



Vysocina Region E@mbulance

Path: Home Page > eAmbulance System > Registration by Ambulance

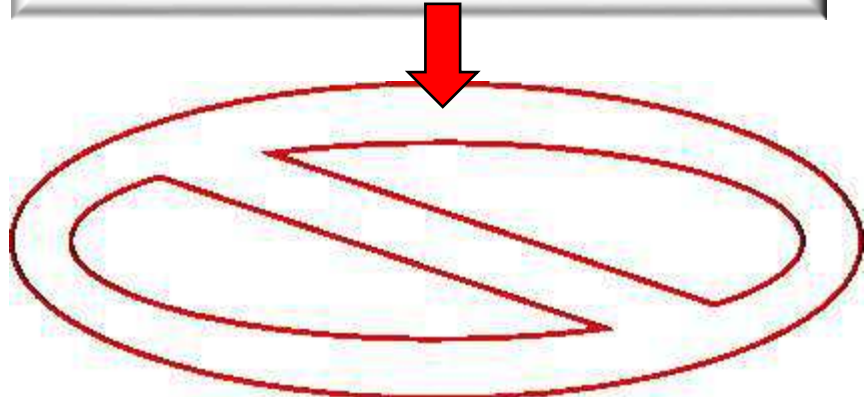
Registration by Ambulance

Current Ambulance : Ambulance bolesti

Appointment Date	Session	Physician	Current No.	Max.No.	Usage Rate
11.02.2015 (Wednesday)	13:00 - 14:00		0	1	0.00%
18.02.2015 (Wednesday)	13:00 - 14:00		0	1	0.00%
25.02.2015 (Wednesday)	13:00 - 14:00		0	1	0.00%
04.03.2015 (Wednesday)	13:00 - 14:00		0	1	0.00%
11.03.2015 (Wednesday)	13:00 - 14:00		0	1	0.00%
18.03.2015 (Wednesday)	13:00 - 14:00		0	1	0.00%
25.03.2015 (Wednesday)	13:00 - 14:00		0	1	0.00%
01.04.2015 (Wednesday)	13:00 - 14:00		0	1	0.00%

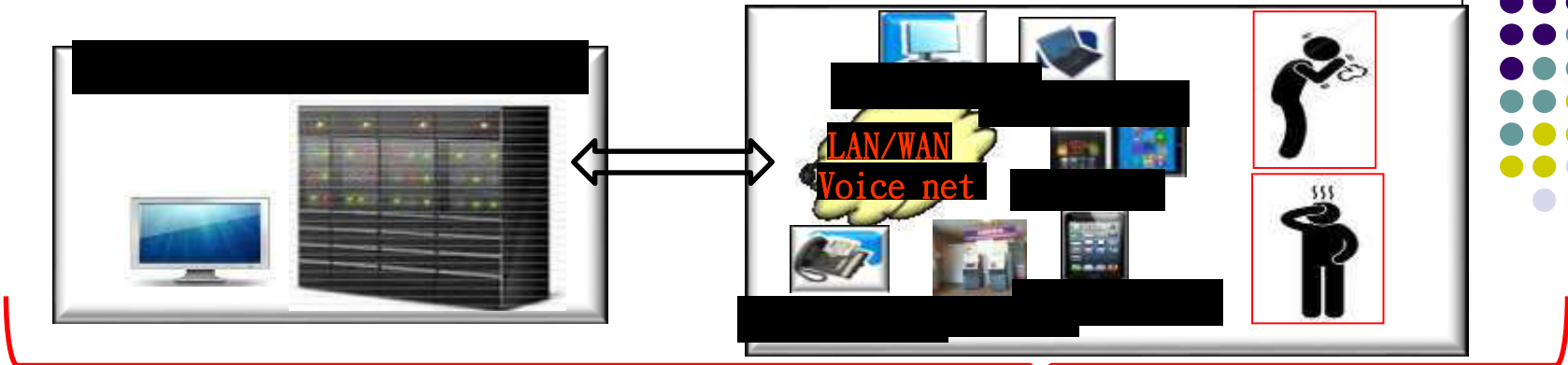
Make appointment

- ◆ any time
- ◆ any places
- ◆ any devices



www.eambulance.cz
36000 users in Vysocina

A.1.2 Benefits : Citizens



Department	Testovací ambulance, Test Ambulance, Kožní Ambulance	
Name	Dubská, Stefan	
Education		
Experience		
Speciality		
Additional Description		

Know :

- ◆ Doctor expertise,
- ◆ Doctor schedules
- ◆ Hospital News

Make appointment to right:

- ◆ Doctor
- ◆ Schedule

Vysocina Region E@mbulance

Path: Home Page >> eAmbulance System >> Registration by Physician

Registration by Physician

Appointment Date	Session	Ambulance	Current No.	Max.No.	Usage Rate
08.01.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	4	4	100.00%
14.02.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	4	4	100.00%
11.02.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	2	4	50.00%
19.02.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	1	4	25.00%
25.02.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	0	4	0.00%
04.03.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	0	4	0.00%
11.03.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	0	4	0.00%
18.03.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	1	4	25.00%
25.03.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	0	4	0.00%

Vysocina Region eAmbulance System

Path: Home Page >> eAmbulance System >> User Login

User Login

Hospital: Hospital Jihlava

Birth Number:

PIR Number:

Verification Number:

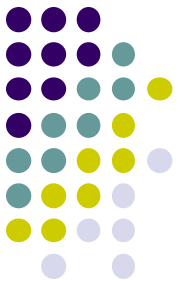
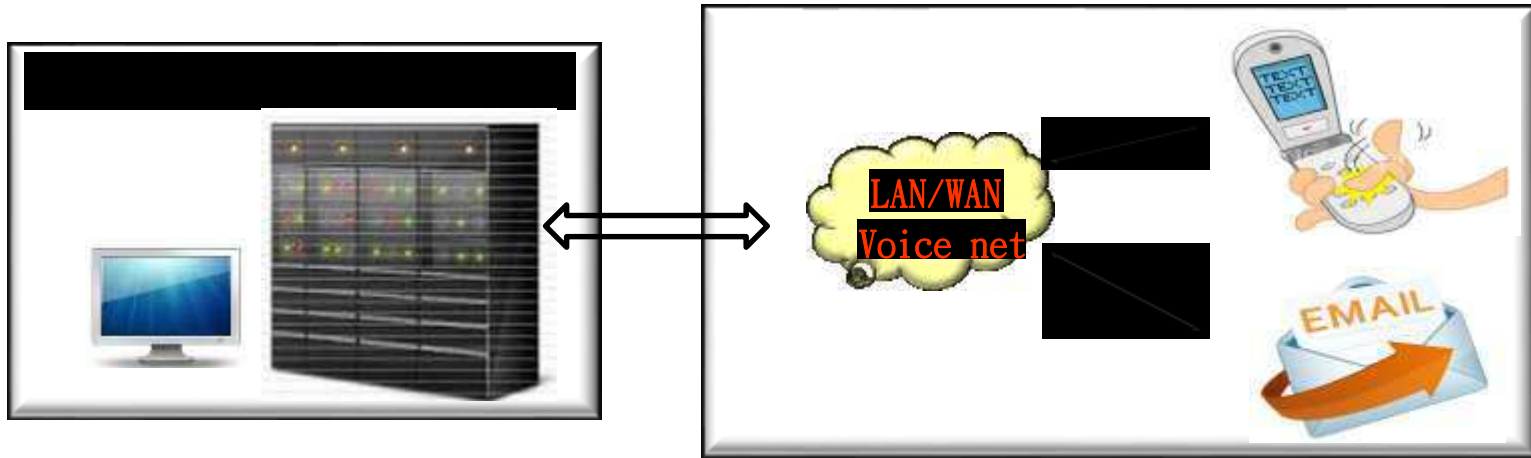
3065

Logon

Hospital News

- [2010-08-21] Všechny v novém registračním systému e@mbulance
- [2010-07-10] ahoj ahoj ahoj ahoj ahoj
- [2010-07-10] Successful Treatment of a Newborn with Congenital Rate Disease
- [2010-07-09] Update on the management of Thyroid-associated orbitopathy

A.1.3 Benefits : Citizens



Your Appointment Information :

1. Appointment Date/Session: 27.03.2013(Wednesday)15:00 - 16:00
2. Ambulance: Test Ambulance
3. Physician: Dubáň Štefan
4. Sequence: 1
5. Max.No.: 11

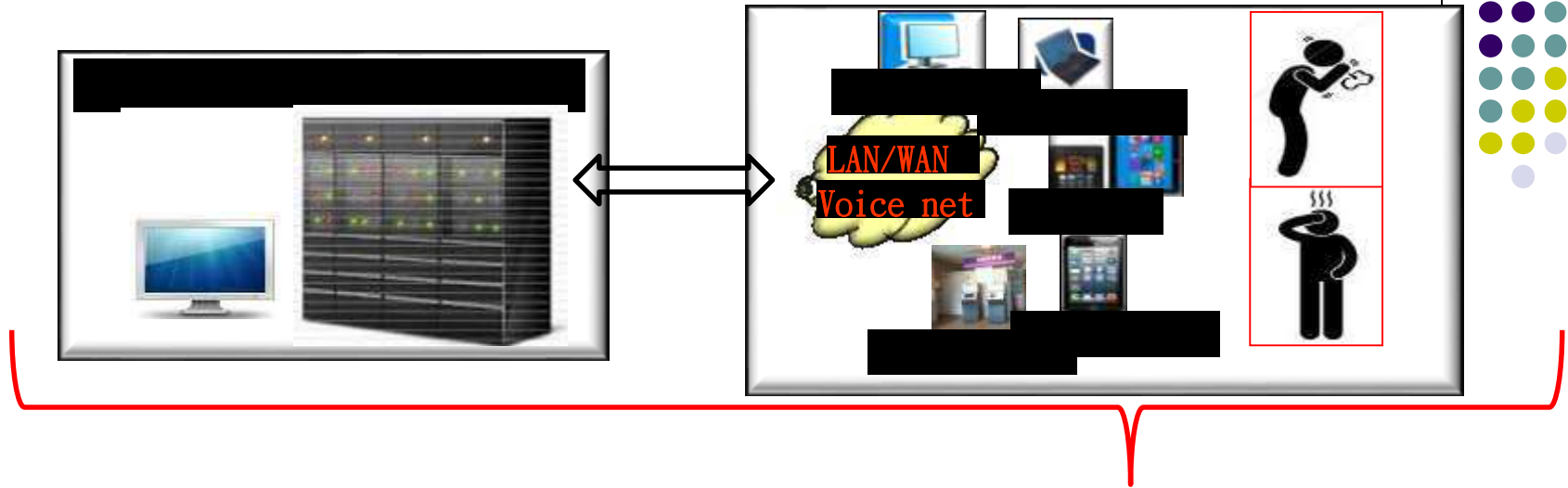
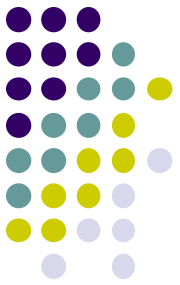
Remind appointment by:

- ◆ Text
- ◆ e-mail



**Never forget the
appointments**

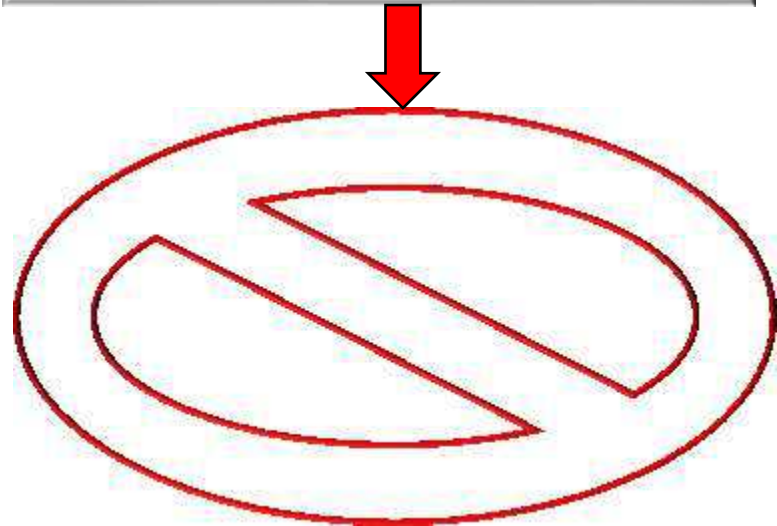
A.1.4 Benefits : Citizens



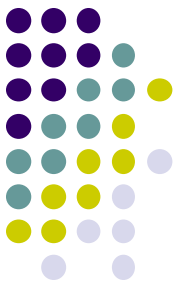
Your Appointment Information :

1. Appointment Date/Session: 27.03.2013(Wednesday)15:00 - 16:00
2. Ambulance: Test Ambulance
3. Physician: Dubaň Štefan
4. Sequence: 1
5. Max.No.: 11

No more long waiting:
◆ Know the visiting time



A.1.5 Benefits : Citizens



Path: [Home Page](#) >> [eAmbulance System](#) >> [User Login](#)

User Login

Hospital/GP Registration
Patient Internet Registration

Dašší projekty

- Zdraví Vysočiny
- eHealth

Nemocnice

- Nemocnice Havlíčkův Brod
- Nemocnice Jihlava
- Nemocnice Nové Město na Moravě
- Nemocnice Pelhřimov
- Nemocnice Třebíč

Patient Internet Registration

User Login

Hospital:

Birthday Number:

PIN:

Verification Number:

Note: "*" means required fields.

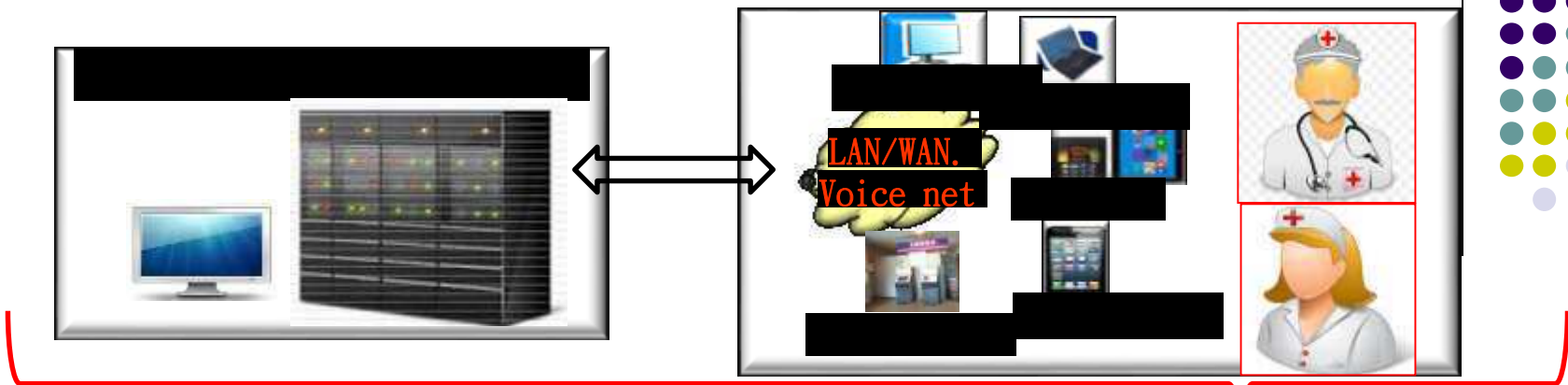
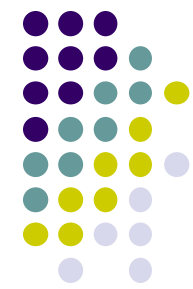
Make appointment to multiple city hospitals

- ◆ Hospital Jihlava
- ◆ Hospital Pelhřimov
- ◆ ...



Easy and friendly to access and use

A.2.1 Benefits : Doctors / Nurses



Ambulance Physician Registration -> Patient Registration List

Ambulance: ▼ Physician ID: Batoušek Bronislav

Appointment Date: 28.01.2015 Session:

Appointment Date	Session	Name	Patient Notice	Attended	Cancel	Next Appointment	Sequence	BirthDay Number	Gender	Vital Sign
Wednesday	08:30 - 9:00	Novák Josef		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	1	5507141805	M	<input type="button" value="Vital Sign"/>
Wednesday	08:30 - 9:00	Musil Milan		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	2	9303194736	M	<input type="button" value="Vital Sign"/>
Wednesday	09:00 - 10:00	Zadražilová Ludmila		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	1	405105048	F	<input type="button" value="Vital Sign"/>
Wednesday	09:00 - 10:00	Křížová Bohumila		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	2	535516208	F	<input type="button" value="Vital Sign"/>
Wednesday	09:00 - 10:00	Kabátek Josef		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	3	5503082640	M	<input type="button" value="Vital Sign"/>
Wednesday	09:00 - 10:00	Hejsková Stanislava		<input type="checkbox"/>	Registration cancelling completed	<input type="button" value="Next"/>	3	6357251890	F	<input type="button" value="Vital Sign"/>
Wednesday	09:00 - 10:00	Konířová Miroslava		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	4	6159271668	F	<input type="button" value="Vital Sign"/>
Wednesday	10:00 - 11:00	Neckář Miloš		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	1	410108458	M	<input type="button" value="Vital Sign"/>

Know up-to-date patient

- ◆ Appointment list
- ◆ Symptoms(Physiology in formation)



Clinic Room -> Vital Sign Inquiry

BirthDay Number: 8607070007

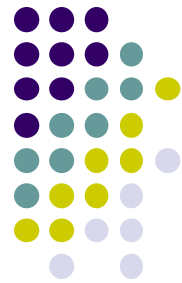
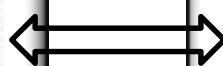
BirthDay Number	Date	Time	Subject			
8607070007	20100812	0436	I'm sick!			
			Temperature: 39.9	Heartbeat: 99	Diastolic Blood Pressure: 99	Systolic Blood Pressure: 129
8607070007	20100726	0329	I'm not good			
			Temperature: 40	Heartbeat: 100	Diastolic Blood Pressure: 88	Systolic Blood Pressure: 133
8607070007	20100726	0324	Temperature: 38.7	Heartbeat: 85	Diastolic Blood Pressure: 88	Systolic Blood Pressure: 127
8607070007	20100726	0323	Temperature: 37	Heartbeat: 77	Diastolic Blood Pressure: 78	Systolic Blood Pressure: 119

[First] [Prev] [Next] [Last Page] [Total 4 Records] [Viewing 1/1 Page]

Inquiry Add

- ◆ Dynamically arrange schedule conflict
- ◆ Preparation for treatment

A.2.2-3 Benefits : Doctors / Nurses



Ambulance Physician Registration -> Patient Registration List

Appointment Date	Session	Name	Patient Notice	Attended	Cancel	Next Appointment	Sequence	Birthday Number	Gender	Vital Sign
Wednesday 08:30 - 9:00		Novák Josef		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	1	5507141805	M	<input type="button" value="Vital Sign"/>
Wednesday 08:30 - 9:00		Musil Milan		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	2	9303194736	M	<input type="button" value="Vital Sign"/>
Wednesday 09:00 - 10:00		Zadražilova Ludmila		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	1	405105048	F	<input type="button" value="Vital Sign"/>
Wednesday 09:00 - 10:00		Křížová Bohumila		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	2	535516208	F	<input type="button" value="Vital Sign"/>
Wednesday 09:00 - 10:00		Kabátek Josef		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	3	5503082640	M	<input type="button" value="Vital Sign"/>
Wednesday 09:00 - 10:00		Hejsková Stanislava		<input type="checkbox"/>	Registration cancelling completed	<input type="button" value="Next"/>	3	6357251890	F	<input type="button" value="Vital Sign"/>
Wednesday 09:00 - 10:00		Konřevá Miroslava		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	4	6159271658	F	<input type="button" value="Vital Sign"/>
Wednesday 10:00 - 11:00		Neckal Milada		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	1	410108458	M	<input type="button" value="Vital Sign"/>
Wednesday 10:00 - 11:00		Vykudalová Blanka		<input checked="" type="checkbox"/>	<input type="button" value="Cancel"/>	<input type="button" value="Next"/>	2	326014444	F	<input type="button" value="Vital Sign"/>

- ◆ Flexible setting session maximum registration no.
- ◆ Make patient next appointment to any hospitals



- ◆ Balancing doctor workloads
- ◆ Better patient service quality



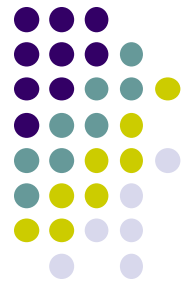
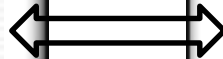
Path: Home Page -> eAmbulance System -> Registration by Physician

Registration by Physician

Current Physician: Dubáň Štefan

Appointment Date	Session	Ambulance	Current No.	Max.No.	Usage Rate
25.01.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	4	4	100.00%
04.02.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	4	4	100.00%
11.02.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	2	4	50.00%
18.02.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	1	4	25.00%
25.02.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	0	4	0.00%
04.03.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	0	4	0.00%
11.03.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	0	4	0.00%
18.03.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	1	4	25.00%
25.03.2015 (Wednesday)	10:00 - 11:00	Kožní ambulance - MUDr. Dubáň	0	4	0.00%

A.2.5 Benefits : Doctors / Nurses



Reports->Patient Registration List

Date	Session	Clinic Room Code	Seq.#	Ambulance Name	Physician Name	Birthday Number	Name
2010/08/30	1000-1100	101911	1	Doctor HJC	7903050035	Bill Vesely	
2010/08/30	1000-1100	101911	2	Doctor HJC	8607070007	Stanislava Cahova	
2010/08/30	1300-1400	101710	2	Hana Bartošová	8607070007	Stanislava Cahova	
2010/08/30	1300-1400	101910	1	Martin Drabek	8505100002	Well TEST	

Reports->Registration Canceling Detail List

Date	Session	Seq.#	Ambulance Name	Physician Name	Birthday Number	Name	Cancel User	Cancel Date
20100830	1000-1100	2	Doctor HJC	8607070007	Stanislava Cahova	8607070007	20100827	
20100830	1300-1400	1	Martin Drabek	8505100002	Well TEST	8505100002	20100827	
20100830	0800-0900	1	Alice Kostihova	8505100002	Well TEST	8505100002	20100827	

Reports->Registration No-Show Reports

Date	Session	Clinic Room Code	Seq.#	Ambulance Name	Physician Name	Birthday Number	Name
20100830	1000-1100	101911	1	Doctor HJC	7903050035	Bill Vesely	
20100830	1300-1400	101710	2	Hana Bartošová	8607070007	Stanislava Cahova	
20100830	1300-1400	102811	1	Alice Kostihova	8505100002	Well TEST	
20100830	0800-0900	102710	1	Kateřina Bařtova	8505100002	Well TEST	

[First] [Prev] [Next] [Last Page] [Total 4 Records] [Viewing 1/1 Page]

Inquiry Print Clean Screen

Know patient number of:

- ◆ Attended
- ◆ Cancelled
- ◆ No show



◆ Better patient service by effective data analysis

A.3.1-3 Benefits : City Gov. / Hospital Executives



Reports->Registration Statistic Report by Physician

Begin Date: 20100830 *(YYYYMMDD) End Date: 20100830 *(YYYYMMDD)
 Session: [Dropdown] Physician ID: [Dropdown]

Physician Name	Session	No of Registration	No. of Registration Canceling	No of Care Completed	No of Care Non-completed	No of No Show
Doctor HJC	1000-1100	2	1	0	2	1
Hana Barto?ova	1300-1400	1	0	0	1	1
Kate?ina Ba?tova	0800-0900	1	0	0	1	1
Martin Drabek	1300-1400	1	1	0	1	0
Alice Kostihova	1300-1400	1	0	0	1	1
Alice Kostihova	0900-1000	1	1	0	1	0

[First] [Prev] [Next] [Last Page] [Total 6 Records] [Viewing 1/1 Page]

Inquiry Print Clean Screen

Ambulance Name	Shift	No of Registration	No. of Registration Canceling	No of Care Completed	No of Care Non-completed
Home Medicine	1300-1400	12	7	0	12

[First] [Prev] [Next] [Last Page] [Total 1 Records] [Viewing 1/1 Page]

Inquiry Print Clean Screen

Area	Session	No of Registration	No. of Registration Canceling	No of Care Completed	No of Care Non-completed	No of No Show
Praha 104	1000-1100	1	0	0	1	1
Praha 105	1000-1100	1	1	0	1	0
Praha 105	1300-1400	1	0	0	1	1
Praha 112	1300-1400	2	1	0	2	1
Praha 112	0900-1000	1	1	0	1	0
Praha 112	0800-0900	1	0	0	1	1

[First] [Prev] [Next] [Last Page] [Total 6 Records] [Viewing 1/1 Page]

Inquiry Print Clean Screen

- ◆ Offer versatile appointment services to citizens
- ◆ Know patient service loading(number) by hospital, unit, doctor, time interval, etc.
- ◆ Know patient visiting pattern by age, gender, area, profession ,etc.



- ◆ Improve citizen services level
- ◆ Make appropriate medical service policy

Hospital Group or Multi-location Support



1. Karlovarský	8. Královéhradecký
2. Plzeňský	9. Pardubický
3. Ústecký	10. <u>Vysočina</u>
4. Středočeský	11. Olomoucký
5. Praha	12. Jihomoravský
6. Jihočeský	13. Moravskoslezský
7. Liberecký	14. Zlínský

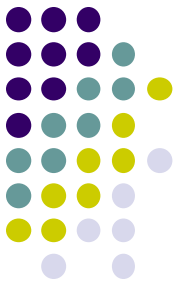


- Hospital group
 - ◆ Hospital Jihlava
 - ◆ ...
- Multi-location
- Integrate with local GP system



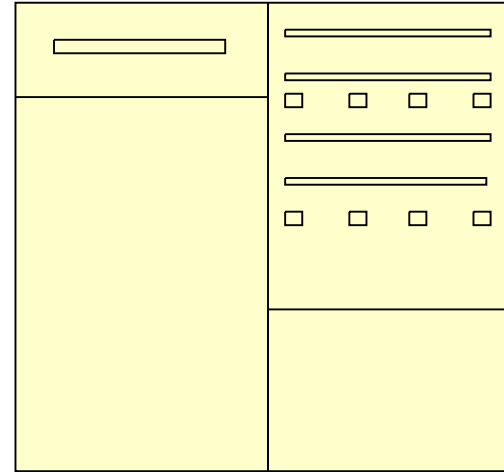
Solution Description

Key Hardware Component Specifications



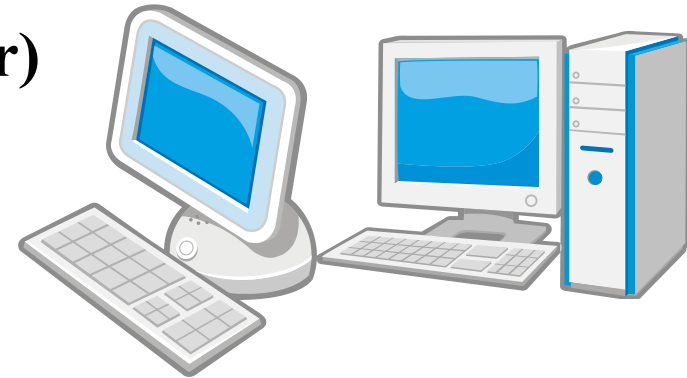
A. Application Server

- . CPU 2.00 GHz * 2 or up
- . MM: 4GB or up
- . HDD: 500GB (Raid 5) or up
- . MS windows server 2008 or up
- . MS Sol server 2008 or up



B. Web Client (can support to run browser)

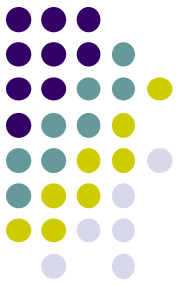
- . CPU: 1.0 GHz or up
- . MM: 1GB or up
- . HDD: 120GB
- . MS windows 7 or up
- . Ms IE 10.X or up Google Chrome or Mozilla Firefox



Note: Above specifications are for **reference** and are subject to change based on the actual transactions required.

Implementation Approach

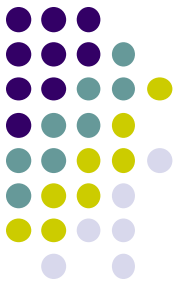
Implementation Strategy



- Adapt a proven solution
 - Appropriate size of hospital
 - Support hospital group or multi location hospital
- Phased implementation

Phase #	Proposed Installed Systems/Hospitals	Remarks
Phase I (6 months)	One hospital as pilot	
Phase II (3 months for each additional hospital)	Expand to more hospitals	
Phase III (3 months for each GP system)	Integrate with local GP	
Phase IV (6 months for each system)	<ul style="list-style-type: none"> ● On line patient reports accessing system ● On line patient medications accessing system 	<ul style="list-style-type: none"> ● Sharing patient reports & medications Infor. ● Saving citizen time

Client Support Suggested



(1) Preparation of all ICT platform required for system installation and maintenance.

A. All ICT system platform (e.g.: Server, client PC, Router, hub, Windows, DBMS, etc.)

B. Remote maintenance facilities, including PC hardware and software, Team Viewer(remote supporting) , and network authorization.

C. All ICT platform installation, configuration and operation.

(2) Assigning Hospital Project Team.

(3) Preparation and verification of the basic data (eg: hospital data, ambulance(clinic) data, physician data, appointment schedule, etc.) required for system implementation.

(4) Assisting system testing.

(5) Conducting system acceptance when the system is successfully implemented.

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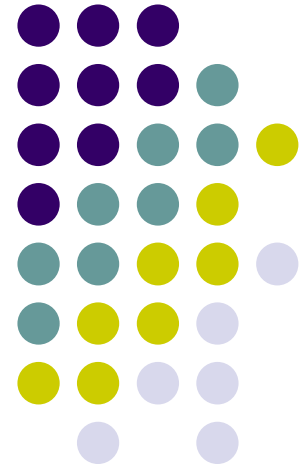
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Thank you for your attention....