Ministry of Health of Turkey

Development and Implementation of the Enterprise Resources Management System (CHRMS)

Agenda

- Definition and Scope of CHRMS
- Objectives
- History
- Current Situation
- Business Value
- Conclusion and Future Projections

Definition of CHRMS

- Core Health Resources Management System (CHRMS) is an Enterprise Resource Planning (ERP) system developed and used since 2001 which is widely used by public and private health organizations in Turkey.
- CHRMS is financed by UNDP in scope of the first and second Health Projects of Turkey.
- CHRMS is developed in order to manage human, financial and material resources of the Ministry of Health efficiently.
- The main purpose of this presentation is to introduce the system and share experiences gained during the development, implementation and maintenance process.

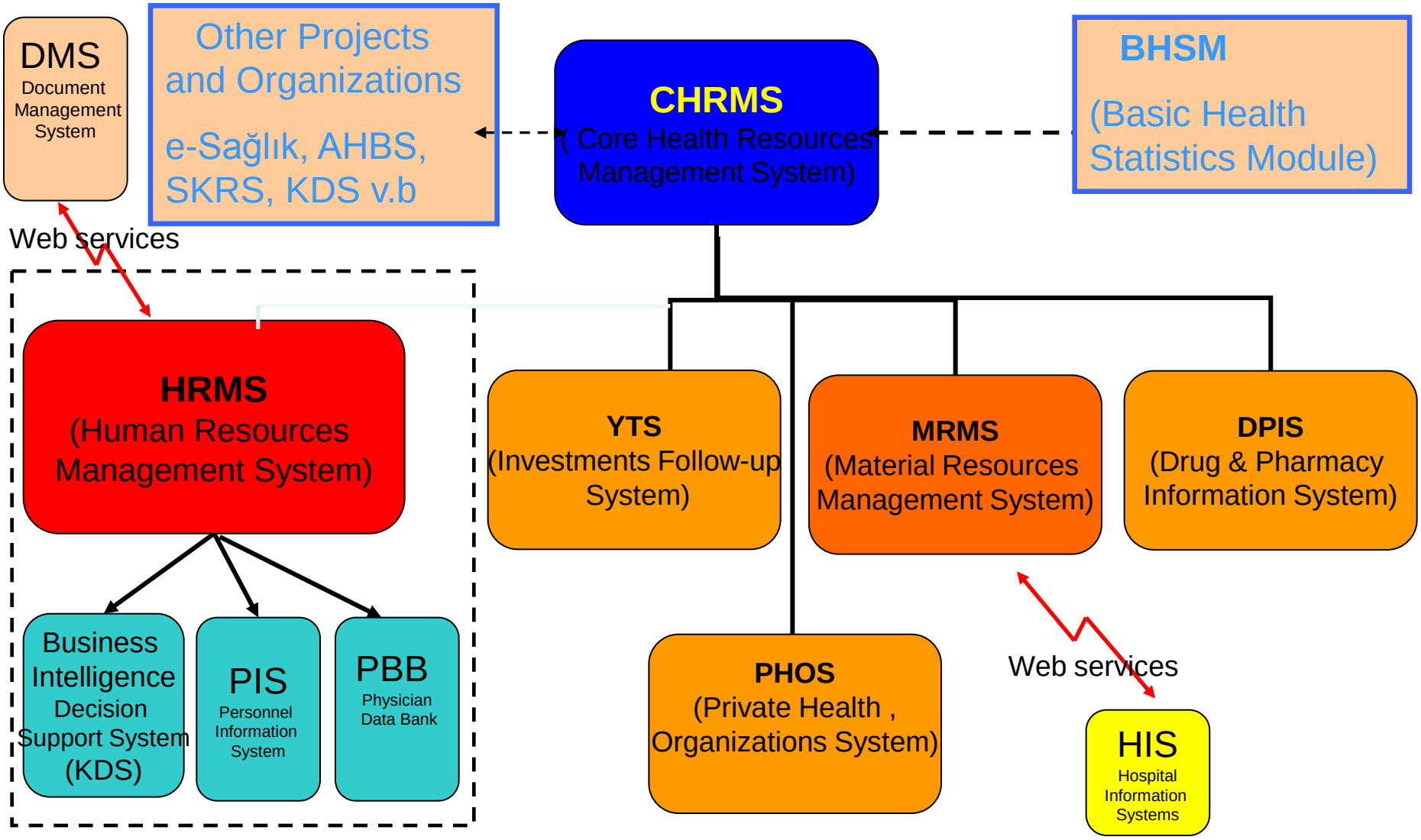
Objectives

- Acceleration of data flow between the Headquarters of MoH and Provincial Health Directorates (PHD)
- Specification of the needs of organizations more quickly and efficiently by monitoring current state of the resources.
- Acquisition of the statistical reports which supports the resource planning process timely and accurately.
- Standardization and coordination of the processes in Headquarters and 81 PHDs.
- Preparation of the data infrastructure for Decision Support and Business Intelligence systems.

History

- 1999 : Client / Server Architecture, Distributed Database Model
- 2001 : Decision for migration to Web and central database
- 2001-2003 : Conversion of all modules by using Oracle Internet Development Suite
- July, 2003 : Kick-off in Headquarters
- July – December 2003 : Pilot study in 5 Provincial Health Directorates (PHD)
- 2004 : Usage in all PHDs.
- 2005-2006 : Guarantee Period

CURRENT SITUATION



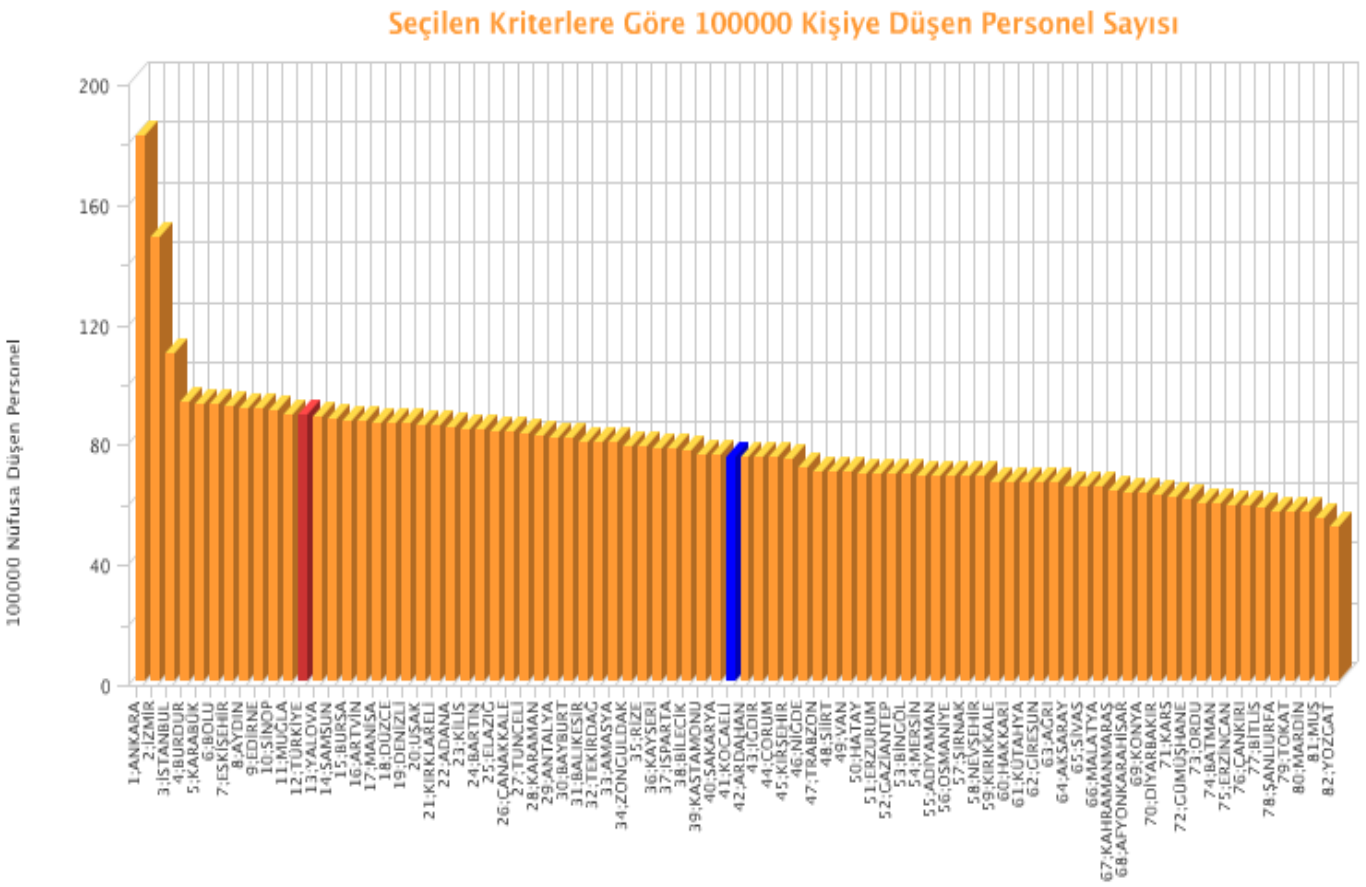
Milestones

Addition of Contractual Health Personnel Sub Module	2004
Integration with Basic Health Statistics Module	2004
Transfer of hospitals belonging to other public authorities	2005
Usage of the system in public hospitals and county offices	2005
Adaptation of the Human Resources Management System (HRMS) according to new employment regulation	2005
Adaptation of the Human Resources Management System according to be new conscription application	2005
Development of the Personnel Portal used by all employees	2006
Adaptation of the Material Resources Management System (MRMS) according to new legislation	2006
Development of the first Business Intelligence application	2007
Integration with the Document Information System	2008
Development of the Private Health Organizations Module	2008
Integration of MRMS with Hospital Information Systems by using Web services	2009
Usage of the system by private hospital users	2009
Integration with Family Practitioners System	2009
Data sharing with Social Security Organization by using Web services	2009

Practitioner Per 100.000 People

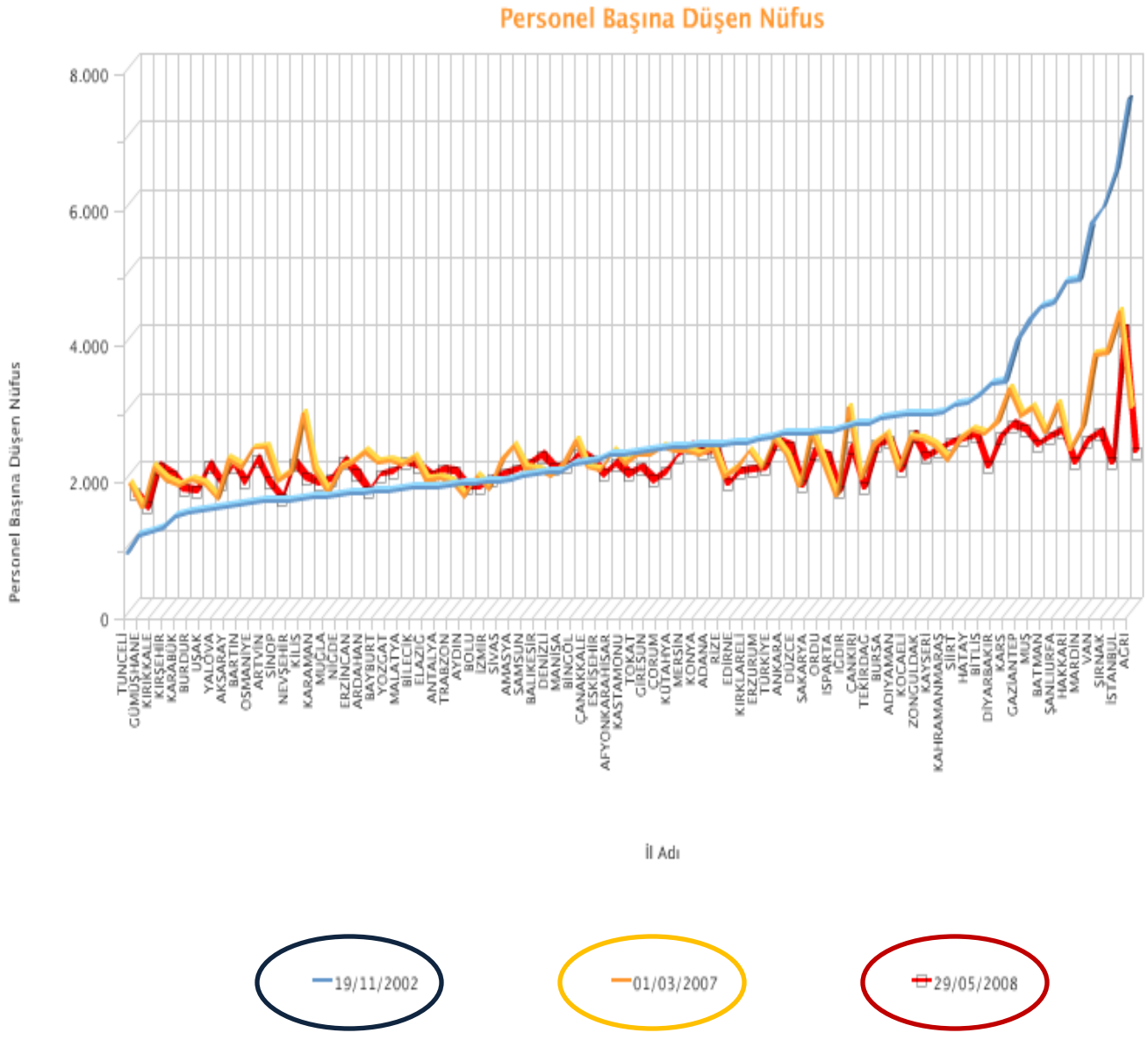
Türkiye Geneli 100.000 Kişiye Düşen Hekim Sayısı

Sıralama	İl Adı	100000 Nüfusa Düşen Personel
1	ANKARA	181,67
2	İZMİR	147,65
3	İSTANBUL	108,87
4	BURDUR	92,68
5	KARABÜK	92,40
6	BOLU	92,00
7	ESKİŞEHİR	91,78
8	AYDIN	91,19
9	EDİRNE	91,16
10	SİNOP	90,44
11	MUĞLA	89,05
12	TÜRKİYE	89,03
13	YALOVA	87,79
14	SAMSUN	87,34
15	BURSA	86,86
16	ARTVİN	86,49
17	MANİSA	86,10
18	DÜZCE	85,91
19	DENİZLİ	85,64
20	UŞAK	85,32
21	KIRKLARELİ	84,94



Personel Başına Düşen Nüfus (TABİP) - Tarihler Arası Karşılaştırma

İlAdı	Personel Başına Düşen Nüfus		
	19/11/2002	01/03/2007	29/05/2008
TUNCELİ	875	1.884	1.632
GÜMÜŞHANE	1.156	1.531	1.453
KIRIKKALE	1.220	2.091	2.017
KIRŞEHİR	1.277	1.921	1.903
KARABÜK	1.452	1.843	1.696
BURDUR	1.488	1.911	1.656
UŞAK	1.538	1.858	2.035
YALOVA	1.558	1.658	1.791
AKSARAY	1.579	2.206	2.048
BARTIN	1.601	2.108	1.820
OSMANİYE	1.645	2.374	2.112
ARTVİN	1.670	2.392	1.806
SİNOP	1.671	1.933	1.565
NEVŞEHİR	1.676	2.039	2.070
KİLİS	1.697	2.890	1.876
KARAMAN	1.719	2.086	1.788
MUĞLA	1.738	1.755	1.839
NİĞDE	1.762	2.095	2.095
ERZİNCAN	1.774	2.166	1.923
ARDAHAN	1.776	2.331	1.670
BAYBURT	1.806	2.167	1.896
YOZGAT	1.812	2.210	1.961



Business Value

- App. 35.400 total active users,
- 4500 concurrent during work hours,
- By using the Business Intelligence and Decision Support applications which use the CHRMS database; the information source for all units were unified and the rational base of decisions were strengthened.
- Serving to all the units of the ministry as the main information backbone for resource planning. For example; In HRMS; the records about the current and past situations of 322.000 current and 125.500 former personnel was saved and processed.
- All HR operations such as assignment, promotion, transfer, position and payroll is conducted by the help of HRMS. The most information in HRMS is shared with these staff. Consequently transparency and justice in operations and the trust of the staff to the system is increased.

Business Value

- All acquisition process of organizations is under control and the audit about the procurement results can be made very easily on quality and price basis.
- Using some BI applications; sharing of medical materials between the hospitals are encouraged and the expenditures are lowered. Only in 2009; nearly 2.000.000 USD was saved as the result of the usage of this opportunity.
- Integrated with other applications of the ministry and the applications of other shareholder organizations by using web services and other methods.

Conclusion

- In addition to the financial advantages that can also be observed in private firms, this kind of systems also plays an important role in increasing the quality of life of the ordinary citizen by speeding up ordinary operations, empowering him against bureaucracy and supplying transparency.
- Such system are also beneficial for the staff working for the government. Lots of paper work is reduced, most operations can be done by using less effort and the staff is specialized to their own duty.

Future Projection

- Integration with the E-Health project
  - Standard Treatment Protocols
  - Qualified Health Service for Citizens
  - Controls for misuse to be used by payment authorities.
- Integration with the E-Sign mechanisms
  - Prevention from paper-based work done parallel with information systems.
- Integration with other govermental applications
  - Data sharing is carried out with many projects.
  - But the need for integration of processes between public and private health shareholders is emerging and will directly affect the quality of health service.

Thank you for your attention.
Questions ?