



Electronic Medical Business Operations System (EMBOS)

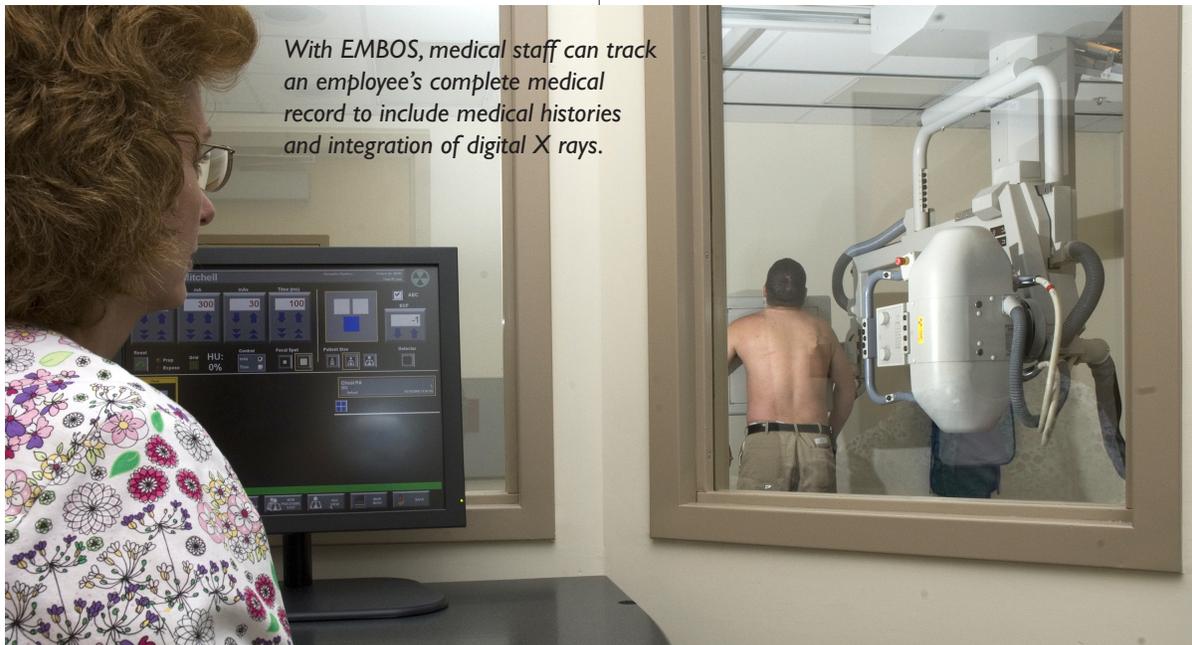
EMBOS is a state-of-the-art, web-enabled, comprehensive electronic medical record (EMR) system. It captures all patient data and the medical workflow, giving the medical provider a knowledge-based tool to support the health assessment process.

Because the volume of paper medical records is staggering and continues to grow, electronic records systems are becoming essential. In 2005 the White House announced support for developing electronic medical records across the federal government. In 2006, the U.S. Department of Energy issued 10 CFR 851 requiring all medical records be electronically available by 2015.

Y-12 is developing a comprehensive EMR that includes the requirements for an occupational health facility – requirements that are common across the Nuclear Weapons Complex. The EMR, known as EMBOS, will capture scheduling and workflow as well as data from medical surveillance, certification, and qualification examinations. This system will be Y-12's comprehensive solution to the DOE order, and it is available to the NWC, other government entities, and the private sector.

DATA TO BE TRACKED

- Patient demographics
- Physical examination data
- Employee medical histories
- Medical surveillance programs
- Patient and provider schedules
- Medical qualifications/certifications
- Non-occupational illness and injury visits
- Occupational recommendations (work restrictions)
- Return to work visits
- Digital x-rays
- Laboratory data
- Standardized abnormal lab notifications
- Standardized patient notifications
- Diagnosis
- Vital signs
- Immunizations
- Allergies
- Prescription medication tracking & dispensing
- Psychological data



Electronic Medical Business Operations System

EMBOS—a state-of-the-art, web-enabled, comprehensive electronic medical record (EMR) system.

CAPABILITIES

- Patient input capabilities for questionnaires
 - Medical Health History
 - Surveillance program
 - Psychological testing
- Targeted health assessments
- Case histories
- Patient/Provider scheduling
- Patient registration
- Patient workflow monitoring
- Laboratory interface & device integration
- Psychological evaluations
- Real-time data entry
- Coding: ICD-9/10
- Integration with PACS digital imaging capture devices
- Ad-hoc reporting
- Scanning capabilities (paper & x-ray)
- Reference data management
- Desktop integration
- Touch screen technology
- Voice recognition

STATUS OF CAPABILITIES

EMBOS V1.0 SP4 – Production
EMBOS V2.0 – under development
EMBOS V3.0 – future development

SECURITY

- Encryption - Secure Socket Layer (SSL)
- IIS authentication
- SecurID – two factor authentication
- Oracle's Secure Application Roles

SOFTWARE ENVIRONMENT

- .Net Framework, C#, ASP.NET, PL/SQL
- Operating system – Windows 2003 Server
- Database – Oracle 10g

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