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The Clinical Informatics Workforce

A Cross-Site Qualitative Study of Two Hospital Systems for
Jobs For the Future Inc.

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Study Partners and Objectives

- OHSU
- Providence Health and Services
- Asante Health System
- JFF



- Snapshot of the clinical informatics workforce of two Pacific NW health organizations
- Investigate career pathways
- Assess education pathways

Methodology

- Studied systems in both urban and semi- rural settings, both community based
- Semi-structured interviews with executives, clinical and IT managers, clinical and IT informatics personnel, HR managers, and trainers
- Collection of organizational charts and hospital quantitative metrics for comparison
- Analysis of interviews for content, emergent themes, and future expectations

Providence Health and Services

- Serves a four state region, with study focused on two largest system hospitals in Portland area.
- 1350 licensed beds in Oregon
- 13,378 FTEs in Oregon
- 478 physician employees
- 3,100 community physicians/admitting privileges
- 400 FTE in CIO office

Asante Health System

- Serves Southern Oregon region – Medford and Grants Pass
- 503 licensed beds in Oregon
- 3,028 FTEs in Oregon
- 45 physician employees
- 519 community physicians with admitting privileges
- 173 FTE in CIO office

Types of Personnel Interviewed

Clinical

- Medical Director
- Chief Medical Information Officer
- Nursing System Coordinator
- Pharmacy Computer Coordinator
- Chief Nursing Officer
- Regional Manager for Respiratory Care
- Regional Manager, Surgery Information Systems
- Information Specialist
- Imaging Information Analyst

Non-clinical

- CIO
- Director, IT Services
- Health Science Library Director
- Data Analyst
- Education Coordinator (HR)
- Senior Recruiter (HR)
- Clinical Systems Liaison
- HR Consultant
- Site Analyst
- Manager HIS
- Lab Staff Assistant
- Lab Info. Specialist

IT vs. Clinical Informatics Positions

- IT jobs centralized under CIO
- Clinical informatics positions distributed throughout the hospital system
- Clinical Informatics positions are patient-facing, team- and service-oriented, involved with clinical workflow
- IT jobs generally more technical, but still customer-service oriented
- Both require familiarity with health care systems and cultural fit

Most Valued Characteristics for Hiring/Promotion

- **Clinical Training – understanding of the unique features of the H.C. industry (Privacy, Security, Medical Terminology, Delivery Systems)**
- **Understanding Clinical Workflow**
- **Demonstrated Experience with Technology/Technical Aptitude**
- **Project Management Experience**
- **Ability to Adapt Quickly**
- **Team Orientation**
- **Attitude of Service**
- **Communication Skills, Patience**
- **Culture Fit**

Education and Training for Informatics Jobs

- Recent efforts to standardize job descriptions at both Providence & Asante
- Technical aptitude vs. highly advanced technical skills – computer geeks may not be the best fit
- Growing their own, adding competencies – “knowledge, not numbers”
- Educational requirements increasing - BA/BS becoming the baseline
- MS degrees for more sophisticated jobs – system optimization, system interoperability
- AA degree with experience in healthcare setting, with BA “in the cross-hairs”
- CC pathways from allied health fields – radiologic technology, medical records, physical therapy, occupational therapy, dietary programs, lab technology, medical assistants (+ CS and informatics courses)
- Change management, Six Sigma, Lean Training, Leadership Training

Future Jobs – Patient Centered Positions

- Project Management – BA/MS
- Systems Architecture - BA/MS
- System Interoperability – BA/MS
- Business Analysts – BA/MS
- Clinical Informaticists – BA/MS
- Quality Assurance – BA/MS
- Information Security – MS
- Process Engineers - MS
- Trainers – BA/MS
- Help desk as entry level for CC grads
- HIM Scanning Specialists - CC

Future Jobs – IT and other technical

- Network Engineers – CC, but 4 year preferred
- Desktop Engineers – CC, but 4 year preferred
- PC Technicians – CC, but 4 year preferred
- IT Help Desk – CC, but 4 year preferred
- IT Server – 4 Year preferred
- Biomedical technicians (electronics and IT) – CC

(In some cases, experience and specific certifications more important than degree, but experience in HC system highly desired)

Biomedical Informatics: Where OHSU Graduates Have Gotten Jobs

- 5 have completed the PhD program
 - Faculty, Director in Healthcare Org., Researcher, Postdoctoral Study
- 126 have completed the Master's program
 - Systems analysts, product managers, clinical analysts, informatics researchers, librarians, consultants, project managers, terminology engineers, software engineers, software architects, physician informaticians, solution designers, bioinformaticians, data managers, database administrators/architects, lab scientists, PhD students, faculty

(Many more have completed OHSU short term certificate or condensed programs)

Questions?

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