Building the Workforce for Today and Tomorrow

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Diane C. Bedecarre', MS, RN-BC, CPHIMS
Co-Lead, Workforce Development, Veterans Health Administration

Elizabeth S. Chapman, MS, CPHIMS
Competency Lead Workforce Development, Veterans Health Administration

DISCLAIMER: The views and opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of HIMSS.
Conflict of Interest

- Diane C. Bedecarre', MS, RN-BC, CPHIMS
  - Has no real or apparent conflicts of interest to report.

- Elizabeth S. Chapman, MS, CPHIMS
  - Has no real or apparent conflicts of interest to report.
Learning Objectives

1. Describe organizational strategies for building informatics and analytics competencies that support improved design, development, implementation and use of healthcare information systems

2. Discuss organizational challenges and barriers in developing the Health Information Technology (HIT) workforce

3. Identify publicly available resources available for use in the development of health informatics training programs

4. Summarize workforce development strategies that foster interaction and inter-professional collaboration and networking
Value Steps Framing Presentation

S: Satisfaction
   - Improve employee morale and support career advancement

T: Treatment
   - Increased competency improves effectiveness of HIT

E: Electronic Information/Data
   - Facilitates evidence-based practice and info exchange

P: Prevention & Patient Education
   - Supports development of patient-centered HIT applications

S: Savings
   - Effective use of available resources
Department of Veterans Affairs (VA)

- Established as an independent agency July 21, 1930
- Elevated to Cabinet level on March 15, 1989
- Second largest Federal department with over 347,883 employees

Veterans Benefits Administration

Veterans Health Administration (VHA)

National Cemetery Administration

Assistant Secretary for Information Technology
# VA Vital Statistics

- **8.92 Million** Veteran Enrollees
- **6.59 Million** VA Administered Life Insurance Policies
- **3.95 Million** Veterans Receiving VA Disability Compensation
- **3.31 Million** VA Maintained Gravesites
- **2.14 Million** VA Home Loan Participants
- **1.09 Million** VA Education Beneficiaries
- **304,579** Veterans Receiving VA Pension
- **364,946** Veteran family members receiving care through VA health care programs

Source: FY 2015 1st Quarter Pocket Card
Veterans Health Administration (VHA)

Organized into 21 Veterans Integrated Service Networks (VISNs) containing >1500 VA Health Care Sites, including:

- 150 Medical Centers
- 819 Outpatient Clinics
- 300 Vet Centers
- 70 Mobile Vet Centers
- 104 Domiciliary Residential Rehab Programs
- 135 Community Living Centers

Source: FY 2014 1st Quarter Pocket Card
VHA’s Current Priorities

- Access
- Patient Aligned Care Teams
- Connected Health Care
- Homelessness
- Mental Health Care
- Standardization
VHA’s Workforce

• VA among largest civilian employers in the federal government and one of the largest health care employers in the world
• Over 312,500 employees in VHA
• Largest provider of health care training in the United States
  ─ Over 5,000 affiliation agreements at over 1,800 educational institutions
  ─ Over 117,000 students in clinical traineeships/fellowships in more than 40 professions in 2013
VA Informatics History

1950
- Purchased 2nd commercial computer system ever sold by IBM

1960
- Developed Patient Treatment File national database

1970
- Decentralized Hospital Computer Program (DHCP) 200,000 computer terminals

1990
- DHCP → VistA (Veterans Health Information Systems & Technology Architecture) Computerized Patient Record System

2000
- My HealtheVet, Federal Health Information Exchange, Open Source VistA

2010
- Health Informatics Initiative (hi2)
VA Health Informatics Initiative Goals

- Modernize and optimize infrastructure
- Transform health care delivery system
- Increase informatics literacy and capacity
Poll Question #1

How did you prepare for your current role?

A. Obtained a degree in an IT or Informatics related field
B. No formal training, learned on the job
C. Started out in another field and transitioned into an HIT role
D. Making it up as I go
E. All of the above
Workforce

Clinical Informaticists

Administration

Biomedical Engineering

Information Technology

Health Information Management

Clinicians

Quality Management
<table>
<thead>
<tr>
<th></th>
<th>You know you’re an informaticist when…</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>You gleefully report technical/usability issues with websites</td>
</tr>
<tr>
<td>9.</td>
<td>You think Agile Development has nothing to do with yoga</td>
</tr>
<tr>
<td>8.</td>
<td>Your talk about granularity has nothing to do with sand</td>
</tr>
<tr>
<td>7.</td>
<td>Information management means your file system stinks but your search skills are superb</td>
</tr>
<tr>
<td>6.</td>
<td>Your license plate is in barcode</td>
</tr>
<tr>
<td>5.</td>
<td>You approach every life decision with an If / Then approach</td>
</tr>
<tr>
<td>4.</td>
<td>You try to convince clinical friends that standardization is a good thing, really</td>
</tr>
<tr>
<td>3.</td>
<td>You do a Workflow Redesign while waiting in line at the DMV</td>
</tr>
<tr>
<td>2.</td>
<td>Your Mom is in the hospital and you pay more attention to the EMR than to her</td>
</tr>
<tr>
<td>1.</td>
<td>Even YOU can't explain what it is that you do (37%)</td>
</tr>
</tbody>
</table>
Drivers

Employee Satisfaction  Change Management
Patient Safety  Leverage HIT
Recruitment  Growing Field
Retention  Innovation
Financial Incentives  Return on Investment
Strategic Planning  Competition
Meaningful Use
Challenges and Barriers

Communication
- Siloes
- Difficulty transitioning to use of social media
- No central distribution point

Human Resources
- Lack of accurate workforce data
- Non-standardized positions and compensation
- Navigating federal hiring system
- Inadequate staff recognition programs
- Recruitment and retention strategies unclear

Fiscal
- Budget
- Travel Restrictions
- Contracting
Workforce Challenges

Career
Advancement is difficult due to lack of training or recognition of on-the-job training

There is no career ladder or upward mobility so some of our staff took other jobs

Community

No two VA’s are the same as far as how informatics is organized

More collaboration between the various informatics groups is needed
Workforce Challenges

The learning curve is huge and most of what I know I learned on the job.

Lack of training is my biggest concern.

Leadership Support

Informatics is not a full time role at my medical center.

Many don’t recognize the return on investment in informatics.

Organizational support and resources for Health IT roles is lacking.

Education and Training

It is unclear what training I should have to advance my career.
Strategies

- Garner leadership support
- Conduct gap analysis
- Utilize interdisciplinary approach
- Maximize efficiency
  - Internal and external resources
  - Distance learning tools
  - Open source software
- Communicate
- Recognize and celebrate achievements
Three-pronged Approach

• Competency
  – Training and Development
• Career
  – Career Paths, Recruitment and Retention
• Community
  – Inter-professional communities, collaboration and innovation
External Resources

Australian Health Review

Journal of the Australian Healthcare & Hospitals Association

Clinical informatics: a workforce priority for 21st century health care

Susan E. Smith A B, Lesley E. Drake A, Peter G. Pohiner A

A Department of Cardiothoracic Surgery, Australia. Email: lesley_drake@health.qld.gov.au
B Corresponding author. Email: susan_e_smith@health.qld.gov.au

Building the Work Force for Health Information Transformation


AMIA Board White Paper

Core Content for the Subspecialty of Clinical Informatics

Reed M. Gardner, PhD, J. Marc Overhage, MD, PhD, Elaine B. Steen, MA, Benson S. Munger, PhD, John H. Holmes, PhD, Jeffrey J. Williamson, Dan E. Detmer, MD, MA, for the AMIA Board of Directors

Abstract

The Core Content for Clinical Informatics defines the boundaries of the discipline and informs the Program Requirements for Fellowship Education in Clinical Informatics. The Core Content includes four major categories: fundamentals, clinical decision making and care process improvement, health information systems, and leadership and management of change. The AMIA Board of Directors approved the Core Content for Clinical Informatics in November 2008.
Internal Resources

• Employee Education Services
• VA Learning Management System
• Human Resources (HR)
• Training Strategy Team
• Budgeting and Contracting
• VA Informatics Expertise

Good Old Fashioned Barn Raising
Competency

Goal:
Improve capacity of staff to design, configure, use, and maintain informatics applications properly and efficiently

Strategies/Tactics:
- Increase training opportunities
- Interdisciplinary focus
- Promote certification
- Share with federal partners
Career

Goal:
Establish Informaticist career track and support recruitment and retention of highly qualified informatics staff

Strategies/Tactics:
- Clarify role definition and career paths
- Expand entry points for VA Informatics positions
- Support career advancement
Community

Goal:
Define collaboration and communication methodologies and organizational consistency in Health Informatics practices

Strategies/Tactics:
• Define the population
• Provide tools for collaboration and networking
• Promote inter and intra professional collaboration and mentoring – Meet, work and share!
• Promote external networking opportunities
## Actions Taken

<table>
<thead>
<tr>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Workforce Assessment</td>
<td>• AMIA Partnership</td>
<td>• Standardized Position Descriptions</td>
<td>• Nursing Informatics Guided Study Group</td>
</tr>
<tr>
<td>• Informatics Training Plan</td>
<td>• Nursing Informatics Workshops</td>
<td>• CPHIMS course</td>
<td>• Third and fourth VA AMIA 10x10</td>
</tr>
<tr>
<td>• AMIA Corporate Membership</td>
<td>• Collaborative Tool Set</td>
<td>• CIBRC course</td>
<td>• Technical Career Field Internships</td>
</tr>
<tr>
<td>• Met Bellevue at HIMSS</td>
<td>• Data Analytics Program</td>
<td>• Second Workforce Assessment</td>
<td></td>
</tr>
<tr>
<td>• Nursing Informatics Workshops</td>
<td>• HIMSS Corporate Membership</td>
<td>• Launched self-study HI 101</td>
<td>• Shared HI 101 with DOD</td>
</tr>
<tr>
<td>• Recruitment and Retention Plans</td>
<td>• First VA AMIA 10x10 Class</td>
<td>• SOC Code work began</td>
<td>• CPHIMS course</td>
</tr>
<tr>
<td>• Health Informatics (HI) Lecture Series</td>
<td>• Subject Matter Expert (SME) database</td>
<td>• Second VA AMIA 10x10</td>
<td>• CIBRC course</td>
</tr>
<tr>
<td>• VA Bellevue HI 101</td>
<td>• MyCareer@VA</td>
<td>• Supplemental Health Informatics Lectures</td>
<td>• Nursing Informatics Journal Club</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• First Chief HI Boot Camp</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Series Course Hours Completed</td>
<td>13,635</td>
</tr>
<tr>
<td>ForumForUs Users</td>
<td>3,903</td>
</tr>
<tr>
<td>Workforce Survey Responses</td>
<td>2,795</td>
</tr>
<tr>
<td>VA/Bellevue HI 101 Graduates</td>
<td>730</td>
</tr>
<tr>
<td>HIMSS Corporate Memberships</td>
<td>650</td>
</tr>
<tr>
<td>AMIA Memberships</td>
<td>400</td>
</tr>
<tr>
<td>Informatics Nurses</td>
<td>291</td>
</tr>
<tr>
<td>MDs In Board Review Course</td>
<td>118</td>
</tr>
<tr>
<td>Clinical Informatics Diplomates</td>
<td>60</td>
</tr>
<tr>
<td>ForumForUs Communities</td>
<td>293</td>
</tr>
<tr>
<td>RN-BC</td>
<td>49</td>
</tr>
<tr>
<td>Nursing Informatics Workshop Attendees</td>
<td>200</td>
</tr>
<tr>
<td>Nursing Informatics Study Group Participants</td>
<td>184</td>
</tr>
<tr>
<td>HI 101 Participants</td>
<td>1635</td>
</tr>
<tr>
<td>CPHIMS Course Seats</td>
<td>250</td>
</tr>
<tr>
<td>VA AMIA 10x10 Graduates</td>
<td>120</td>
</tr>
<tr>
<td>Classified HIS Positions</td>
<td>110</td>
</tr>
</tbody>
</table>

Cumulative Data 2011 through 2014
Lessons Learned

- Leadership support
- Adequate resources
- Alignment to strategic initiatives
- Communication of achievements
- Change management
- Needs extensive
- Volunteers
Future Plans

• Sustain current educational offerings
• Develop new training programs
• Track, trend and report enrollment, course completion, employee certifications, student satisfaction for continuous quality improvement
• Promote informatics certifications such as CPHIMS/CAHIMS
• Continue building career opportunities
• Grow informatics communities
What would you add to this list?

Workforce Development Strategies
1. Align workforce efforts with organizational strategic initiatives
2. Conduct a workforce assessment to identify gaps
3. Leverage publicly available resources from organizations like HIMSS, AMIA, etc.
4. Pull together an interdisciplinary workforce development team
5. Support staff development
6. Recognize staff who achieve certification
7. Standardize job descriptions and job titles
• **Student satisfaction**
  – Over 90% reported having gained knowledge or skills that would help them in their jobs.
    • “I have changed the way I approach projects and objectives because of what I learned in this course.”
    • “From my experience with a single project, following the AMIA10x10 recommendations would have saved huge sums in direct costs and salary expense and resulted a better product.”

• **Management satisfaction**

• **Staff satisfaction and retention**
• Efficient and responsible use of resources
  – Leveraged free materials developed through the ONC Workforce Development Program
  – Reduced travel and classroom expenses through online courses
  – Used free open source learning management platform
  – Utilized in-house expertise as faculty moderators
  – Utilized training resources already available through existing corporate agreements/contracts
  – Shared programs with Department of Defense
Conclusion and Takeaways

- Assess current organizational needs through surveys and focus groups
- Design cost-effective training using distance learning tools and open source software
- Utilize freely available ONC materials in course offerings
- Leverage the work of experts, e.g. AMIA Core Content, TIGER competencies, HIMSS, AHIMA
- Collaborate with internal and external partners to develop and deliver training
- Provide tools to encourage inter-professional networking and collaboration
- Establish staff recognition programs and share, publish and spread individual and organizational accomplishments
Resources


Resources (continued)

- MyCareer@VA website [http://mycareeratva.va.gov/](http://mycareeratva.va.gov/)
- ONC Workforce Development Curriculum available at AMIA Knowledge Center at [http://knowledge.amia.org/onc-ntdc](http://knowledge.amia.org/onc-ntdc)
Contact Information

Diane C. Bedecarre', MS, RN-BC, CPHIMS
**diane.bedecarre@va.gov**
San Francisco, California
Phone: 707-763-1835

Elizabeth S. Chapman, MS, CPHIMS
**elizabeth.chapman@va.gov**
Atlanta, Georgia
Phone: 803-608-7012