

HIT WORKFORCE DEVELOPMENT BRAIN TRUST

STRATEGIC PLAN WORKSHEET

BACKGROUND:

New technologies, management of vast amounts of information, improvements in health care delivery and quality, cost controls and new federal and state policy goals are pushing the health care industry's demand for a health information technology (HIT) workforce. Recent federal and state health care reform efforts have pushed this demand to a tipping point. The federal American Recovery and Reinvestment Act of 2009 and related legislation included \$36 billion for implementing electronic health records (EHRs) for every U.S. resident by 2014, the adoption of standards-based HIT systems and a national health information network, which are exponentially increasing the demand for HIT occupations.

HIT is a critical component of state legislated health care reform efforts to provide access to high quality, affordable health care for all Oregonians. This includes an objective to stimulate, coordinate, and support statewide efforts towards the adoption and use of HIT.

The success of these state and federal investments depends on a qualified workforce to install, implement and use the technology. Add to this demand the need to train the current health care workforce in the use of HIT and electronic health records and the need to integrate HIT into health professions' standard curricula.

MISSION:

The intent of the Brain Trust's collaborative effort is to craft a strategic action plan ready for education, industry, workforce investment boards, state government, associations, health care

workers, and other stakeholders to use, to invest in and to coordinate the development of a sufficient HIT workforce supply and a high quality health care workforce capable of implementing and using EHRs and related health information technology to improve the delivery of care to all Oregonians.

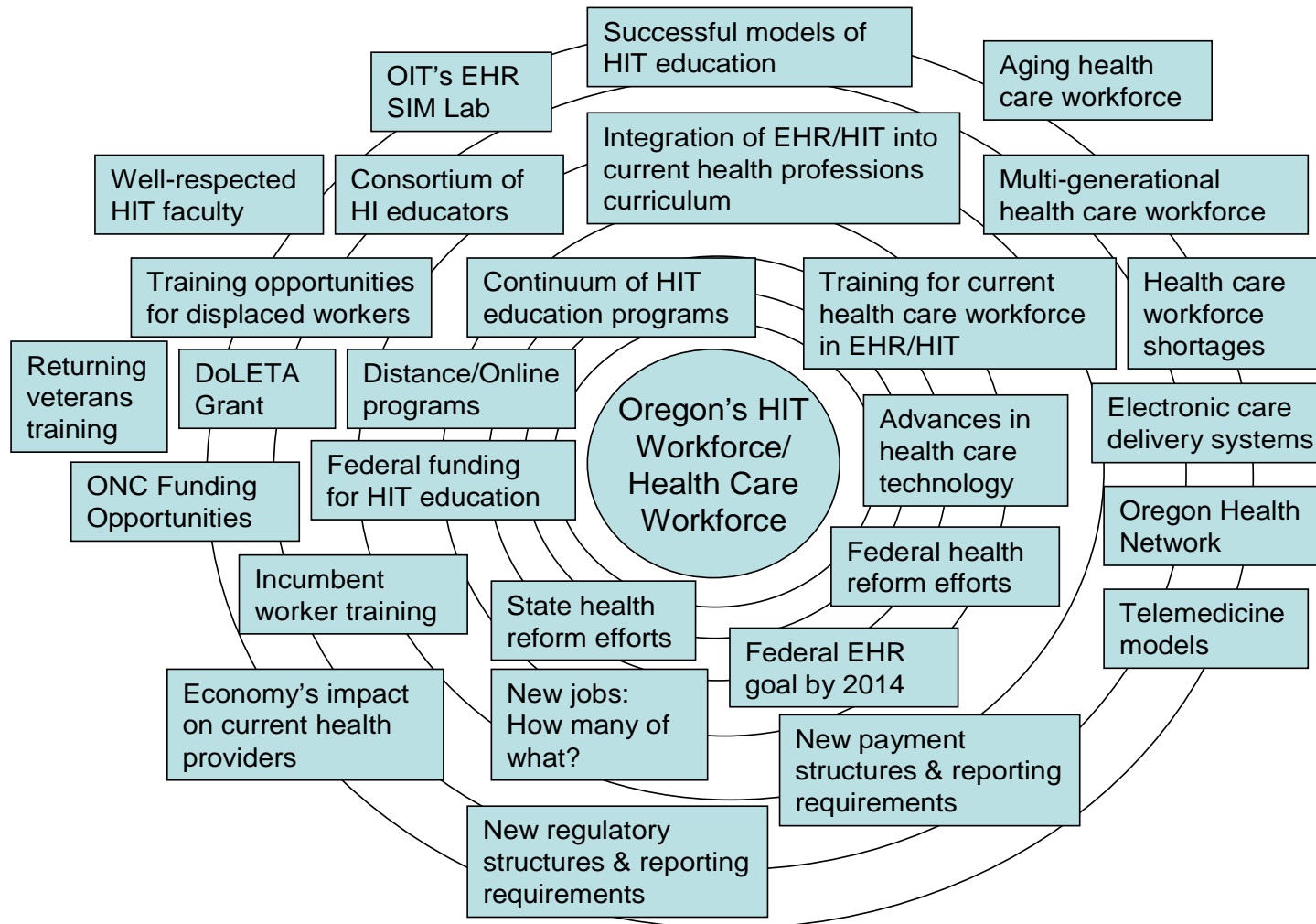
On the economic front, this effort will lead to a skilled workforce ready to fill quality jobs and contribute to Oregon's economy. This effort may also position Oregon as a national leader in the development of a quality HIT workforce, lead to the development of partnerships to leverage resources for alignment of education programs with industry's need, inform a HIT workforce research agenda, and establish a network of HIT workforce experts to inform subsequent phases of workforce and curriculum development.

WORKFORCE-RELATED GOALS:

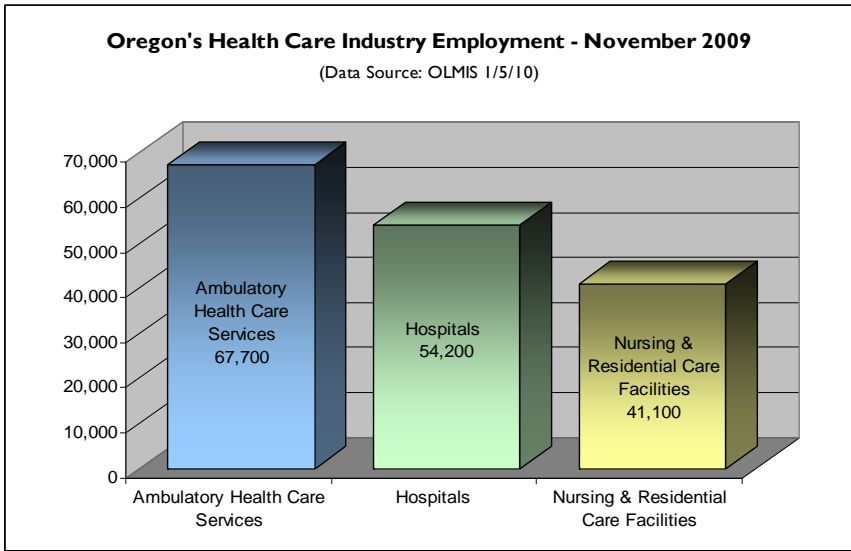
The strategic plan focuses on addressing three key HIT and health workforce related goals:

- Build Oregon's health information technology, informatics and information management workforce.
- Train Oregon's current health care workforce to meet basic competencies in using electronic health records and related technology.
- Integrate HIT coursework into Oregon's health care profession educational programs to ensure that graduates are competent in the use of electronic health records and related technology.

ENVIRONMENTAL SCAN



OREGON WORKFORCE DATA



Industry employment is defined as the number of filled positions in a particular industry at a particular time. This does not necessarily imply full-time or year-round positions.

Oregon's Health Care Industry Employer Count*

Data source: Oregon Employment Department, 1/10

U.S. Department of Labor Industry Title	Employers
Practitioner Offices	
Offices of Physicians	2,894
Offices of Dentists	1,958
Offices of Chiropractors	873
Offices of Optometrists	287
Offices of Mental Health Practitioners	81
Offices of Specialty Therapists	520
Offices of Podiatrists	113
Offices of Misc. Health Practitioners	1,308
Out-Patient Care Centers	
Kidney Dialysis Centers	31
Freestanding Emergency Medical Centers	393
Medical Laboratories	156
Diagnostic Imaging Centers	39
Home Health Care Services	220
Misc. Ambulatory Health Care Services	422
All Other Out-Patient Care Centers	82
Health Care Facilities	
General Medical & Surgical Hospitals	70
Psychiatric & Substance Abuse Hospitals	182
Other Hospitals	15
Nursing Care Facilities	308
Elder Care Facilities	
Continuing Care Retirement Communities	236
Homes for the Elderly	425

* Please note that employer count does not include the self-employed.

Top Ten Health Occupations with Forecasted New Job Growth from 2008-2018 (Data Source: Oregon Employment Department 11/09)				
	Occupation	2008	2018	Change
1	Registered Nurses	30,656	37,427	6,771
2	Nursing Aides	12,842	15,950	3,108
3	Home Health Aides	8,599	10,775	2,176
4	Medical Assistants	7,113	8,948	1,835
5	Physicians & Surgeons	7,456	9,278	1,822
6	Dental Assistants	4,360	5,527	1,167
7	Dental Hygienists	3,142	4,003	861
8	Healthcare Support Workers, All Other	3,137	3,804	667
9	Medical & Health Services Managers	3,112	3,763	651
10	Medical Records & Health Information Technicians	2,639	3,274	635

Top Ten Health Occupations with Forecasted Total Openings Due to New Job Growth and Replacement Openings from 2008-2018 (Data Source: Oregon Employment Department 11/09)				
	Occupation	Growth	Replacement	Total
1	Registered Nurses	6,771	5,947	12,718
2	Nursing Aides	3,108	1,433	4,541
3	Physicians & Surgeons	1,822	1,472	3,294
4	Home Health Aides	2,176	965	3,141
5	Medical Assistants	1,835	895	2,730
6	Dental Assistants	1,167	928	2,095
7	Pharmacy Technicians	555	1,056	1,611
8	Dental Hygienists	861	729	1,590
9	Licensed Practical Nurses	590	900	1,490
10	Child, Family & School Social Workers	453	894	1,347

Oregon Employment Department 2008-2018 Occupational Employment Projections							
(Data Source: OED 11/09)							
Occupational Title	2008 Employment	2018 Employment	Change	Percent Change	Growth Openings	Replacement Openings	Total Openings
Computer and Information Scientists, Research	199	204	5	2.5%	5	43	48
Computer Programmers	3,264	3,646	382	11.7%	382	650	1,032
Computer Software Engineers, Applications	8,205	9,020	815	9.9%	815	724	1,539
Computer Software Engineers, Systems Software	2,185	2,374	189	8.6%	189	192	381
Computer Support Specialists	7,279	8,017	738	10.1%	738	2,117	2,855
Computer Systems Analysts	4,252	4,697	445	10.5%	445	965	1,410
Database Administrators	1,207	1,334	127	10.5%	127	212	339
Network and Computer Systems Administrators	3,546	3,906	360	10.2%	360	621	981
Network Systems and Data Communications Analysts	2,322	2,556	234	10.1%	234	438	672
Computer Specialists, All Other	5,373	5,825	452	8.4%	452	1,207	1,659
Medical Records and Health Information Technicians	2,639	3,274	635	24.1%	635	603	1,238

SWOT ANALYSIS

<p>Strengths (What are the skills, capabilities, knowledge, structures, systems, technology, etc. that Oregon has to build the HIT workforce and train our health care workforce in the use of EHRs?)</p>	<p>Weaknesses (What obstacles may prevent progress in building Oregon's HIT workforce and training our health care workforce in the use of EHRs?)</p>
<p>Opportunities (What are the technological, organizational, financial, demographic, political, economic and other opportunities for developing Oregon's HIT workforce and to train our health care workforce in the use of EHRs?)</p>	<p>Threats/Challenges (What external factors may hinder the ability to build Oregon's HIT workforce and train our health care workforce in the use of EHRs?)</p>

BUILD THE HIT WORKFORCE

2010-2011 - Short-Term Objectives (the initial EHR ramp-up period and priority need): Beyond our current HIT workforce, what additional health information technology workers does Oregon need **now and up to one year from now**? How many new workers will be needed for each occupational area?

Workforce	Estimated Additional Workers	Minimum Level of Education (e.g. OJT, 1yr Certificate, Associate, Bachelor, Graduate Degree)
Information Technology Workforce (Six categories identified by the Office of the National Coordinator Technical Advisory Committee)		
Implementation technical support staff		
Implementation support managers		
Workflow redesign specialists		
Clinician consultants		
Software support specialists		
Trainers		
Other:		
Other:		
Health Information Management Workforce		
Health information managers (e.g. RHIA's)		
Health information technicians (e.g. RHIT's)		
Coders		
Other:		
Other:		
Other:		
Informatics Workforce		
Physician Informaticists		
Nurse Informaticists		
Pharmacy Informaticists		
Public Health Informaticists		
Dental Informaticists		
Other:		
Other:		
Other:		

2011-2012 - Mid-Term Objectives: What and how many additional health information technology workers will Oregon need one to two years from now?

Workforce	Estimated Additional Workers	Minimum Entry Level of Education (e.g. OJT, 1yr Certificate, Associate, Bachelor, Graduate Degree)
Information Technology Workforce (Six categories identified by the Office of the National Coordinator Technical Advisory Committee)		
Implementation technical support staff		
Implementation support managers		
Workflow redesign specialists		
Clinician consultants		
Software support specialists		
Trainers		
Other:		
Other:		
Health Information Management Workforce		
Health information managers (e.g. RHIA's)		
Health information technicians (e.g. RHIT's)		
Coders		
Other:		
Other:		
Other:		
Informatics Workforce		
Physician Informaticists		
Nurse Informaticists		
Pharmacy Informaticists		
Public Health Informaticists		
Dental Informaticists		
Other:		
Other:		
Other:		

2012-2015+ - Longer-term Objectives: What and how many additional health information technology workers will Oregon need to have **in two to five years and beyond?**

Workforce	Estimated Additional Workers	Minimum Level of Education (e.g. OJT, 1yr Certificate, Associate, Bachelor, Graduate Degree)
Information Technology Workforce (Six categories identified by the Office of the National Coordinator Technical Advisory Committee)		
Implementation technical support staff		
Implementation support managers		
Workflow redesign specialists		
Clinician consultants		
Software support specialists		
Trainers		
Other:		
Other:		
Health Information Management Workforce		
Health information managers (e.g. RHIA's)		
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Coders		
Other:		
Other:		
Other:		
Informatics Workforce		
Physician Informaticists		
Nurse Informaticists		
Pharmacy Informaticists		
Public Health Informaticists		
Dental Informaticists		
Other:		
Other:		
Other:		

TRAIN THE CURRENT WORKFORCE IN THE USE OF EHRs/HIT

2010-2011 - Short-Term Objectives (initial ramp-up period/priority need): What do we need to start doing now and up to one year from now to prepare the current health care workforce to meet basic competencies in using EHRs and related technology?

2011- 2012 - Mid-Term Objectives: What do we need to do or have in place one to two years from now to prepare the current health care workforce in basic competencies in using EHRs and related technology?

2012-2015+ - Longer-Term Objectives: What do we need to do or have in place in two to five + years from now to prepare the current health care workforce in basic competencies in using EHRs and related technology?

INTEGRATE HIT/EHRs INTO HEALTH PROFESSION EDUCATION CURRICULUM

2010-2011 - Short-Term Objectives (initial ramp-up period/priority need): What do we need to do now and up to one year from now to integrate HIT/EHR coursework into Oregon's health care profession educational programs?

2011- 2012 - Mid-Term Objectives: What do we need to do or have in place one to two years from now to integrate HIT/EHR coursework into Oregon's health care profession educational programs?

2012-2015+ - Longer-Term Objectives: What do we need to do or have in place in two to five + years from now to integrate HIT/EHR coursework into Oregon's health care profession educational programs?

ADDITIONAL WORKSHEETS



This project is funded by the Oregon Department of Community Colleges and Workforce Development.