The Health IT Workforce Development sub group was formed in July of 2012 to address both broad and specific charges to identify efforts by providers to train their staff and other efforts by industry to create training programs for organizational change management programs.

**Broad Charge for the Workgroup:**
Make recommendations to the Health IT Policy Committee on ways to provide health IT education to all health care workers

**Specific Charge for the Workgroup:**
Make recommendations to the Health IT Policy Committee so that within one year, health IT training needs and competencies are identified and tools for implementation are recommended.

In response to the Broad Charge, the Health IT Workforce subgroup deliberated multiple issues. Initially three sets of workers were identified, (1) the health care workers at the point of care, and those that and support them, (2) IT and informatics professionals who are leading the projects, implementing and configuring systems and leveraging the data from them at the intersection of health and IT , and (3) the information systems technologists, including developers, operators, implementers and other IT specialists, not health care specific. The group heard presentations from the Health Resources Services Administration on projected health occupations, there are over 50 health professions, however, many of the health IT specific jobs do not have standard occupation codes (SOC) as identified by the Bureau of Labor Statistics. AHIMA and Department of Labor presented tools that help identify competencies for various workforce roles. Competencies required for supporting team-based care and population health were discussed. The diversity of the workforce and the evolving health care environment pose challenges.

After thirteen meetings, the workforce sub-group deliberated and made the following recommendations regarding workforce training. These recommendations are being proposed for consideration by the committee, in order to ensure that these issues continue to be addressed in the future.

**Recommendations**
1. ONC has funded several workforce development programs. **Recommend** that these programs be summarized and the results of those programs should be publicized.
2. The above programs identified core competencies. **Recommend** that these competencies are summarized and widely disseminated.
3. There are many resources available. **Recommend** publicizing the resources and best practices
4. Healthcare of the Future – emerging need for soft and hard skills related to team-based care, population health and patient engagement. **Recommend** new program development to address these emerging needs. **Recommend** additional funding for new workforce program.

5. Learn from what is happening with the current workforce. **Recommend** funding studies on the impact of Health IT on the workforce – traditional measures – like turnover, enrollment in healthcare vocations (schools), plus new jobs, like nurse informaticists.

6. The current Standard Occupational Classification (SOC) does not address Health IT. **Recommend** ONC hosting SOC input process from the Health IT community.

**Background**

To meet the goal of a continuously learning health care system the health care workforce needs the requisite knowledge, skills, abilities, and attitudes that complement:

- Creation of a learning framework for all levels of the workforce
  Including the ability to understand the health IT needs for different workforce groups such as:
  - Healthcare clinicians/medical
  - Informatics
  - Computer science (IT systems)
  - Key healthcare organizations such as 
    Provider organizations not limited to hospitals and physician practices, but including the spectrum of care: Long-term and post acute care, behavioral health, safety net, corrections health system, etc.
  - Vendors
  - Pharmacies, lab, etc.

- Transformation to implementation of Health Information Technology that supports patient centered care and delivers comprehensive, coordinated, accessible, high-quality and safe care.

- Development of and access to learning resources that specifically target a team-based approach to care that is heavily supported by technology

- Traditional roles within a practice must adapt and leverage this new technology in care delivery, which may require new or updated skills.

- Team-based care, interdisciplinary approach – how the team works together and how technology support improves workflows and information sharing needs.

**Recommendation 1**

ONC has funded several workforce development programs. **Recommend** that these programs be summarized and the results of those programs should be publicized.
Background: Identify and review the effectiveness of the workforce initiatives sponsored by the Office of the National Coordinator (and others), and leverage and/or expand them to shorten the timeframe for standing up workforce programs across the country.

This recommendation refers to understanding the survey instruments that have been utilized for the evaluation of the workforce initiatives. Based on the results the subgroup can make further recommendations.

**Recommendation 2**
ONC funded programs have identified core competencies. **Recommend** that these competencies are summarized and widely disseminated.

Background: This recommendation refers to the diversity of the health care workforce. There are vast differences in the education and training required for health care jobs, but there are also commonalities. Are there a set of competencies that would go across all roles? Are there critical competencies for providers that are moving to Stage 2 and beyond. The subgroup identified this as an important first step in the process. **See Appendix** for tools that Department of Labor and AHIMA have developed to assist with the process of identifying competency for some health care roles.

This recommendation proposes wide dissemination of the competencies identified to entities that are involved with health care. The sub group would also like to see a continuing dialogue with these entities to ensure that there is an understanding of and implementation of these recommendations.

Competencies should be widely disseminated to the following communities:

– Secondary and Postsecondary educational organizations
– Federal, State and Local Agencies
– Healthcare professional, provider, trade organizations
– Health Information organizations
– Allied Health Professions
– Credentialing organizations
– Workforce representative groups (e.g. unions)

**Recommendation 3**
There are many resources available. **Recommend** publicizing the resources and best practices

Background: This recommendation is focused on providing real-time access to training resources and best practices that have been developed. As the pace of knowledge generation accelerates a mechanism for sharing and disseminating this information will be important.
Examples: 1) Department of Energy hosts NTER – the National Training & Education Resource 2) The American Association of Community College, funded by the Department of Labor hosts the Virtual Career Network and can serve as a clearinghouse for marketing information.

**Recommendation 4**
Healthcare of the Future – emerging need for soft and hard skills related to team-based care, population health and patient engagement. 
**Recommend** new program development to address these emerging needs.

**Background:** Accelerating, expanding and infusing health IT training into all health related educational programs is the foundation for this recommendation. This would include medical education, nursing education, allied health and continuing education. Creating career pathways between secondary and post secondary education and developing articulation agreements should also be considered.

Advocate that educational programs (including formal education as well as certificates and certification) in healthcare support the competencies required for team-based care and population health.

**Recommendation 5**
Learn from what is happening in the current workforce. 
**Recommend** funding studies of the impact of Health IT on the workforce – traditional measures – like turnover, enrollment in healthcare vocations (schools), plus new jobs, like nurse informaticists.

**Background:** The use of technology is rapidly increasing in health care, but how does specific technology affect the workforce, and what workforce configurations make the most of technology are poorly studied.

**Recommendation 6**
The current Standard Occupational Classification does not address Health IT.
**Recommend** ONC hosting SOC input process from the Health IT Community.

**Background:** Currently a search of the SOC on “health information technology” brings up one position – Medical Records and Health Information Technician which is limited in scope and does not reflect current functions and skills in a technology-enabled environment. Modifications are made infrequently with the next modification set in 2018. The Workforce Sub-workgroup identified a need to update the SOC to include Health IT as an occupation.
Appendix

1. **Health: Electronic Health Records Competency Model**
   
   ![EHR Competency Model](http://www.careeronestop.org/competencymodel/pyramid.aspx?EHR=Y)

   The Electronic Health Records (EHR) Competency Model is depicted in a graphic consisting of several tiers. The arrangement of the tiers in a pyramidal shape is not meant to be hierarchical, or to imply that competencies at the top are at a higher level of skill. The model’s shape represents the increasing specialization and specificity in the application of skills as you move up the tiers. Tiers 1-5 have been developed and are divided into blocks. The blocks represent competency areas, that is, the applied skills, knowledge, abilities essential to successful performance in the increasingly electronic environment of the health industry. A table of the competency definitions and associated key behaviors follows the graphic.

2. **2012 CHIME Survey : Demand Persists for Experienced Health IT Staff**
   
   ![Survey Link](http://www.cio-chime.org/chime/press/surveys/pdf/CHIME_Workforce%20survey_report.pdf)

3. **AHIMA Career Map**
   
   ![Career Map Link](http://www.hicareers.com/careermap/)

   The American Health Information Management Association has launched an interactive online career development tool to help students and other job seekers find and track jobs in the health information management sector.

   Read more: [http://www.ihealthbeat.org/articles/2012/7/30/ahima-launches-new-career-map-tool-for-health-it-job-seekers.aspx#ixzz2IAczllfR](http://www.ihealthbeat.org/articles/2012/7/30/ahima-launches-new-career-map-tool-for-health-it-job-seekers.aspx#ixzz2IAczllfR)

4. **Career Pathways – Resources**
   - Training and Employment Notice (TEN):
     ![TEN Link](http://wdr.doleta.gov/directives/attach/TEN/ten2011/ten39-11acc.pdf)
   - TEN 39 – 11 – Resources for Career Pathways Link
     ![TEN Resources Link](http://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=4609)
   - TEN 36-11 – Joint Letter of Commitment to Career Pathways from DOL, ED, and HHS
     ![Joint Letter Link](http://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=3536)

   A Joint Letter of Support from the Assistant Secretaries of the Employment and Training Administration, the Office of Vocational and Adult Education, and the Administration for Children and Families encourages states and local areas to align resources that support integrated service delivery across Federal and state funding streams and calls for improved collaboration and coordination to support career pathways systems for youth and adults.
   - Career Pathways webinar series:
     ![Webinar Series Link](https://learnwork.workforce3one.org/)
5. National Training & Education Resource (NTER)
https://www.nterlearning.org/
National Training & Education Resource – is an easy-to-access, open source, web-based learning platform that enables learners, instructors, and organizations to be part of an entirely new education community – the next generation of learning.

6. Virtual Career Network
http://www.aacc.nche.edu/Resources/aacprograms/health/cap/Pages/vcn_healthcare.aspx
An online tool that will allow current and prospective health care workers to explore more than 80 different occupations, identify local education and training programs, and tap into current job listings. Through the Virtual Career Network, users also can learn how previous experience such as military or on-the-job training can be applied toward a health care career, take free online courses and find sources of financial aid.

7. Career clusters (careertech.org), Programs of Study Design Framework
(http://cte.ed.gov/nationalinitiatives/rposdesignframework.cfm)

Employability skills project
(http://cte.ed.gov/nationalinitiatives/employability.cfm?&pass_dis=1)