September 20, 2016

Standard Occupational Classification Policy Committee
U.S. Bureau of Labor Statistics, Suite 2135
2 Massachusetts Avenue NE
Washington, DC 20212
Submitted via email tosoc@bls.gov (subject line 2018 SOC)

Re: Request/Recommendation for New Health Informatics Practitioner Standard Occupational
Classification (SOC)

Standard Occupational Classification Policy Committee:

On behalf of the undersigned, we appreciate the opportunity to submit the following
recommendations to the Standard Occupational Classification Policy Committee (SOCPC)
regarding 2018 SOC revisions.

We greatly appreciate the acceptance of recommendations sent in July 2014 on the inclusion of
"health informatics" as an occupation.[1] However, we believe that the operationalization of our
recommendations could use refinement. Specifically, we are concerned with the conflation of
Health Informatics with Health Information Management (HIM) and Health Information
Technology (Health IT) occupations. **We strongly recommend the SOCPC develop detailed
codes under the new broad code 29-9020, separating the occupations of Health Informatics,
HIM and Health IT. Additionally, we recommend the 2018 SOC revisions include new
definitions for each of the distinct occupations of Health Informatics, Health IT and HIM,
using the currently proposed 29-9021 definition as a foundation.** Separate detailed codes will
allow both industry and government to track organic changes to each job category, over time,
and it will enable both government and industry to forecast expected changes in the workforce
more accurately. Such forecasting is critical to economic development across the nation, and it
can serve as the basis for positioning citizens for training and more impactful public funding.

As explained in more detail below, each of these occupational areas include workers with
distinct skills, job titles, and education and/or training, which will be difficult to reflect under a
single detailed code, as proposed in the current draft SOCPC recommendations. While
interrelated, we believe each occupation has unique origins, have developed in response to
changes in different environments and will continue to demand different kinds of skills,
education and training in the future.

Occupational History of Health Informatics, HIM and Health IT: Competencies and Education

The profession of **Health Informatics** dates back to the 1960s and the recognition that through
the combination of clinical knowledge and IT application that improved health and healthcare is
possible. Health informatics is largely a multidisciplinary, interprofessional endeavor,

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[1] Coalition Letter to the Standard Occupational Classification Policy Committee, July 21, 2014. Available at
http://bit.ly/2c5pZVH

combining expertise in computational fields of computer sciences, information sciences or data analytics, as well as in clinical fields, such as physician, nursing, dentistry, or pharmacy. Health informatics professionals merge these disciplines to support improvements in healthcare and to promote better, more efficient care. As more biomedical data has been digitized, through EHRs and other health IT applications, Health Informatics professionals have moved from a primarily academic setting to applied settings in healthcare delivery and industry as experts who demonstrate a capacity to integrate clinical knowledge with biomedical and other digital data, using information and communications technology. In order to deliver higher quality care at controlled costs, health informatics professionals are essential members of the modern care team, assimilating not only clinical data, but financial data, governmental data, population health data (e.g. poverty, social economic status and health literacy) to ensure that patients and families have the right information at the right time. Currently, there are over 50 graduate degree programs in Health Informatics and the subspecialty of Clinical Informatics was recognized in 2011 as the newest subspecialty in medicine, with over 1,100 board-certified physicians and 20 fellowship programs accredited by Accreditation Council for Graduate Medical Education (ACGME). Further, Nursing Informatics has been a recognized nursing specialty by ANA since 1992. These and other health informatics professionals engage in data analytics, develop clinical decision support, and leverage patient-generated health data for improved outcomes in the care setting.

HIM professionals have expertise in managing data without having the expectation of using the data in a clinical setting or context. The HIM profession was born out of paper records management, billing and coding for compliance purposes. These tasks have a largely administrative focus, and as paper records have morphed into electronic records, HIM professionals have had to evolve governance policies and processes for an electronic environment. HIM professionals are primarily concerned with clinical codes and concepts meant to inform billing or establish business rules; they work with clinicians but are not clinicians themselves. Their work also includes coding of the medical record, using DRG and ICD-10 codes which have a direct bearing on the acuity and severity of illness of the patient (case mix index) which affect reimbursement and population health measures. In addition, HIM professionals test their ICD-10 coding for accuracy and specificity. For nearly a century, fundamental medical research has been based using ICD codes, as to the diagnoses [pleural] of the patient. HIM Professionals do not work in areas such as usability or point of care implementations as Health Informatics professionals do, nor are they charged with designing or managing software and hardware systems (as do Health Informatics professionals).

The **Health IT** profession has its roots in hardware, software and traditional IT, such as wireless networks and routers, applied in the healthcare space. It has gained prominence over the last several years because healthcare has modernized, along with other sectors, to adopt IT. Enterprise resource planning, revenue cycle management, and other business applications have been joined by electronic health records (EHRs), population health platforms and other healthcare-oriented applications in recent years. Health IT professionals also have competencies in IT security, including cybersecurity, security risk analysis and risk mitigation, as well as "desktop support," measures related to access, authentication, authorization and credentialing. Fundamentally, though, Health IT professionals are IT professionals in healthcare, not experts in information governance as are HIM professionals, nor are they experts in the clinical application of IT as are Health Informatics professionals.

SOCPC Recommendations

Seventeen organizations recommended to this Committee in 2014 that revisions to the 2018 SOC system include a new broad code for "Health Informatics Practitioner" under the major group: 29-0000 Health Practitioners and Technical Operations. This letter articulated with great detail the rationale for a new code, including analyses articulating the nature of the work performed by Health Informatics professionals; how the work performed by Health Informatics professionals is distinct from other detailed occupations in the SOC; and Health Informatics jobs titles. For reference it is available as an appendix to this letter.

In response to our recommendations and others' input, the SOCPC recommended a new broad code and detailed code was added (29-9020 and 29-9021, respectively) for Health Information Technology, Health Information Management and Health Informatics Specialists and Analysts. In addition, this Committee developed a new definition for 29-9021, stating:

> Apply knowledge of healthcare and information systems to assist in the design, development, and continued modification of computerized health care systems. Design, develop, select, test, implement, and evaluate new or modified informatics solutions, data structures, and decision support mechanisms to support patients, health care professionals, and their information management and human-computer and human-technology interactions within health care contexts. May educate staff and assist in problem solving to promote the implementation of the health care information system.

Finally, this Committee responded to multiple dockets requesting new detailed occupations. According to Docket Number 1-0148:

> Multiple dockets requested new detailed occupations and improved coverage of occupations related to Health Information Technology such as Health Informatics Practitioners, Medical Records Specialists, and Medical Registrars. The SOCPC partially accepted these recommendations and proposed revising the title for 29-2071 Medical Records and Health Information Technicians to 29-2071 Medical Registrar and Records Specialists, adding Medical Bill Coder as an illustrative example, and adding "Includes medical coders" to the definition. The SOCPC also proposes a new broad and detailed occupations (29-9020 and 29-9021) for Health Information Technology, Health Information Management, and Health Informatics Specialists and Analysts. Finally, the SOCPC proposes adding illustrative examples to the existing 11-9111 Medical and Health Services Managers to include: Clinical Informatics Director, Health Information Services Manager, and Chief Medical Information Officer.

Recommendations

Given these differences in occupations today, the exponential growth of new technologies demanding new skillsets while decommissioning others, and the trends likely to continue in the future, we respectfully recommend the 2018 SOC include three distinct detailed codes for Health Informatics occupation (29-9021), HIM occupation (29-9022) and Health IT occupation (29-9023). This separation will allow professionals in these occupations to be categorized appropriately for statistical purposes and it will enable employers to acknowledge important

differences in skills, education and/or training. And separate categories will improve forecasting for this burgeoning sector of the economy, allowing employees and employers to make more informed decisions and enabling more targeted economic development through taxpayer investments.

The new definition for 29-9021 could serve as a foundation for each of the new detailed code definitions as follows:

- Health Informatics professionals: Design, develop, select, test, implement, and evaluate new or modified informatics solutions, data structures, and clinical decision support mechanisms to support patients, healthcare professionals, and improved usability of such systems for patient safety within healthcare contexts.
- HIM professionals: acquire, analyze, and protect digital and traditional medical information vital to the daily operations management of health information and electronic health records (EHRs).
- Health IT professionals: Apply knowledge of healthcare and information systems to assist in the design, development, and continued modification of computerized health care systems.

Finally, we appreciate and support the illustrative examples cited by the SOCPC for 11-9111 Medical and Health Services Managers to include: Clinical Informatics Director, Health Information Services Manager, and Chief Medical Information Officer. We suggest the addition of "Chief Nursing Informatics Officer" to this list to add further clarity. Experience among our constituencies indicate a proliferation of senior executives and other management-level job titles within and across these distinct occupations, all of which need to be captured under this detailed code.

We appreciate the opportunity to provide comment on these recommendations, and look forward to continued dialogue with the SOCPC on this important topic. For more information, please contact Thomas M. Leary, Vice President of Government Relations (tleary@himss.org) or Jeffery Smith, Vice President of Public Policy, AMIA (jsmith@amia.org).

Sincerely,

Alliance for Nursing Informatics (ANI)
American Medical Informatics Association (AMIA)
American Nurses Association (ANA)
Apervita
Association of Clinicians for the Underserved
Association of Medical Directors of Information Systems
Bellevue College Life Science Informatics
Brown Center for Biomedical Informatics
Center for Patient Safety, Research and Practice, Brigham and Women's Hospital
CHRISTUS Health
College of Healthcare Information Management Executives
Department of Health Informatics and Administration, College of Health Sciences, University of Wisconsin – Milwaukee

Department of Medical Informatics & Clinical Epidemiology, Oregon Health & Science University
Department of Veterans Affairs, Veterans Health Administration
Division of Health Informatics, Medical University of South Carolina
Division of Health Sciences Informatics at Johns Hopkins School of Medicine
Duke Center for Health Informatics
Health Informatics Program, University of San Francisco
Healthcare Information and Management Systems Society (HIMSS)
Indiana University - School of Informatics and Computing, Indianapolis
Institute for Health Informatics, College of Computing & Informatics, Drexel University
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Mount Sinai Health System
National Health IT Collaborative for the Underserved, Inc.
Nova Southeastern University, Biomedical Informatics Program
The Ohio State University Department of Biomedical Informatics
The University of Texas Health Science Center at Houston (UTHealth) School of Biomedical Informatics
University of Central Florida Health Care Informatics MS
University of Cincinnati, Master of Health Informatics Program
University of Colorado College of Nursing
University of Delaware, College of Health Sciences
University of Kansas Center for Health Informatics, University of Kansas Medical Center and University of Kansas Health System
University of Missouri Informatics Institute
University of San Diego Graduate Program in Health Care Informatics
University of Utah Department of Biomedical Informatics
University of Washington, Department of Biomedical Informatics and Medical Education