



IHE Work Item Proposal (Short)

1. Proposed Work Item: Improvement of Occupational Data for Health Templates

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Domain: Patient Care Coordination

2. The Problem

In 2011, the Institute of Medicine issued a report entitled, *Incorporating Occupational Information in Electronic Health Records*. The report states, “The transition from paper to electronic records offers the potential for providing clinicians with relevant and necessary information about their patient’s occupations, as well as possibilities for links to an array of clinical decision–support tools that could improve the health care and safety of individuals. Additionally, the inclusion of occupational information in EHRs offers a significant opportunity to advance and expand public health surveillance in order to provide a better understanding of occupational illness and injury. Each year in the United States, more than 4,000 occupational fatalities and more than 3 million occupational injuries occur along with more than 160,000 cases of occupational illnesses¹. Advances in incorporating occupational information in EHRs could lead to more informed clinical diagnosis and treatment plans as well as more effective policies, interventions, and prevention strategies to improve overall health of the working population.”

The CDA templates for exchanging occupational data for health (ODH) are inadequate and inconsistent across existing document standards, negatively impacting information exchange. The IHE CDA templates that include ODH represent only occupation and industry, do so in an inconsistent manner, and do not maintain occupation and the associated industry together when multiple entries are enabled. Consistently representing ODH in interoperability standards will facilitate structuring of ODH in EHRs and enable clinicians and patients to use/re-use ODH in their healthcare communications.

¹ BLS. 2010b. *Workplace injuries and illnesses—2009*. <http://bls.gov/news.release/pdf/osh/pdf> (accessed December 23, 2010)

-----2011b. *National Census of Fatal Occupational Injuries in 2010 (preliminary results)*. <http://bls.gov/news.release/cfoi.nr0.htm> (accessed May 26, 2011).

3. Key Use Case

Patient worked for 20 years as a Plant Operating Technician at the lead battery manufacturing plant. Since retirement 2 years ago, the patient has been working part-time as a cook in the family restaurant and also working as a Certified Nursing Assistant at the local long-term care nursing facility. This occupation and industry information needs to be represented unambiguously and include encoding standards for information such as employer and other data as standards evolve.

4. Standards & Systems

We will review the IHE Content Profiles with templates that represent occupation and industry.

IHE Content Profiles Impacted by this Work Item

IHE Content Profile Name	Domain	Current occupation and industry template(s) used
APHP LDHP MDS NDS PPVS PRPH-Ca	PCC PCC PCC PCC PCC QRPH	Documents that use the CodedSocialHistory section 1.3.6.1.4.1.19376.1.5.3.1.3.16.1 which include machine readable entries that use the IHE SocialHistoryObservation entry 1.3.6.1.4.1.19376.1.5.3.1.4.13.4
PRPH-Ca	QRPH	Defines additional constraints on the PCC SocialHistoryObservation template 1.3.6.1.4.1.19376.1.5.3.1.4.13.4 These further constraints are cited in an un-templated way to represent occupation information using US BLS Standard Occupation Codes, and to represent industry using US Census NAICS codes.
XDSMS Referral	PCC	Documents that use the uncoded SocialHistory section, recommended for inclusion in the scope of this work. 1.3.6.1.4.1.19376.1.5.3.1.3.16

5. Discussion

This is maintenance work to revise existing IHE CDA templates that include ODH; these templates affect a significant number of IHE content profiles. Changes to the existing profiles may be warranted to establish consistency and improve accuracy of ODH; a new modeling structure for the representation of occupation and industry may be proposed for use in the affected current and future profiles. We will reach out to the authors of the existing affected profiles to propose that they change the relevant profile(s) for the next IHE development cycle.

Specifically, we propose to define a new OccupationObservation entry which includes a nested IndustryObservation. This construction will enable industry information to be associated with the correct occupation. The vocabulary for coded elements will be defined for the US Realm. Also, a new section will be defined called OccupationHealthInformation. This section will be comprised of OccupationObservation entries and will represent a history of occupations. Change proposals will be submitted to request that each of the documents identified above adopt either the use of new OccupationHealthInformation section within the Social History Section or the direct inclusion of OccupationObservation entries within the Social History Section.