Annual Report

2010

Occupational Information Development Advisory Panel Baltimore, MD

OIDAP

OCCUPATIONAL INFORMATION DEVELOPMENT

ADVISORY PANEL

Mary Barros-Bailey, Ph.D. *Chair*

2 May 2011

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The Honorable Michael J. Astrue Commissioner Social Security Administration Suite 100 Altmeyer 6401 Security Boulevard Baltimore, MD 21235

Dear Commissioner Astrue:

On behalf of the OIDAP, attached please find the 2010 annual report. During our December in Baltimore, we discussed three areas the Panel unanimously believed would greatly assist in the progress of the project:

- Business process implementation of this process has greatly facilitated communication and project work flow among the individual components, including the OIDAP
- 2) *OIS plan* development of the plan sets a strong and clear direction for current and future R&D activities
- Skillset the hiring of a lead scientist, and appropriate scientific supporting staff, will help facilitate scientific integrity standards

In December, you issued a challenge to the Panel about ways to help accelerate the OIS. SSA has made substantial strides toward developing the tracks upon which the project could travel. We understand that fiscal and economic pressures have affected hiring authority within all government agencies. The staffing of the OVRD with complementary senior scientific staff to support the director, current staff, and lead scientist will put this project on the fast track.

Sincerely,

Mary Barros-Bailey, Ph.D.

Chair

THE MISSION

The Occupational Information Development Advisory Panel (OIDAP) was chartered on 14 January 2009 to provide advice and recommendations to the Social Security Administration (SSA) on the development of an Occupational Information System (OIS) to replace the Dictionary of Occupational Titles (DOT)¹ in SSA's disability programs.

Our 2009-2010 Recommendations to SSA

- 1. A new OIS is needed to replace the DOT²
- 2. The OIS should be based on SSA's legal, technical, and data requirements
 - **3.** The OIS should include physical, mental/cognitive, environmental, and other **data elements**
 - **4.** An internal **scientific and program unit** is needed to **develop** and **maintain** the OIS
 - 5. Basic and applied research should be conducted
 - **6. Measurement** considerations should be tied to the OIS's purpose
- 7. Continued communication with stakeholders is imperative
 - 8. An OIS comprehensive plan should be developed to guide the project and to provide transparency³

³ Recommendation Eight was pass unanimously by the OIDAP in November 2010.

¹ US Department of Labor. (1991). *Dictionary of occupational titles*. Washington, DC: US Department of Labor, Employment & Training Administration.

² The first seven recommendations were passed by the OIDAP in September 2009.

REFLECTIONS: OIDAPPURPOSE

In its activities and relationship with the chartering agency and the public, OIDAP is held to the Federal Advisory Committee Act (FACA). Thus, the Panel must be **advisory** only, ...

The OIDAP is advising SSA on activities for the development of the OIS. SSA considers these recommendations in its development of the database. Through professional development, presentations, and deliberation, the OIDAP considered work analysis theories, methods, and applications to database design; sampling options; and, legal topics to better understand the technical and contextual issues important in advice and recommendations responsibilities.

... it must be **transparent**, ...

During the 9-month public comment period for its 2009 report on content model and classification recommendations, OIDAP members participated in presentation teams with SSA staff and Workgroup members to inform the public about the recommendations and to solicit input using the OIDAP's transparent and open process as stipulated under FACA. During each day of public meetings, the Panel sets aside time to hear public comment.

... and, it must be **independent**!

To ensure undue influence by the sponsoring federal agency, as per FACA guidelines, Panel reports, correspondence, and other communication is authored by the Panel and disseminated through its Designated Federal Officer.

REFLECTIONS: OIDAP 2010 REPORTS

The OIDAP was asked by SSA to review the recommendations of the National Academy of Sciences (NAS) report of its review of the O*NET, the only currently-existing civilian occupational information system in the United States. Such as has been the case with previous reviews about the O*NET's use in disability adjudication, the OIDAP's review of NAS report reinforced that the O*NET was not suitable for SSA's disability needs; if modified to suit SSA's purposes, the O*NET would be materially changed from its original purpose for workforce development applications and changes would require revalidation of the entire database.

The OIDAP also conducted a 9-month public comment period on its 2009 recommendations to SSA to include dissemination of the information in the *Federal Register*, other electronic platforms, and outreach to over 3,500 stakeholders at conferences and provided the summary of the public comment to Commissioner Astrue in December 2010. The Panel's review of public comments and project implementation, resulted in General Recommendation Eight being delivered to SSA in November 2010: Need for an overarching OIS research and development plan that is transparent to the public.

June 28, 2010

"O*NET is a general purpose database The disability adjudication data needs and purposes are very different and not a subset of [those needs served by] the general purpose database." p. 11-16

"[National Academy of Sciences]... conclusions regarding occupational database maintenance ... were similarly reached by the OIDAP for the OIS's development..." p. 9

"... significant changes would need to be made to the O*NET in order for it be suitable for disability adjudication ..." p. 8

"... application of O*NET in SSA's disability adjudication process would require SSA to change its definition of 'skills'..." p. 10-11

OIDAP findings report: A review of the National Academy of Sciences report entitled A Database for a Changing Economy: Review of the Occupational Information Network (O*NET)

October 29, 2010

"...summarizes public comment ... regarding the development of a new Occupational Information System ..." p. 3 $\,$

Summary of Public Comment: Report of the User Needs and Relations Subcommittee to the Occupational Information Development Advisory Panel

REFLECTIONS: OIDAPACTIVITIES

To meet its needs, the OIS developed for SSA's disability programs *must* meet three criteria. The OIDAP was active or helped provide input into each of these three areas.

Criteria: The OIS must ...

1) ... be reflective of work as it is performed in the national economy, ...

Sampling - the OIDAP identified resources SSA may want to consider in its OIS sampling strategy, including attendance at meetings with the Bureau of Labor Statistics and the Bureau of the Census.

Data Collection - an ad hoc Panel group with subject matter experts in physical therapy, industrial/organizational psychology, and rehabilitation counseling/psychology provided thoughts and input for the use of *field job analysts* for data collection. The group performed a job analysis demonstration project and shared lessons learned for consideration in the OIS's data collection methodology.

2) ... reflect human function ...

While this criterion is straightforward, achieving it is complex. The OIDAP emphasized a distinction in the OIS purpose as needing an *ergometric* database design v. an *econometric* approach. With such a design, the resulting ergometrically-driven data could best be applied to the individualized assessment process in disability adjudication.⁴

The OIS is a work analysis database. It will include data collected about the *demands* of work, not the *abilities* people possess. Yet, for its ergometric design to make sense in the disability application, it must reflect discrete forms of human function, such as the lifting demands of work activity.

⁴ Occupational Information Development Panel. (2010). Findings report: A review of the National Academy of Sciences report entitled *A Database for a Changing Economy: Review of the Occupational Information Network (O*NET)*. Baltimore, MD: Author.

3) ... and, be legally defensible!

Science is ...

"... knowledge or a system of knowledge covering general truths or the operation of general laws especially as obtained and tested through scientific method."

William-Webster Dictionary

The development of the OIS involves the scientific process in applied research. This is often misunderstood by stakeholders. The OIDAP believes that, from the ground up, the OIS must adhere to scientific integrity principles⁵ for SSA to meet its burden of proof and for the OIS to be legally sound.

Scientific method is ...

"... principles and procedures for the systematic pursuit of knowledge involving the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses ..."

William-Webster Dictionary

"... even small flaws in research methodology can substantially alter results Even seemingly innocent choices in sampling or statistical techniques can have ramifications that find their way into 'common knowledge' and then into policies that affect people's lives." p. ix

Keller, D. K., & Casadevall-Keller, M. L. (2010). *The Tao of research: A path to validity*. Thousand Oaks, CA: SAGE Publications.

⁵ See 17 December 2010 White House Memorandum on scientific integrity: http://www.whitehouse.gov/sites/default/files/microsites/ostp/scientific-integrity-memo-12172010.pdf

REFLECTIONS: SSA ACTIVITIES & CHALLENGES

[The OIS is a mandatory project for SSA, not only program improvement or enhancement.]

ACCOMPLISHMENTS

- ✓ The Office of Vocational Resources Development (OVRD) was created as a formal unit within SSA's Office of Program Development and Research
- ✓ Occupational/Medical/ Vocational Claims Review Study (Disability Claims Data) finalized
- ✓ Field Job Analyst Benchmarking project initiated
- ✓ Users Needs Analyses studies conducted
- ✓ Special Sworn Status at US Census acquired
- ✓ Stakeholder Outreach performed



CHALLENGES

Concurrently creating a supporting infrastructure while delivering the OIS developmental steps.

Staffing the OVRD with scientific staff.

Lacking OIS development plan and process.



OIS Project SSA ACTIVITIES in 2010

To target OIS first rounds of data collection—

SSA completed review of approximately 3800 initial disability cases to capture the occupations found most frequently among disability claimants' past relevant work.

To develop a business process for field job analysts—

SSA worked with contractor, ICF International, to benchmark job analysis approaches and investigate methods for recruiting, training, and certifying job analysts.

To explore sampling options & ways to locate jobs throughout the U.S.—

SSA is working with other Federal agencies that have expertise developing occupational classifications or conducting national statistical surveys.

To lay groundwork for content model and instrument—

SSA reviewed and synthesized thousands of public comments on Panel's 2009 recommendations.

To exchange ideas and answer stakeholder questions—

SSA and Panel conducted extensive outreach together.

To meet challenges—

SSA began creating OIS business process, recruitment for lead scientist, and outlining comprehensive R&D plans.

THE FUTURE: OIDAP IN 2011

Panel composition, structure, and activities responsive to the needs of the OIS development as is inherent in the OIDAP's mission:

- Scientific and technical expertise and increased membership
- Subcommittee restructure focused on function per OIS plan needs (e.g., work taxonomy, sampling, etc.)
- Strong focus on transparency and communication per FACA
- Agendas anticipatory of greatest
 OIS development plan needs to
 guide advice and recommendations

THE FUTURE: OIS PROJECT IN 2011

- Continue collaboration
 with Federal agencies
- Develop Scientific Staffing
- Recruit Lead Scientist
- Implement Business
 Process
- Complete an R&D plan for the project

For additional information, please contact us at:

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