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Labor Market Survey/Research: An Approach Centered on the Individual and Grounded in Objective and Reliable Data

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In 2010, a cross section of Vocational Rehabilitation Counselors (VRC's) in Washington State took part in a comprehensive review of labor market survey methodology as it pertains to Washington Administrative Codes (WAC) (Donley & Johnson, 2015). This review produced the Labor Market Survey/Research (LMS/R) protocol: a combination of quantitative and qualitative data derived from scientifically surveyed published statistics and individual employer sampling, analyzed against worker-specific data, to arrive at a valid vocational opinion (Donley & Johnson, 2013). The goal is to arrive at a reliable conclusion based on these factors and VRC's professional clinical judgment (Barros-Bailey & Heitzman, 2014; Field, Choppa, & Weed, 2009). This article will review the LMS/R protocol as an option when conducting labor market research.

The Labor Market Survey

Labor Market Surveys (LMS) are used in a variety of venues where vocational assessments are required. These include Workers' Compensation, Longshore Harbor Workers/Jones Act, Social Security Disability, Long Term Disability, Civil Litigation, Marital Dissolution and Veterans Administration cases, among others (Barros-Bailey & Heitzman, 2014).

According to the Washington Administrative Code (WAC) 296-19A-010, an LMS "is a survey of employers in an industrially injured or ill worker's labor market to obtain specific information (such as physical demands and qualifications) related to job possibilities" (para. 5). Barros-Bailey & Heitzman (2014) define an LMS as "a survey methods strategy to collect qualitative and/or quantitative data for a small population census or sample about an identified labor market in order to draw inference to the client/evaluee (N=1)" (p. 168).

An LMS is used "to provide documentation in support of a vocational recommendation" (WAC 296-19A-140 (1). For the purposes of Washington State Department of Labor and Industries Worker's Compensation (L&I), an LMS is primarily used for Vocational Assessment, Plan Development, and Forensic Assessment, (WAC 296-19A-140 1(f)(i) and (ii); WAC 296-19A-130 (e), 2004; and 296-19A-135 (iii), 2004, 296-19A-010 (iii), 2004).

Concerns with Existing LMS Expressed Amongst Stakeholders

Washington State's workers' compensation stakeholders (attorneys, VRCs, employers and their representatives, and L&I) have long engaged in informal discussion related to concerns around the implementation and execution of LMS for L&I cases. (Donley & Johnson, 2015). Historically, execution of the LMS and subsequent vocational recommendations have been based solely upon a small sample size of employers, commonly understood to consist of five employer contacts in a given geographic labor market. It is unclear where the reliance on five employer contacts is derived, as it is not implicit in

the WAC. Thus, the rule of five contacts appears to be arbitrary, which introduces a note of levity to the historical execution of LMS for Washington State's workers' compensation cases (Cary, Choppa, Gamez, & Johnson, 2015). This process also entails cold calling employers to verify complex aspects of jobs in a short window of time. Such a format thus relies upon the collection of primary data, leaving vocational opinions to be based upon an inadequate sample sizes given the desired occupation studied (particularly in metropolitan areas), which more often than not lacks an adequate survey design (Donley & Johnson, 2013, Donley & Johnson 2015).

There was an overlap among stakeholders regarding this historical execution of the LMS, and while some noted issues directly related to the quality and thoroughness of work by an individual VRC, attention was primarily placed on the concern related to employer sample based LMS described above. This focus was directed at the subjective nature of responses solicited from the narrow employer sample method. Additional queries were raised relating to the amount of resources being devoted to gathering information in a sample that is routinely collected through state, federal, and non-profit organizations using scientific research based survey protocols, not just sampling (Donley & Johnson, 2013, Donley & Johnson 2015).

Development of the LMS/R Work Group

Informal conversations about historical use of the LMS for L&I cases gave way to an organized approach to address the issue, and in 2010 the need to formally review the LMS process was raised by the vocational community in Washington State. Driven by Cloie Johnson and Jan Donley, a cross section of VRC's from around the state were recruited. Within this work group, the issue was dissected, literature was reviewed, the WAC was analyzed, VRCs were surveyed, and a mission statement was created (Donley & Johnson, 2013). Donley & Johnson (2013) outlined the work group's goal in a memo to L&I:

> Propose a complementary labor market research methodology based on existing objective labor market and wage data through Employment Security Department, federal and other state resources. Our intention is to uphold the current WAC guidelines while increasing LMS accuracy, strengthening case outcomes[,] and decreasing costs through reduction of subjective data collection methods, for example, direct employer contacts (para 5).

A sample LMS/R format was created, first utilizing secondary data sources to determine the suitability of an occupation, followed by primary data sources reflecting the suitability for an occupation, including claim-specific facts related to pre/post and accepted conditions (Donley & Johnson, 2013).

By February of 2015, L&I released the following in "What's New for Vocational Counselors" (The Washington State Department of Labor and Industries, 2015):

> Objective approach to Labor Market Survey
>
> Vocational representatives from the Washington Self-Insurers Association (WSIA) approached L&I to discuss how to make labor market surveys more objective, how to ensure a more consistent product[,] and how to make them easier to administer. With this goal in mind, the vocational representatives worked with a number of other vocational providers in the community to develop an alternative approach to labor market surveys (para. 1).
>
> The alternative approach relies heavily on objective labor market data from Federal, State[,] and County resources, while still validating information with specific employers when necessary, for example when the JA [Job Analysis] doesn't match the physical requirements of the objective labor market data (para. 2).
>
> L&I believes that all parties can benefit from a more objective approach to labor market surveys. The alternative option presented to L&I appears to provide this objectivity, while reducing burden on employers and VRCs. (para. 3)

> The "alternative option" referenced is the LMS/R, and the "objective labor market data" are secondary data sources such as the Employment Security Department (ESD), WOIS/The Career Information System (WOIS), O*NET OnLine (O*NET), among others. The primary data is derived from direct employer surveying to verify worker-specific data that has not been triangulated through the limited study of quantitative sources. The LMS/R emphasizes triangulating data sources to either confirm or refute the suitableness of jobs for an individual worker (N of 1) (Donley & Johnson, 2013, Donley & Johnson 2015).

Thus, the focus of the LMS/R is on following established research methodology within the field of rehabilitation to mitigate longstanding issues with reproducibility of employer surveying. This is accomplished by triangulating a wide variety of available and reliable sources, along with employer contacts, thus providing the VRC with an effective protocol for conceptualizing and interacting with the labor market. These data points, combined with the clinical judgment and experience of the VRC seeks to limit the chance for inaccurate or incomplete vocational opinions and recommendations.

Foundational Research Methodology

It is important that rehabilitation professionals rely on established methodologies in all facets of their work product (Field, Johnson, Schimdt, & Van de Bittner, 2006). The LMS/R approach to research into the labor market and formulation of a vocational conclusion should be no different. Research methodologies in the field of rehabilitation counseling are well established and should be acknowledged in forming an understanding of the newer LMS/R protocol. It is important to return to the tenets of research within the field of rehabilitation counseling in order value of the research process. To understand the foundations of the protocol being proposed in any LMS process, some research involves the formulation of a research question, the collection of data from individuals, the analysis of data, and finally the determination of the findings on the original hypothesis (Bellini and Rumrill, 2009). This remains the central tenet to the LMS/R.

As is the case for any labor market research utilized, the VRC must determine a research question founded on the purpose and necessity of data for a given occupation based upon the evaluee's skill set (i.e., work experience, education, aptitudes, among others), with special consideration to the nature of the individual's functional limitations and impairment. The VRC's training and clinical experience is essential to establishing research questions and potential hypotheses. This training is grounded in more than thirty-five years of expected competencies in the use of labor market in practice across the nation (Barros-Bailey & Robinson, 2012). Once a research question has been identified, the VRC's objective may be to then test the hypothesis through data collection. The primary means of data collection come in the form of quantitative and qualitative design, or both (called mixed methods) (Van de Bittner, Toyofuku, & Mohebbi, 2012; Barros-Bailey & Heitzman, 2014). As noted by Bellini and Rumrill (2009), quantitative research translates observations "into numbers and a focus on summarizing and aggregating findings as a way of bringing meaning to research results," (p. 184). With regard to qualitative sources, Bellini and Rumrill (2009) explain, "findings are arrived at using non-mathematical analytic procedures" (p. 187), i.e., interview and observations. The most accurate way to describe the research outlined in this article is mixed methods research.

While sound methodology in rehabilitation research is comprised of many additional elements worthy of detailed review, defining qualitative and quantitative research within primary and secondary sources of evidence is meant to establish the "basics" from which a VRC should be guided, in the design of their labor market analyses. What is important to note is the use of various sources of data points and collection methods to determine or test an original hypothesis. Such triangulation of data is necessary in an effort to limit and mitigate researcher bias, along with erroneous or incomplete information from a given data source.

As noted by Weed and Field (2001), the results of labor market surveys can hold significant meaning and impact on the evaluee and, thus, "deserve to be conducted in a methodical, standardized, objec-

tive manner which replaces personal bias on the part of the rehabilitation professional with clear data to support realistic placement opportunities" (p. 123).

Below, the qualitative and quantitative elements of the LMS/R are explored to provide reference to statistically valid and relevant data collection sources and their relationship to the unique physical, mental, and skills inherent in an "N of 1" study of labor market accessibility.

Secondary Data Sources

From the outset, it is important to acknowledge the limitations associated with secondary quantitative data sources. Barros-Bailey (2013) points out that quantitative data contained in secondary data sources are outside of the control of the VRC, in that VRC's have no way of framing the questions that are utilized to collect the data contained within those secondary sources. This is a valid limitation with regard to applying these data for the purposes of the LMS/R if the questions to be answered for a given evaluee were not collected and contained by the source (e.g., O*NET, DOT).

Additionally, the obsoleteness of sources and data is a limitation and important to consider. The Commission on Rehabilitation Counselor Certification (CRCC) Advisory Opinion #46 (2002), acknowledges the "lack of current and complete information in the DOT and O*NET" (p. 21) and note that even in their most up-to-date form may "fall short of listing every position" (p. 22). CRCC (2002) notes that secondary data sources are one source of information, "which should be supplemented with additional information such as that obtained from current labor market surveys, and that judgment should be applied when making use of any data upon which a professional relies when developing recommendations" (p. 22). This approach is consistent with WAC 296-19A-140 (g): "Additional information may be presented in the summary, but only as a supplement to the labor market survey. Additional information may include, but is not limited to, published statistical data regarding occupations and projected job openings" (para. 1).

The LMS/R addresses the use of secondary sources by emphasizing a triangulation of data from primary sources. When analyzing secondary data sources, it is incumbent upon the VRC to use their clinical judgment (or experience understood) as a critically important and central requirement of the LMS/R. The LMS/R further emphasizes the use of quantitative sources through employer surveying to acquire specifically selected data points to address the issue of level of impairment on an individual's ability to work.

Triangulated quantitative and qualitative data analysis assists the VRC to arrive at an opinion that is reproducible and reference-ready to all involved stakeholders. This is especially true when documenting the following "necessary" geographic specific elements of labor market survey information (The Washington State Department of Labor and Industries, 2018a):

> The return-to-work program goal exists in the worker's labor market (para. 1).
>
> The worker meets the minimum qualifications for the return-to-work goal or will meet the minimum qualifications at the conclusion of their retraining program (para. 1)
>
> The worker has transferable skills required for the job (para. 1).
>
> When evaluating reasonable commuting distance in the labor market (para. 2).

Additionally, because the "ability to obtain gainful employment decision [is not] based solely on fluctuation in the job market" (para. 1) (The Washington State Department of Labor and Industries, 2018b), secondary data sources become important to the VRC to weigh data in order to project employability into the future, which is not easily attainable through the collection of a small sampling of employer contacts and a sophisticated research design. This is especially true when analyzing the following considerations for employability in a fluctuating labor market (The Washington State Department of Labor and Industries, 2018b):

> Lack of current or projected job openings shouldn't be the reason to find an IW eligible for plan development. Inability to work must be due to the injury or disease, not fluctuation in the labor market (para. 3).
>
> A LMS conducted during Plan Development is positive if it shows enough jobs for the proposed goal exist to reasonably conclude the IW will be employable at plan completion (para. 7).

The LMS/R encourages the analysis and scrutiny of secondary data sources in tandem with primary data collection, especially when making decisions related to projecting employability, often times two, or more, years in to the future.

Secondary quantitative and qualitative data are obtained through sources including, but not limited to, the *Dictionary of Occupational Titles* (DOT), WOIS, ESD, and O*NET. Despite critical reviews of occupational information systems existing in the United States for over eight decades (National Academy of Sciences, 1981, 2010), these sources are considered the best available we have to do the analyses required in our work. The following is a brief overview and history of each secondary source of evidence utilized in the LMS/R.

The Dictionary of Occupational Titles

The DOT was developed out of need to address the job placement activities of the expanding public employment service in the mid 1930s, and in response to the Wagner-Peyser Act of 1933 (US Department of Labor, 1991). The Wagner-Peyser Act of 1933 was designated to establish a national employment system (US Department of Labor, 2008), which the U.S. Employment Service instituted in the form of a national occupational research program utilizing analysts in regional field offices to collect standardized occupational data (US Department of Labor, 1991).

These data have been used for decades to match people with jobs for various purposes including for occupational and career guidance, and labor market information services (US Department of Labor, 1991).

L&I requires utilization of the DOT, or other occupational coding, in identifying occupations which reflect work history, transferable skills, and/or occupational retraining goals (WAC 296-19A-140 (1)(a)). It is important to note that the most recent revisions to the DOT's were the 3rd edition (US Department of Labor, 1965) and the 4th edition (US Department of Labor, 1977). The LMS/R recognizes that the weight of the DOT information alone is not enough for making vocational determinations/recommendations, but rather serves as a source of data based on direct observation and analysis of occupations over time (US Department of Labor, 1991) while also fulfilling L&I's requirement that the DOT, or other occupational code and source, be included in an LMS (WAC 296-19A-140 (a). The LMS/R relies on the VRC's clinical knowledge as an essential key to interpreting the validity and/or obsoleteness of the DOT's data when compared against jobs as they exist today, in the geographic labor market under review.

WOIS/The Career Information System

Previously known as the Washington Occupational Information Service or simply WOIS, the WOIS/The Career Information System began in 1974 as a state agency (WOIS, 2018). In the 1980s this system became a private, 501(c)(3) nonprofit organization and changed the name to WOIS/The Career Information System (WOIS, 2018). Tami Palmer, WOIS Executive Director, (personal communication, July 12, 2015) explained that as a member state of intoCareers, a national Career Information System (CIS) based in the University of Oregon, WOIS adheres to the Alliance of Career Resource Professionals (ACRP), quality standards for computer-based career information, services, and systems.

According to T. Palmer (personal communication, July 12, 2015) data utilized in the database include national wage, employment, and job outlook data from the Bureau of Labor Statistics and O*NET, both divisions of the US Department of Labor. Additional content for the occupation descriptions is

from the *Occupational Outlook Handbook* and from publications created by professional organizations. State specific employment and outlook information comes from the Washington State Department of Employment Security (T. Palmer, personal communication, July 12, 2015). Occupations that list numbers of licensed workers in the state at the time of update are gathered from the state licensing agencies by internal WOIS analysts/researchers Security (T. Palmer, personal communication, July 12, 2015). Specific Washington state wages come direct from the Washington State Department of Employment Security. WOIS lists wages for some State of Washington jobs using data from the Washington State Human Resources office. WOIS also has access to other states' data on earnings outlook. (T. Palmer, personal communication, July 12, 2015).

In addition to these resources, WOIS' own Information Analysts and Researchers track real time labor market trends, in order to provide the most up-to-date labor market information available (T. Palmer, personal communication, July 12, 2015).

Employment Security Department (ESD)

Occupational information reported by the ESD is based on a survey of employers throughout Washington State and is collected in accordance with The Bureau of Labor Statistics' Occupational Employment Statistics standards (OES) (US Department of Labor, 2015). As explained by Anneliese Vance-Sherman, Ph.D., Regional Labor Economist at Employment Security Department (personal communication, July 13, 2015), projections are industry-based and occupational information is derived from a combination of staffing information (occupational staffing by industry), which is based on the OES survey (US Department of Labor, 2015). Additional data are procured from Help Wanted OnLine and Unemployment Insurance claims information by occupation (A. Vance-Sherman, personal communication, July 13, 2015). These lists are specific to Workforce Development Areas and are used to inform job training decisions. The lists are owned by local Workforce Development Councils throughout the state, and can be changed to reflect the local list owners' observations of economic trends in their respective areas (A. Vance-Sherman, personal communication, July 13, 2015). The ESD also provides information from WorkSource. WorkSource is a joint venture of organizations dedicated to addressing Washington State's employment needs. WorkSource Partners include state and local government agencies as well as local community-based organizations that provide a wide range of employment and training-related services (US Department of Labor, 2015). Organizations include:

- Business
- Labor
- Employment Security Department
- Workforce Development Councils Community and Technical Colleges
- Department of Social and Health Services
- Workforce Training and Education Coordinating Board
- Superintendent of Public Instruction

Information is reported through Current Employment Statistics, Washington Employment Estimates, and Labor Market and Economic Report (US Department of Labor, 2015).

The O*NET OnLine

The database is sponsored by the U.S. Department of Labor, Employment & Training Administration, and developed by the National Center for O*NET. O*NET OnLine is an application that was created for the general public to provide broad access to the O*NET database of occupational information (U.S. Department of Labor, 2011). Data collection is managed by Research Triangle Institute (RTI) International, an independent nonprofit organization (RTI, 2015a). RTI staffs two-thirds of their research core with advanced degrees (RTI, 2015b). These scientists and engineers work in multidisciplinary teams, often in collaboration with university and industry researchers (RTI,

2015b). The data collection design seeks a "statistically random sample of businesses expected to employ workers in the targeted occupations" and "a random sample of workers in those occupations within those businesses" (U.S. Department of Labor, 2011, para. 3).

O*NET OnLine offers a variety of search options and occupational data and is a unique and powerful source for continually updated occupational information and labor market research. By using a contemporary, interactive skills-based database and a common language to describe worker skills and attributes, O*NET transforms mountains of data into precise, focused occupational intelligence that anyone can understand easily and efficiently (U.S. Department of Labor, 2011).

The National Center for O*NET Development also supports My Next Move, which is a streamlined application of the data collected for use on O*NET OnLine specifically for students and job seekers (My Next Move, 2015).

Primary Data

Primary data collected from a small sample of direct employer contacts has been the mode by which most LMS's have been historically completed for Washington State workers' compensation cases (Donley & Johnson, 2015). Primary data has been mostly optional and limited to supplementing employer contacts (WAC 296-19A-140 (g). Barros-Bailey and Heitzman (2014) review the complexity of a valid and reliable Survey Design when utilizing an interview-based survey, and explore the sophistication by which LMS through employer sample or census surveying should be executed. Barros-Bailey (2012a) sets forth a 12 step methodology by which a survey instrument is designed, data are collected, analyzed, and reported, when a review of secondary quantitative data is insufficient by itself or requires supplementation (Barros-Bailey & Heitzman, 2014).

Unfortunately, based on the feedback solicited from VRCs, attorneys, employers, and L&I representatives in Washington state, transparency in research questions, sample framing, data collection, and analysis of data has called into question whether a true methodology is being sufficiently followed in the execution of LMS in accordance with WAC (Donley & Johnson, 2015). Additionally, the variance in VRC qualifications per WAC 296-19A-210 (a), Bachelor's Degree and/or Master's Degree and up to 3 years of internship status, does not always translate to immediate understanding of a high level skills, such as LMS, which is often delegated to VRC Interns.

Hence the LMS/R encourages beginning with secondary quantitative and qualitative data from reliable sources to distill an understanding of the job under review, and then seek qualitative input to determine if in fact an occupation is suitable for retraining or if an individual is able to obtain and perform the work (Donley & Johnson, 2014). In most other venues of vocational rehabilitation, depending on the VRC's experience and depth or breadth of secondary data sources, the secondary data sources may be sufficient to arrive at an opinion (Barros-Bailey, 2012a). However, in accordance with WAC, it is advisable that primary data sources are used to support opinions discovered by review of secondary sources.

The key component is the VRC's capacity to utilize the quantitative and quantitative data to address the appropriateness of a recommended occupation (Donley & Johnson, 2014) and to reach a point of Opinion Validity© (Barros-Bailey & Neulicht, 2005) through careful analysis of quantitative and qualitative data.

Coupled with supportable secondary data, other objective primary data collections methods, such as job analysis and employer contacts (survey research) are used to clarify claim-specific criteria related to the individual under study (Donley & Johnson, 2014). The proposed sample format provides a summary of the principle data sources used in the LMS/R.

Previous Job Analysis (JA)

According to WAC 296-19A-010 (6) a job analysis (JA) is: "the gathering, evaluating, and recording of accurate, objective data about the characteristics of a particular job" (para. 6). Previously completed

JAs are reflective of positions that are generalizable to occupations within the general labor market and are geographically specific. Especially when completed on site as a stand-alone job analysis (SAJA) for the job of injury (JOI) or past transferable skill/work history position, this primary data collection observation source is valuable and essential for inclusion to the development of an LMS/R opinion. Thus, JAs can serve as a comprehensive qualitative data point in the critical analyses of the labor market.

> The methodology set out for developing a JA is clear in WAC 296-19A-170, paraphrased for brevity: (1) Include identifying information on each page . . . the specific job title surveyed . . . an accurate reflection/description of the job, then list the specific job surveyed, the occupational code and the source from which the occupational code was obtained; (2) Note . . . where the provider completed the job analysis and the date of the job analysis. If the analysis is based on site specific information, include the employer name and employer contact person(s) name(s) with phone number(s); (3) Describe the essential functions . . . necessary, and integral parts of a job performed by a worker; (4) List the tools and equipment required to do the job; (5) Evaluate and describe the skills required to perform the job; (6) Evaluate and describe the physical demands and their frequency required to perform the job, utilizing the physical demands . . . and the source from which the physical demands listing was obtained . . .; (7) Describe, if pertinent, any environmental hazards encountered on the job; (8) Describe possible modifications to the job for employer job offers or job modifications; (9) A section for medical approval, signature, and comments; and (10) The signature of the vocational rehabilitation provider presenting the job analysis for review and date signed (para. 1-10).

RCW 51.32.090 (4) stipulates that workers are entitled to a JA during the intervention phase of vocational services, thus resulting in a bank of JA accessible by large vocational counselor firms and sole proprietors alike, from which to analyze as primary sources of information. In the LMS/R protocol, significant claim-specific, and geographically appropriate, portions for the jobs under review are analyzed and summarized as they pertain to the specific worker under review. The redacted JAs are attached to the LMS/R and qualify as a primary data source for employer contact. (Donley & Johnson, 2015).

Labor Market Survey/Employer Sample or Census Surveying

In the LMS/R, employer sampling is reserved for focusing on refined, claim-specific criteria, applicable to the individual under review, which have not been or could not be gathered through review of secondary research (Donley & Johnson, 2014). The technique is not used to supplement data collected in the secondary data collection process to support an already established opinion that an occupation is Positive or Negative (i.e., quantitative data that supports or refutes the qualifications, wage, availability, and physical demands). Rather, the employer sample or census phase is one of two possible components with the other component being secondary data in achieving Opinion Validity© (Barros-Bailey & Neulicht, 2005; Choppa, Johnson, & Neulicht, 2014). Workers represent their own (N of 1) variable data set (e.g., nature of injury, functional capacities, occupational/academic history/experience), which is compared against the aggregated data gathered through the course of LMS/R judgment (Barros-Bailey & Heitzman, 2014; Donley & Johnson, 2014; Field, Choppa, & Weed, 2009). Specific employer contacts are reserved for addressing those worker-specific variables not present or adequately defined during the course of LMS/R research (e.g., level of English comprehension required for the work activity, reasonable accommodations available) while collecting the other data required by the WAC (Donley & Johnson, 2013; Donley & Johnson, 2014; Donley & Johnson, 2015).

The critical component is the VRC's analysis utilizing professional, clinical judgment after each data source to provide findings and opinions relevant to the outcome of each data source's contribution in support of or not in support of the injured worker's employability (Barros-Bailey & Neulicht, 2005; Choppa et al., 2014; Donley & Johnson, 2013; Donley & Johnson, 2014; Donley & Johnson, 2015). Inconsistencies or consistencies in data, and emphasis on the appropriate recommendation is based

upon the VRC's knowledge, training, and experience combined with professional clinical judgment, and should be provided for each data resource under VRC comment (Donley & Johnson, 2015).

It should be noted that all the aforementioned sources included in the LMS/R (DOT, WOIS, ESD, O*NET, Previous JA, LMS/Employer Sampling) are already existing within the VRC's toolbox. VRC's are expected to be familiar with these sources in their clinical work in areas of occupational research and retraining plan development. VRC's are already skilled in navigating and interpreting these data. It is also recommended that VRC's, particularly VRC Interns and their Supervisors, establish a transparent Survey Design (Barros-Bailey, 2012a) and properly applied methodology (Barros-Bailey, 2012b; Van de Bittner, Toyofuku, & Mohebbi, 2012).

Sample Format

The product of the work started in 2010 by the LMS/R Work Group in Washington State was a sample LMS/R format. The following represents a simplified outline of the LMS/R format developed by the 2010 work group:

Table 1

LMS/R Sample Format

(County) Labor Market Survey/Research

This labor Market Survey/Research is submitted as the documentation in support of the vocational recommendation. The labor Market Survey/Research is a combination of secondary data that may include ESD/WorkSource, WOIS, O*NET, DOT, Job analysis(es), and the primary data from employer sample or census specific to the above-identified individual.

The labor market survey/research methodology is based on existing objective labor market and wage data from the Washington State Employment Security Department, federal, and other state resources.

- *Dictionary of Occupational Titles* (DOT)
- ESD/WorkSource (which provides job growth and trend information, in-demand/neutral/not in demand occupational information, etc.)
- Washington Occupational Information System (WOIS) (Hybrid of federal, state, county information as well as employer sampling, etc.)
- O*NET (general occupational data with state and regional specific wages).
- Job analysis (JA) (using past job analyses obtained from employer contacts within the VRC's practice for physical demands, wages, minimum qualifications, etc.)
- Selective employer contacts for clarification of conflicting or unknown data.

Labor Market Research Summary

Claim-specific Criteria: Claimant, injury, Date of Injury, Pattern of employment, job at time of injury, geographic area, education, experience and skills (summarized), and what the worker's primary physical restrictions are; worker's injury (accepted conditions). Are there any pre-existing conditions that need to be considered followed by restrictions, limitations, and which job analysis is approved?

Occupational Goal per *Dictionary of Occupational Titles* (DOT):

DOT Title/code (Industry), alternate titles:

Description:

GOE:

STRENGTH:

GED: Reasoning, Mathematics, and Language (RML):

SVP:

DLU:

VRC COMMENT: (Analysis, findings, and opinion(s) relevant to the outcome stated above, addressing any inconsistencies or providing applicable emphasis to the recommendation based upon the qualitative and quantitative data findings along with knowledge, training, and experience combined with professional and clinical judgments.)

LABOR MARKET RESEARCH

PART I: SECONDARY DATA
RELEVANT LABOR MARKET/COUNTY:

WOIS (The Career Information System):

Terms researched:

Description:

Training: Wages:

Occupational Outlook:

(county) County Outlook:

Washington Outlook:

VRC COMMENT:

WORKSOURCE/(county):

Terms researched:

Description:

Training:

Wage:

Growth:

(county) County:

Demand:

Updated:

VRC COMMENT:

National Data: (Growth, Wages)

O*NET:

Terms researched:

SOC CODE:

Description:

Sample of reported job titles:

Tasks:

Training/Job Zone:

Education:

Wages:

Projected growth in Washington State:

VRC COMMENT:

PART II: EMPLOYER SAMPLING:

PART A: JOB ANALYSES

These previously completed job analyses are reflective of occupations within the injured worker's geographic labor market which represent actual positions previously analyzed. Significant portions are summarized below. Actual JAs are attached.

#1: Title:

Employer/Location:

Phone#:

Person Contacted:

Date:

Physical Demands:

Qualifications:

License/Certification:

Work Pattern: ☐ FT ☐ PT

Claim-specific Criteria:

#2: Title:

#3: Title:

VRC COMMENT:

PART B: LABOR MARKET SURVEYS - CASE SPECIFIC CRITERIA

SUMMARY OF EMPLOYER SAMPLE/CENSUS SURVEYING

	Employer Contacts	Date	Positive/Negative	Why Negative?
1				
2				
3				

Note Claim-specific Criteria:

DOT NO

SVP NO

GOE

CLAIM #

WORKER:

DATE OF CONTACT

SURVEYOR: **PHONE**

JOB TITLE

(Per Employer)

(Per DOT)

EMPLOYER:

CITY/CO: **TELEPHONE:**

PERSON CONTACTED: **TITLE**

WORK PATTERN: **NUMBER OF OPENINGS**

DATE OF LAST HIRE: **NUMBER OF POSITIONS**

WAGES:

JOB DESCRIPTION:

MINIMUM QUALIFICATIONS

CLAIM-SPECIFIC CRITERIA:

OTHER RELEVANT INFORMATION:

The above sample LMS/R Format can be used to gather and present the quantitative and qualitative primary and secondary data sources outlined in this article.

Summary and Conclusions

The LMS/R format provides for a comprehensive analysis of the individual or evaluee's labor market, intended to mitigate the risk of otherwise erroneous or incomplete findings, and places the emphasis on the use of the VRC's professional clinical judgment that rests upon a database of qualitative and quantitative evidence from primary and secondary sources. A format to record labor market primary and secondary information was introduced emphasizing an individual's case facts and residual functional profile as the anchor for the collection of the different types of labor market evidence to ultimately achieve Opinion Validity©. The LMS/R protocol promotes a consistent professional, objective, and dynamic approach for the VRC, aligned with calls for greater reliability in the peer reviewed and published methodology. The format is not a paint-by-numbers model using existing data, or based on an extremely small sample of the labor market, neither are these data being applied to an individual without context. The utilization of primary and secondary labor market data promoted in the LMS/R is intended to provide the VRC with a clear foundation of the labor market for specific occupations under review, without which a professional cannot arrive at a defensible and replicable opinion regarding an individual's ability to work. The use of primary and secondary data is a foundational component of strong research methodology for the rehabilitation field. These sources provide a database allowing for the triangulation of data – whether qualitative or quantitative – thus reducing broad data sources through professional and clinical judgment to arrive at sound and objective vocational opinions, thereby limiting reliability on erroneous or incomplete data and findings.

VRCs hold requisite education, are nationally certified, must adhere to a code of ethics, and are experienced and qualified to utilize their specialized knowledge to provide analyses and labor market survey/research. The LMS/R proposes to reduce redundancy, promote a higher level of objectivity, and help to neutralize LMS validity concerns regarding employer and respondents such as employer size, relevance to job, respondent's position, tenure, familiarity with job, general mood, the way a question is phrased, resistance to interview, etc. This comprehensive and transparent analysis completed by

the VRC may promote accuracy, strengthen case outcomes, and decrease costs through the reduction of subjective data collection methods.

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