Consulting in Occupational Health Nursing
An Overview

by Deborah R. Roy, MPH, RN, COHN-S, CET, CSP, FAAOHN

ABSTRACT
Occupational health nurses work in a variety of settings and some have chosen to practice the profession as consultants. The process of consulting is similar to that of other disciplines but only two small descriptive studies offer functions and roles specific to occupational health nurse consultants. This article provides an overview of consulting practice, the process, the functions, and the roles of occupational health nurse consultants, and presents some common characteristics of successful consultants.

Changes in the external environment have forced reconsideration of the occupational health nurse role, meaning that some occupational health nurses are searching for ways to better use their highly developed talents. Many occupational health nurses are now contractors for their former employers. They provide similar work site health services in the same facility for which they were previously employees, but now work for a different firm, often without the substantial benefit packages they once earned. Some occupational health nurses are providing technical expertise to a variety of facilities as an employee of a corporation. Others have left the security of a corporate paycheck to start a business providing occupational health and safety expertise to a variety of organizations. These individuals are considered occupational health nurse consultants. According to Holtz and Zahn (2004), “Consulting [is] a way of practicing a profession, that is, not truly a profession in and of itself” (p. 4).

The purpose of this article is to provide an overview of occupational health nurse consulting practice by offering an historical perspective, defining the term consultant, illustrating the consulting process, discuss-
ing the functions and roles of occupational health nurse consultants in the literature, and presenting some common characteristics of successful consultants.

**HISTORICAL PERSPECTIVE**

Although the birth of occupational health nursing in the United States is attributed to Betty Moulder, employed by a Pennsylvania coal mine in 1888 (Parker-Conrad, 1988), it is not as clear when occupational health nurse consulting began. In 1914, the U.S. Public Health Service officially recognized its occupational health activity, which had existed for 4 years, by establishing the Office of Industrial Hygiene and Sanitation (Cooper, 1963). Its function was to provide consultation. However, it is unknown whether the consultants were primarily physicians, or if nurses were also included. According to Martin (1975), the first occupational health nurse consultant was hired by the Indiana State Board of Health in 1939.

By January 1942, 36 states, 4 cities, 2 counties, and 2 territories had industrial hygiene programs. Of the 36 states, 8 had public health nursing consultants functioning in the field of industrial hygiene (Scott, 1942). At that time, the term industrial hygiene meant anything related to the health of workers. The consultants, specialized public health nurses, provided consultation to other public health nurses with factories located in their districts and to the “industrial nurses” who actually worked in the factories (Roy, 1988).

The functions of the consultant included teaching about industrial hygiene problems and possible solutions, surveys, analysis of survey data, plant walkthroughs, and “arranging . . . special health programs on subjects such as dentistry, nutrition, tuberculosis, venereal disease, first aid, and rehabilitation” (Scott, 1942, p. 272). These functions were accomplished primarily through staff meetings, field observations, and individual conferences (Scott, 1942). Actual interaction with personnel at various factories was the responsibility of the public health department’s supervising nurse, as opposed to the consultant. Thus, in most states, the role was limited to professional education. In Michigan, beginning in April 1941, the “industrial nursing consultant” advised industries without nurses and provided services to new nurses in industry. The role consisted of the following functions:

- Develops an awareness of health hazards in manufacturing processes.
- Encourages plant surveys to assess plant housekeeping and other environmental conditions.
- Encourages addition of professional books and magazines to plant libraries.
- Encourages employee conferences to discuss personal and family health practices.
- Assists in developing monitoring service through home visits using local public health facilities.
- Recommends acceptable industrial nursing procedures such as standing orders, complete records, adequate space, and safe and healthful working environment (Alton, 1943).

By 1975, about 20 states had occupational health nurse consultants (Martin, 1975). Martin (1975), who was the Occupational Health Nursing Consultant for North Carolina, described the six major areas of consultation:

- Construction and design of the health unit.
- Staffing of the health unit.
- Nursing service.
- Education for occupational health nurses.
- Research and studies.
- Evaluation of the health service.

Except for historical documents about state consultants, other information about occupational health nurse consultants does not appear to exist. For this reason, it is unknown when occupational health nurse consultants began to provide services in settings such as the insurance industry (e.g., loss control and rehabilitation), occupational health clinic facilities, or private practice. Consequently, little is known about the services provided by occupational health nurse consultants or settings in which they practiced (Roy, 1988).

**DEFINITION OF CONSULTANT**

Consultation is not unique to occupational health nursing. Those in other fields (e.g., management and engineering) and other health care professionals pioneered the consultation role. Regardless of the discipline, the definition of a consultant is similar—anyone who provides professional advice or services. Used loosely, this definition could include an individual providing contract services. Examples include an occupational health nurse who provides post-offer examinations or case management for a former employer, or an occupational health nurse who provides a specified number of hours per week for injury management or safety training services to two or three small companies.

Consultant services could include in-house staff employees who provide advice without authority. An example is a company-employed Corporate Director who develops strategies or recommends solutions to various company work sites. The definition of consultation also could include occupational health nurses who work for a firm contracting with the government or corporations to provide outsourced work site health services. Finally, consultation could include individuals external to the client organization who provide professional services, such as self-employed consultants who work alone or as owners of consulting firms.

**Internal Consultants**

The two basic types of consulting are internal and external. An internal consultant is an employee who provides consulting services to the corporation. Often, these occupational health nurses function at the corporate level, providing technical expertise to other occupational health nurses or management personnel at various work sites within the corporation. Internal consultants have the advantage of knowing the system, including the culture, history, and politics of the organization, facilitating long-term work on the problem. The disadvantage is the consultant may be part of the problem or have a limited power base or narrow focus (Marriner-Tomey, 2009).
The development of an ergonomic health management program illustrates the role of the consultant. For the internal consultant, the reason for starting such a program may be the consultant’s observation of workers’ compensation costs due to cumulative trauma disorders (CTDs), management directive, or an outside force such as an Occupational Safety and Health Administration (OSHA) Agreement. (CTDs are otherwise called work-related musculoskeletal disorders.) Protocols are developed in-house, and staff are trained over time. The internal consultant is aware of company culture and how employees and management usually respond to new programs. If questions or problems develop, the internal consultant is easily accessible to work on resolutions. The primary goal of the ergonomic health management program is to identify possible cases of CTDs early and provide proper treatment. Barriers to meeting this goal, such as supervisor evaluation systems that reward low numbers of reported injuries and illnesses, can be addressed in the implementation plan. The internal consultant understands the organizational power structure and can involve the correct individuals in promoting the program. On the other hand, if consultants have never implemented such a program, they may not realize which program components work best or have the power base to influence changing the supervisor evaluation system.

**External Consultants**

An external consultant functions outside the client organization and provides technical expertise to occupational health nurses or management. External consultants usually have a more diverse background, bring ideas that have worked successfully in other organizations, are independent of the power structure, and offer a fresh perspective. On the other hand, external consultants may not be aware of the organization’s culture or politics, and may not invest time and energy in ascertaining this information (Marriner-Tomey, 2009). Using the ergonomic health management program example, the external consultant also can develop protocols and train staff. However, additional consulting time is needed to assess the existing program, staffing, and on-site health facility. The project may be completed sooner than with the internal consultant, but the timing of the work will be based on the availability of the consultant. Ongoing support for the program may or may not be available. Some information, such as a supervisor who rewards employees with a barbecue for not visiting the on-site occupational health nurse or another health care provider, may not be available to the external consultant. Nor can the consultant necessarily remove such a barrier. Sometimes, upper management support is only half-hearted, even when feedback voiced to the consultant reflects full support.

External consultation can be further delineated into subcategories, including contractor, intrapreneur, and entrepreneur. A contractor is typically engaged for a specified number of hours and for a specified period of time to provide a specified group of services. Contract occupational health nurses may work for a temporary service or contract directly with an organization. Within the context of ergonomic health management protocols, the contractor may be engaged to evaluate and treat CTDs at a work site for 24 hours per week, or the contract nurse may provide case management for employees who have lost workdays.

The contractor could be the same occupational health nurse who previously worked for the company, but is no longer needed full-time due to a work force reduction. Alternatively, the contractor may work for a temporary service that provides occupational health nurses as needed. Regardless of the arrangement, the specific duties are clearly delineated and may involve strict protocols.

An intrapreneur works for an organization as an entrepreneur. Kuratko and Hodgetts (2004) described intrapreneurship as “the process of profitably creating innovation within an organizational setting” (p. 73). In the context of consulting, the intrapreneur may develop new services for external client companies. These individuals or their team may develop business plans, market services, and deliver the new consulting services. However, they do so while receiving a paycheck and benefits as an employee of the organization. Possible employers include insurance companies, occupational health clinics, health care institutions, federal or state government, and legal or consulting firms. These days, even traditional manufacturing organizations are selling safety or health services based on experience with their own internal programs (e.g., Johnson & Johnson’s Wellness and Prevention, Inc., which offers wellness solutions, or Dupont’s Safety and Sustainability services). Depending on whether the organization operates on a fee-for-service basis, skills such as proposal writing and financial analysis may be essential for the intrapreneur.

An entrepreneur “is one who undertakes to organize, manage, and assume the risks of a business” (Kuratko & Hodgetts, 2004, p. 28). The consultant entrepreneur may operate as a sole proprietor, in a partnership, or as a corporation with employees. In each case, the owner(s) must develop a business plan, market services, and deliver consulting services in addition to managing financial data, projects, and potentially employees.

**Other Definitions**

Although the services may vary due to the setting employing the occupational health nurse consultant, the definitions of consulting are often comparable. In fact, consultants in other fields define consulting similarly; Marriner-Tomey (2009) defines consultation as “a helping relationship, [and] . . . a process of interaction between the consultant, who has the specialized knowledge and skills, and the consultee, who asks for assistance with problem solving” (p. 80). According to the Professional Standards of the American Institute of Certified Public Accountants, management consulting is:

an independent and objective advisory service provided by qualified persons to clients in order to help them identify and analyze management problems or
opportunities. Management consultants also recommend solutions or suggest actions with respect to these issues and help, when requested, in their implementation. (Barcus & Wilkinson, 1995, p. 4)

The Institute of Management Consultants USA (2012) defines a management consultant as:

a professional who, for a fee, provides independent and objective advice to management of client organizations to define and achieve their goals through improved utilization of resources. He or she may do this by diagnosing problems and/or opportunities, recommending solutions, and helping implement improvement.

The oldest management consulting association, organized in 1929, is the Association of Management Consulting Engineers (now called the Association of Management Consulting Firms [AMCF]). AMCF (2012) defines consulting as:

the rendering of advisory services and related assistance for a fee by independent and objective professional persons organized as a firm or similar entity. It covers those persons who help management analyze problems associated with the goals, objectives, policies, strategies, products, administration, organization, and the principal functional or operating areas of the various institutions of society; recommend practical solutions to these problems; and assist with implementation when asked to do so by the client.

The AMCF definition is consistent with the definition of the American Association of Occupational Health Nurses, Inc. (AAOHN), the professional association founded in 1942 to serve nurses employed by business and industry. AAOHN defines the role of the occupational health nurse consultant as:

An advisor for developing, selecting, implementing and evaluating occupational and environmental health and safety services. (Dirksen, 2006, p. 28)

Although AAOHN’s definition does not specify that the consultant is an expert, an older document by AAOHN on developing job descriptions notes that the recommended qualifications include master’s preparation, an awareness of resources for occupational disease surveillance, and a minimum of 3 years’ experience in an occupational health nurse management role (AAOHN, 1986). The purpose of defining consulting in other disciplines is to illustrate that consultation is essentially the same; only the area of expertise varies. In fact, the author and others who work as occupational health nurse or safety consultants could identify with any of the management consulting definitions. All consultants are experts in their field who provide a service to a client. That service is often problem solving, the basis of the nursing process and of the Standards of Occupational and Environmental Health Nursing (AAOHN, 2012).

CONSULTING PROCESS

According to Brill and Kilts (1986), problem solving is the “step-by-step process of inquiry for determining choices of action. [It] . . . requires critical thinking and is greatly enhanced by creativity” (p. 122). The authors define critical thinking as a “logical pattern of thought based on knowledge, experience, problem solving ability and reasoning” (p. 122). Change is brought about when problem solving, critical thinking, and creativity are used together. The process of problem solving or creating change has several steps or phases. The consultant may be brought into a company at any point in the problem solving or change process. Thus, the functions differ depending on clients’ needs and available resources. The nursing process is a systematic way to organize the change process within a nursing context. The current steps of the process are assessment, diagnosis, outcome identification, planning, implementation, and evaluation (AAOHN, 2012; Wilkinson, 2012).

An individual occupational health nurse consultant or group might not provide services for every phase of the nursing process. In fact, the consultant may contract to provide services during only one phase of the process. Some consultants may not provide direct service and may require in-house personnel or others to carry out the program designed and planned by the consultant. Regardless of whether all the services provided during the phases are completed by the consultant, the problem solving or nursing process remains the same (Roy, 1988). The consultant’s use of the nursing process and the Standards of Occupational and Environmental Health Nursing (AAOHN, 2012) can be illustrated by the ergonomic health management program described earlier.

First, data are collected (e.g., the numbers of work-related injuries and illnesses by category, lost workdays, restricted workdays, cost per case, and cost per worker hour). Additional data may include the number of visits to the on-site health facility for CTDs, number of cases by health care provider or physical therapy practice, and outcomes such as surgeries (assessment). Second, the data are analyzed to determine the problem(s) and to establish priorities (diagnosis). If, for example, the on-site health facility is understaffed, as evidenced by the number of visits and the average 1-hour wait, this problem must be addressed prior to adding more staff responsibilities. Third, outcomes are identified, realistic time lines are set, and a plan is developed. The plan may include the elimination of barriers to implementation (e.g., incentives not to report CTDs) or the implementation plan and protocols to be used (e.g., outcome identification and planning). Fourth, implementation may include training staff, supervising examinations, and answering questions about the protocols. Finally, evaluation involves comparing data before and after the intervention, evaluating the care, and evaluating the efficacy of forms and processes used to deliver the care. Ideally, if the consultant’s approach was valid and management supported the complete implementation of the program, the number of CTD cases detected early should increase, resulting in outcomes including restricted duty increase, cost per case decrease, and employees feeling positive about
their care. Long-term positive outcomes are only possible when ongoing evaluation and monitoring are included as part of the process.

FUNCTIONS AND ROLES
Two studies have attempted to elicit information about occupational health nurse consultants in the United States. Roy (1988) determined the settings, functions, and qualifications of occupational health nurse consultants throughout the United States; this study had a small number of participants, Landreth (1988) identified the functions of four consultants in North Carolina; however, this study was limited by a small geographic area and a small number of participants. Landreth (1988) interviewed four occupational health nurse consultants from North Carolina about their scope of practice. Two of the participants had bachelor’s degrees and two had master’s degrees. Three of the nurses had the title of manager or director and one had the title of consultant. The occupational health nurse consultants’ responses were categorized into the following functions, with only the first function mentioned by all the participants:

- Assessment and identification of needed occupational health services requested by clients.
- Development and marketing of health and wellness programs to industry.
- Development of “in-house” programs designed to address problems encountered by specific industries.
- Provision of direct on-site nursing services for industries without an occupational health nurse.
- Coordination of hospital resources and local industry needs.
- Orientation of nurses new to occupational health.
- Assistance to other occupational health nurses with publications and grants.
- Certification of clients as pulmonary function technicians (Landreth, 1988).

From these functions, Landreth (1988) described the three major roles assumed by occupational health nurse consultants, including expert or specialist, resource, and collaborator. She noted that “one, two, or all three roles may be assumed by the occupational health nurse consultant in any given situation” (p. 65). Herein lies the problem: occupational health nurse consultants have different clinical experiences, different educational backgrounds, and different levels of expertise. They work in various settings and assume various roles. Such diversity makes the development of core functions or roles for all occupational health nurse consultants a difficult task.

Roy (1988) secured a systematic sample from a list of the members of the AAOHN Consultants Special Practice Group. A final sample of 36 external occupational health nurse consultants was surveyed. Fifty-eight percent of the sample population was composed of board-certified occupational health nurses. The highest educational level was master’s degree (36%), baccalaureate degree (28%), diploma (22%), and associate degree (14%). The majority had worked as occupational health nurses for more than 10 years prior to consulting, with just less than 5 years’ consulting experience. In comparison, a 2005 survey of 2,914 members of AAOHN showed approximately 1% doctorate, 21% master’s degree in nursing or another field, 44% baccalaureate degree in nursing or another field, and 34% diploma or associate degree. Fifty-nine percent of the general AAOHN membership was board certified as occupational health nurses. The average number of years of occupational health nurse experience was 15 (AAOHN, 2006).

In Roy’s (1988) study, consultants came from a variety of settings. The majority were employed by the government, including federal, state, and military employees. Others were working for, or owned, occupational health and safety consulting firms. Insurance companies employed occupational health nurse consultants in both loss control and rehabilitation services. Some were employed by occupational health clinics, including hospitals and independent facilities, or by private rehabilitation firms. Finally, the miscellaneous category consisted of an HMO, an occupational health nurse corporation, a union, and a visiting nurses association.

Titles varied among the participants. As expected, the majority (39%) used the title of consultant, with 14% using specialist. Only 22% used the word “nurse” anywhere in their title. The consultants described themselves as advisors who made recommendations to their clients. They also considered themselves liaisons among health care, business, and individuals (Roy, 1988).

The first common function noted was planning. More specifically, planning included developing health and safety programs and developing management tools such as policies, procedures, protocols, and standards. The second common function was implementation, including worker health and safety instruction, professional education, and clinical services. The services provided by the sample group were typically high level (e.g., physical examinations, case management, or research), requiring experience, certification, or advanced practice. However, some provided pulmonary function testing or audiometric testing, which also may be administered by a trained technician. The nursing process was used to systematically organize what study participants described as the services provided. The results are listed in the Table (Roy, 1988).

Data were further analyzed for the self-employed group. Twenty-five percent of the sample described themselves as self-employed. All had been in business for less than 10 years, with an average of approximately 3 years. These individuals had an average of 13 years of occupational health nurse practice prior to starting a business. The majority were master’s prepared (44%) or diploma prepared (33%), and 66% were certified as occupational health nurses (Roy, 1988).

These two small, descriptive studies were initial steps in determining the extent of occupational health nurse consultative practice. Consultation is a growing field. Many occupational health nurses are starting new businesses. In 1988, 323 members belonged to the AAOHN Consultants Special Practice Group (Roy, 1988). Since that time, many more occupational health nurses have entered consulting, based on the author’s experience, and the roles have become even more varied. Some occupational health nurses have achieved other certifications, such as
CHARACTERISTICS OF CONSULTANTS

Occupational health nurses have learned from other disciplines that certain characteristics or traits are required to be successful consultants. First, consultants must be able to communicate effectively, which includes listening. Second, consultants must be willing to market themselves. Third, consultants must focus on problem solving and creative challenges. They can assess a situation, define it, determine the important elements, and develop practical solutions. Fourth, consultants must be willing to work alone without peer support. Finally, consultants must be self-starters. They determine their own goals and create their own schedules (Shenson & Nicholas, 1997).

The above traits are needed by any consultant, whether internal or external. However, the work setting chosen by the occupational health nurse consultant is often based on the individual’s perception of financial risk. This perception may not be due to current financial commitments or responsibilities, but may depend on the individual’s experiences. For example, an occupational health nurse with 10 years of progressive experience, board certified and with a marketable specialty, may be a candidate for consulting. If that occupational health nurse has friends or has worked closely with other colleagues who are successful in business, or had parents who were successful entrepreneurs, the perception of risk in an entrepreneurial venture may be minimal. This nurture theory was supported in a study of entrepreneurs in Brazil, where entrepreneurs were significantly more likely to have friends and family who owned businesses (Djankov, Quin, Roland, & Zhuravskaya, 2007). This finding may be because expectations are more realistic. The occupational health nurse may be more willing to engage in tasks to make the business work, knowing that revenues will grow slowly. Money will become a way to keep score instead of the reason for the work.

External consultants, especially those who own a business, must have additional skills to become successful. Bhide (2000), in his classic study of Inc. 500 companies in the United States, suggested that a high tolerance for ambiguity and decisiveness are essential for entrepreneurs. Occupational health nurses who choose to start a business must have discipline, desire, and motivation to succeed. They must be willing to put the interests of their clients first while maintaining strict ethical standards. Entrepreneurs must have sufficient reputation and networking contacts to maintain business growth. They also must be willing to take calculated risks and accept the consequences of those risks (Roy, 2005). Another occupational health nurse with the same professional qualifications, but different life experiences, may not be open to giving up a steady paycheck and benefits package. However, the reality is that corporations no longer offer lifetime employment. As a result of the most recent recession, many occupational health nurses with significant experience have been forced to make choices that involve less cer-

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<tr>
<th>Category</th>
<th>Functions</th>
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<tbody>
<tr>
<td>Assessment</td>
<td>Workers’ compensation loss review, group insurance loss review, OSHA log review, and collection of industrial hygiene sampling data. Assessment of program needs, work site hazards, and specific regulatory requirements.</td>
</tr>
<tr>
<td>Analysis</td>
<td>Job analysis, work site walkthrough, hazard identification, and laboratory results interpretation.</td>
</tr>
<tr>
<td>Planning</td>
<td>Program planning; program development for regulatory compliance and disaster planning; development of programs such as alternate duty, health surveillance, health education, screening (e.g., for cancer, hypertension, diabetes), safety training, and fitness; development of immunization and overseas travel protocols; and development of health and safety policies, procedures, protocols, mission, standards of practice, budget, and management systems.</td>
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<tr>
<td>Implementation</td>
<td>Professional education, new occupational health nurse orientation, worker health education, worker safety training, fitness training, clinical services (e.g., pulmonary function testing, audiometric testing, drug/alcohol screening, physical examinations, fitness evaluations, medical/case management, and disability management), industrial hygiene monitoring, research, and grant writing.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Evaluation program audits, evaluation of quality and responsiveness of services, regulatory compliance, and nursing practice audits.</td>
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tainty. Becoming an internal consultant or an intrapreneur may be more appropriate for individuals who have occupational health nursing expertise, management experience, and consulting skills but are uncomfortable with the level of ambiguity involved with entrepreneurship.

For some who consider consulting, one major limitation must be contemplated: consultants can only recommend changes. Client companies are free to determine what, if any, changes will be made. Sometimes, individuals within the client organization have a vested interest in sabotaging a new program or change. Other times, the organization’s management only wishes to create the illusion of regulatory compliance, not a real fix. Consultants have no power to require work be done. Successful consultants become savvy judges of human behavior and choose their clients carefully. They also learn to make practical suggestions and to communicate those suggestions effectively to all levels of an organization.

CONCLUSION

Consulting can be a rewarding way to practice occupational health nursing. Historically, occupational health nurse consulting services were free and offered by government agencies. Currently, more and more external consultants are offering consulting on a fee-for-service basis. Consulting services vary greatly and so do the settings where occupational health nurse consultants choose to practice. As with most other professions with consultants, occupational health nurses use problem solving skills and specific expertise to assist clients in solving complex problems. The consulting role is growing. More information is needed to determine the extent of the growth and how occupational health nurses practice this role.

REFERENCES


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IN SUMMARY

Consulting in Occupational Health Nursing

An Overview

Roy, D. R.


1 The term consultant is defined as anyone who provides professional advice or services, which may include internal and external consultants. Consulting is a challenging way to practice occupational health nursing.

2 The consulting process involves problem solving and then creation of change. This process may be illustrated by using the nursing process and the steps of assessment, analysis, outcome identification, planning, implementation, and evaluation.

3 Successful occupational health nursing consultants are excellent communicators, are willing to market themselves, enjoy problem solving, and are self-starters.


Roy, D. R. (2005). Exploring entrepreneurship: Do you have the personality traits to be a consultant? Presented at the American Society of Safety Engineers Professional Development Conference, New Orleans, Louisiana.

