

# Profiles

PUTTING ASSESSMENTS TO WORK

## BHI™ 2 TEST

### The Ramazzini Center: Dedicated to Making a Difference in Workers' Lives

#### Background

Throughout his 24 years as a practitioner in the field of occupational medicine, John Charbonneau, MD, MPH, FACOEM, has adhered to the belief that when practiced at its best, occupational medicine should focus not only on providing treatment to workers, but on helping employers manage the health of their workforce through the prevention of injury and illness -and through the optimization of employees' health status.

Charbonneau's practice is one of three businesses at the Ramazzini Center™ in Greeley, Colorado. The Center also houses Health Psychology Associates operated by Daniel Bruns, PsyD, and Back On Track, a physical therapy clinic operated by Ola Simonsson, RPT, and Kevin Younger, RPT.

Founded in 1999, the Ramazzini Center takes its name -and its inspiration - from Italian physician Bernardino Ramazzini, whom Charbonneau credits as being "the father of occupational medicine." In 1700, Ramazzini's groundbreaking treatise, *Diseases of Workers*, established basic principles for occupational health practitioners.

In this article, Charbonneau discusses his practice and the work of the Ramazzini Center in the framework of Ramazzini's guidelines: the importance of learning about patients' workplaces through onsite visits; the value of getting to know the "whole patient"; and the physician's duty to the community, especially with respect to education.

#### The Worksite as a School for Practitioners

As Bernardino Ramazzini visited the shops of craftsmen in early 18th century Italy, he found his patients' workplaces to be "schools whence one can depart with more precise knowledge" to aid in the diagnosis and treatment of worker injury and illness (Ramazzini 42). As John Charbonneau meets with patients at job sites in 21st century corporate America, he wholeheartedly shares Ramazzini's perspective.

"Seeing patients onsite is one of the most valuable aspects of my practice," says Charbonneau. These visits allow him to learn first-hand about job conditions that may be contributing factors in a worker's injury or illness. He also can gather corroborating data from co-workers and managers. And, he can follow up directly with managers to implement changes that will help address the worker's problem.

"In addition," says Charbonneau, "becoming familiar with the workplace is incredibly important in identifying larger opportunities for prevention. I have the chance to observe commonalities, such as ergonomic conditions that may be affecting a number of workers. The time I spend within the organization helps me build trust with decision-makers so that I can influence company policies to address these broader issues."

## Learning about the Whole Patient

Long before physicians began speaking of “the mind/body connection,” Ramazzini urged practitioners not to simply gather information on physical symptoms, but to pull up a “three-legged stool” and take time getting to know the worker personally. Charbonneau emphasizes the benefits of putting this principle into practice.

“Too often, we have labeled patients as ‘non-recoverers’ and showing ‘failure to thrive’ when the truth is we just haven’t gotten to the root of the problem,” says Charbonneau. “When I talk with patients, I pay close attention to the first thing they talk about,” he says. “Do they start off by telling me their physical symptoms, or do they comment on how tough their job is, or on a problem at home? I’ve learned that if you don’t address the first thing the patient talks about, that person won’t get better.”

Charbonneau and his colleagues at the Center work closely together to provide multi-disciplinary care to their patients. “We come to the table as equals to share information, and together we design a patient-specific rehabilitation program,” he says. “Sometimes medical issues drive our decisions. At other times, psychological factors are foremost; and in other cases physical therapy takes the lead.”

## Asking the Right Questions Leads to Better Outcomes

To illustrate the need for thorough investigative work in creating effective treatment programs, Charbonneau cites the case of patient “Hannah.” A long-time client of the workers’ compensation system, Hannah had received numerous medical treatments for back pain - with no improvement. In asking Hannah about her background, Charbonneau learned that she came from a strict, work-oriented farm community. He also observed that while she talked about her inability to work, she never spoke directly of her pain nor emotions. Assessing that she suffered from alexithymia, the inability to verbalize or even identify one’s feelings, Charbonneau and his colleagues determined that manual physical therapy was the best first step in her rehabilitation plan.

“At the first follow-up visit, her improvement was dramatic,” says Charbonneau. “This was a woman for whom medical treatment had not been effective and who would not have benefited from psychological therapy because of her inability to talk about feelings. But the ‘laying on of hands’ through massage therapy had a powerful effect on her, partly because it provided tactile nurturing, which she hadn’t received growing up.”

Patient “Bob,” on the other hand, called for a different approach. Complaining of wrist pain, Bob previously had seen an orthopedic surgeon who diagnosed tendonitis and prescribed a wrist splint, anti-inflammatory drugs and physical therapy - none of which eased his pain.

In chatting with the patient at his work site, Charbonneau learned that Bob typically worked 100 hours a week at his computer. When Charbonneau questioned whether Bob’s employer demanded such a heavy time commitment, Bob acknowledged that this wasn’t the case. “I impose this workload on myself,” he admitted. “I have never said no to anyone who asks me for something.” Suspecting that Bob’s work habits were affected by underlying emotional factors, Charbonneau scheduled a psychological evaluation, which confirmed that Bob was working compulsively to control anger and depression. “For Bob, the most important element of his treatment plan will be psychological follow-up to help him change the work habits that are causing his symptoms, and to help him find more effective ways of coping with his feelings,” says Charbonneau.

## Getting to the Root Cause Calls for Effective Tools

While Charbonneau recognizes the critical role that psychosocial factors can play in a patient’s recovery from injury or illness, he points out that conducting an effective psychological evaluation has been difficult in the past.

“For some years, we didn’t have really effective assessment tools,” Charbonneau says. “Too often, psychological evaluations looked at the patient as if life began at the time of injury or illness. They failed to look at personality development and pre-injury/illness psychological functioning. And so, de facto, psychological diagnoses were attributed to the injury.”

Charbonneau comments on how the BHI™ (Battery for Health Improvement)<sup>1</sup> assessment has helped address this gap. “The BHI instrument helps us gain a comprehensive picture of the patient—both pre- and post-injury/illness,” he says. “And most important, it is the only psychological test that is normed on physical rehabilitation patients as well as a large community sample. It uses the average physical rehabilitation patient as a benchmark for interpretations and recommendations. For the first time, we have an instrument that allows us to compare apples to apples.”

The BHI assessment helps Charbonneau and his colleagues quantify the right balance between physical and psychological treatment in developing individually tailored rehabilitation plans. “No other assessment has allowed us to do that,” he says.

**The BHI instrument has been replaced by the newer BHI™ 2 (Battery for Health Improvement 2) and BBHI™ 2 (Brief Battery for Health Improvement 2) assessments.**

### Influencing Long-Term Change

Charbonneau and his colleagues are deeply committed to another of the main principles set forth by Ramazzini: the physician’s duty to the community.

“An important part of our work at the Center,” says Charbonneau, “is to gather information on the root causes of worker injury and illness; to provide education about these factors to decision-makers in the health system, in corporate America and in the workers’ compensation system; and to generate support for broad-based preventive measures.”

For example, Charbonneau notes that in studies conducted at 106 sites in 36 states to validate the BHI instrument, 63% of female patients in the workers’ compensation system reported being survivors of physical or sexual violence.

“The statistics on this issue are astonishing,” says Charbonneau. “We would like to create enthusiasm about taking steps to turn the tide on this epidemic problem, such as promoting intervention programs for survivors of violence. We know that they are more vulnerable than other patients and have a heightened stress reaction. They may dislike being touched or physically examined. We have developed protocols for the interdisciplinary treatment of such patients.”

Another area of focus for the group is to change the perception that performing psychological evaluations for medical patients drives up employer costs. “In the long run, quite the opposite is true,” says Charbonneau. The Center has collected strong evidence to make the case, including that:

- Research conducted with Bank One employees found that mental health disorders were the number one cause of absence from work and the number three cause of lower workplace productivity (Burton et al.).
- In a World Health Organization study of more than 26,000 subjects in 14 countries, it was found that physical disability was more closely associated with psychological factors than with medical diagnosis (Ormel et al.).

- In a study of Boeing employees, it was found that psychosocial factors (job dissatisfaction, hysteria and antisocial traits) were better predictors of who would file a workers' compensation claim than were 53 medical variables (Battie et al.).

"Clearly, the use of psychological evaluations presents an opportunity to help employers save long-term costs due to such factors as chronic absenteeism and lower productivity," says Charbonneau. "We are taking the message to corporate America - showing them the facts and asking them, "Do you realize what it costs companies every day for employees to have untreated psychological conditions?"

## A Continued Commitment

Centuries after Ramazzini laid the foundation for the practice of occupational medicine, Charbonneau and his colleagues carry on his vision to influence change "for the benefit and comfort of the working classes" (Ramazzini 43).

"We see a great opportunity to improve diagnosis and care for our patients," says Charbonneau, "and to help their companies and the broader community by enabling these individuals to become more productive citizens."

Dr. John Charbonneau is the founder and president of Occu-Care, Inc.™, a full-time private practice occupational medicine clinic at the Ramazzini Center in Greeley, Colorado. He received a BS with distinction from Valparaiso University-Valparaiso, Indiana, an MD from Indiana University School of Medicine and a Master of Public Health from the University of Utah. In addition to private practice, Dr. Charbonneau serves as a regional consultant for Union Pacific Railroad, Hewlett Packard Company and Agilent Technologies, on-site physician consultant at Kodak-Colorado division, and regional medical director for State Farm Insurance. Previously, he served as medical director at Benchmark Worker Rehabilitation Services.

<sup>1</sup> The BHI (Battery for Health Improvement) was developed by Daniel Bruns, PsyD, John Mark Disorbio, EdD, and Julia Copeland, PT.

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