INTRODUCTION

In 2012, the United Kingdom’s Society of Occupational Medicine (SOM) and the United States’ American College of Occupational and Environmental Medicine (ACOEM) began discussing an initiative designed to build stronger collaborative relationships between medical societies around the world that represent the physicians and other health professionals who promote the health of workers.

These discussions were driven by a growing awareness that occupational medicine societies worldwide are addressing a common set of issues as work processes become more standardized, businesses become global, and environmental hazards in the workplace and health risks among workers increasingly cross national boundaries.

Recent tragic industrial accidents including the death of more than 1,000 workers in a Bangladesh factory collapse where clothing was manufactured to supply markets in Europe and the United States clearly illustrate how worker health and safety and business decisions are globally interconnected.

In a series of meetings, SOM and ACOEM created the framework for a new organization, the International Occupational Medicine Society Collaborative (IOMSC), intended to strengthen relationships between global occupational medicine societies while leveraging their resources to address common issues.

IOMSC was formally launched on May 1, 2013, during a meeting of 17 global occupational medicine societies. Co-hosted by SOM and ACOEM, the meeting was held during ACOEM’s annual American Occupational Health Conference (AOHC) in Orlando, Florida. The purpose of the meeting was to establish a dialogue of common global interests, opportunities and challenges and lay the foundation for continued interaction among IOMSC participants.

During the inaugural meeting, Collaborative participants discussed shared interests as well as opportunities and challenges facing occupational medicine practitioners globally. Topics ranged from the impact of an aging workforce to the rise of chronic conditions that affect worker health and productivity, such as obesity and diabetes. There was widespread agreement that more trained specialists and improved access to occupational health professionals delivering evidence-based interventions would be needed to meet these growing issues.

A summary of the proceedings of the inaugural meeting of IOMSC is provided here.
IOMSC MEETING PARTICIPANTS

The countries of Brazil, Canada, Denmark, Estonia, Germany, India, Ireland, Malaysia, the Netherlands, New Zealand, Nigeria, Norway, the Philippines, Slovakia, Switzerland, the United Kingdom, and the United States, participated at the inaugural IOMSC meeting. These countries, representing 2.625 billion people and a workforce of approximately 915 million, are located on 6 of the 7 continents.

OPENING REMARKS: EXPLORING GLOBAL ISSUES IN OEM

Ron Loeppke, MD, ACOEM President; Richard Heron, MD, SOM President; Dame Carol Black, DBE FRCP, Adviser on Work and Health at the Department of Health, England.

Dr. Ronald Loeppke, Dr. Richard Heron, and Dame Carol Black welcomed participants to the meeting, providing comments and a background statement on global issues in occupational and environmental medicine (OEM).

The recent global economic crisis has resulted in a slowing down of migration and had a devastating impact on workers, causing high levels of unemployment, underemployment, and job insecurity. Occupational health experts have expressed concern that the economic slowdown will lead to an increase in work intensification, with businesses employing fewer workers to do the same amount of work. The health and safety of the global workforce could be compromised as a result.

The International Labour Organization estimates that each year there are 270 million occupational accidents, 160 million occupational diseases and more than 2 million work-related fatalities. These numbers, however, may underestimate the true extent of the problem since many occupational injuries and illnesses are under-reported, especially in developing countries.

In addition to workplace injuries or illnesses, countries around the world face the growing epidemic of chronic disease, with significant impact on people of working age and significant implications for the affordability of health care. According to the World Health Organization (WHO), chronic diseases, such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes, are by far the leading cause of mortality in the world, representing 63 percent of all deaths worldwide.

In 2010, there were 52.8 million deaths globally from non-communicable diseases. Eight million of these individuals died from cancer. Ischemic heart disease and stroke killed another 12.9 million. That represents one in four deaths worldwide, up from 1 in 5 deaths in 1990. And, in 2010, 1.3 million individuals died from diabetes, twice the number of deaths in 1990, and 90 percent of these premature deaths occurred in low- and middle-income countries.

The burden of chronic diseases has major negative effects on the quality of life of the individual suffering from the chronic condition. Additionally chronic disease has an adverse effect on the economics of families, employers, communities and societies as a whole.
The impact of chronic disease is compounded by the aging of populations in many countries of the world. In five years, it is expected that 25 percent of the global workforce will be 50 to 65 years old. The age of retirement is gradually rising in many countries, and aging workers are introducing new challenges for workforce planning.

In the face of these trends, practitioners of occupational medicine find themselves faced with a daunting task: What can be done to stem the rising tide of chronic illness among workers? What steps can be taken to ensure the workforce is safe, healthy and productive and to diminish the negative impact of environmental hazards and health risks on workers, families and communities? How can we best prepare ourselves to address the unique needs of an aging workforce?

ESTABLISHING COMPONENTS OF A HEALTHY WORKPLACE

Addressing these issues begins with establishing the components of a healthy workplace. WHO has defined a healthy workplace as one in which both workers and managers collaborate in a continual improvement process to protect and promote the health, safety, and well-being of all workers. And, healthy workplaces should be open, accessible, and accepting environments for people with differing backgrounds, demographics, skills, and abilities.

WHO has developed a global framework and model for employers, workers, policymakers, and practitioners to assist them in the planning, development, implementation, and evaluation of healthy workplace initiatives. This framework defines avenues of influence for a healthy workplace as:

- the physical work environment;
- psychosocial work environment;
- personal health resources in the workplace; and
- enterprise-community involvement.

As its first order of business, the IOMSC agreed to begin a discussion of how international occupational medical societies collectively can facilitate the highest standards for OEM and ensure healthy workplaces in their respective countries, including:

- safe work environments;
- balanced work-life and psychosocial work environments;
- the provision of personal health resources to prevent and/or manage chronic disease; and
- the integration of OEM within communities and the development of enterprise community involvement.
COMPARING THE PROFILE OF OEM GLOBALLY

During the meeting’s second segment, participants provided a brief synopsis of the environment and infrastructure for the practice of OEM in their respective countries. Each was asked to note the reach and impact of OEM in terms of the numbers of organizations it reaches, the number of employees and family members served by OEM practitioners, and the influence of OEM physicians on governmental policies. Highlights of this discussion are as follows:

**Brazil – Population: 194 million**

Brazilian law mandates that its 92.5 million workers have regular access to OEM services. Due to sustained growth in the labor market, there has been growing demand for these services. Brazil currently has 12,800 licensed OEM physicians and the number of physicians interested in entering OEM practice is growing. Providing OEM services in remote areas is a challenge. Brazil’s OEM society has 4,000 members, distributed in 26 state associations.

**Canada – Population: 35.1 million**

People born between 1946 and 1965 represent Canada’s largest generation; as of 2011, most were still working. Because of this, the working-age population in Canada (age 15 to 64) was 68.5 percent in 2011; among the highest of the G8 countries. As this generation turns 65 in coming years, population aging is expected to accelerate. The unemployment rate in Canada as of May 2013 was 7.1 percent. Canada’s contingent of OEM physicians classified as specialists is small — approximately 60 for the entire country. OEM services are also provided by primary care physicians, many of whom have a special interest in the field. Fewer companies are employing full-time medical directors and it is common to find OEM consultants providing services to several companies. There is a lack of awareness of the role of OEM and maintaining funding for residency positions is a challenge. Among the health issues are mental health and stress, substance abuse in the workplace, injuries to younger workers, and outdated occupational exposure limits. Due to the concern for mental health issues in the workplace, Canada adopted a national standard for Psychological Health and Safety in the Workplace in January 2013.

**Denmark – Population: 5.6 million**

There are 100 OEM specialists in Denmark, with occupational health services located in hospitals in 5 regions. OEM specialists are currently in demand as experts in helping create return-to-work strategies for employers.

**Estonia – Population: 1.3 million**

The population of Estonia is 865,000, of which approximately 66 percent are of working age (15 to 64 years), and 600,000 (about 70 percent) are employed. The average age of workers is on the rise. As of January 2012, 9.5 percent of the population had a disability. Most companies are small- or medium-sized, and there is one physician for roughly every 12,000 employees. Up to 60 percent of the workforce has access to OEM services. OEM began to evolve in the 1960s; Estonia’s Occupational Health and Safety Act was ratified in 1999. OEM physicians are credentialed after 6 years of pre-graduate studies and 4 years of residency. The Estonian OH Physicians’ Society, founded in 1996, has approximately 100 members. Estonia recently began creating return-to-work strategies for employers and employees.
Germany – Population: 82 million

There are 41 million people in the German workforce. Every worker has the right to OEM services and every employer must offer these services. For small- to mid-sized companies this sometimes creates difficulty. Of the 12,000 physicians who provide OEM services, 4,000 to 5,000 are classified as specialists. Five years of training is required to become an OEM specialist. Approximately one half of the country’s OEM physicians are age 60 or older.

India – Population: 1.3 billion

India’s occupational medicine society was founded in 1948. It has 5,000 physician members, of which approximately 4,000 are OEM specialists. India’s occupational health services are delivered via a 3-tier health system that extends from village health clinics, district hospitals to state hospitals. While patients do not frequently visit OEM physicians, India’s centralized medical services system has in recent years taken a greater interest in OEM.

Ireland – Population: 4.5 million

Ireland has a workforce of 2.1 million people, but less than 25 percent of workers have access to OEM services. Two organizations represent the country’s OEM physicians — one with approximately 300 members and the other with approximately 350 members.

Malaysia – Population: 28.8 million

Malaysia’s workforce of 12 million people is mainly employed in small enterprises. Workers do not have widespread access to OEM services, which are still in the development stage in the country. The return-to-work concept, for example, is relatively new. Malaysia has experienced an influx of foreign workers, with 2 to 4 million coming from Bangladesh, Philippines, Nepal, Pakistan, and other locations many of them working in hazardous occupations.

The Netherlands – Population: 16.7 million

The Netherlands’ workforce numbers around 8 million with approximately 800,000 receiving a work-disability pension. The country is trying to attract new physicians to provide services. OEM physicians do not treat OEM cases; rather, they offer preventive services and advice on when patients can return to work. There are about 2,000 OEM physicians in the Netherlands. Each year, approximately 15 new OEM specialists join the physician workforce and 125 retire.

New Zealand – Population: 4.4 million

New Zealand has 1.9 million paid workers in 500 industries, with an unemployment rate of slightly more than 7 percent. Demand for OEM services is not high in New Zealand, which has only 60 occupational physicians and 1,500 general practitioners whose average age is in the 50s. The country has limited occupational health and safety regulations.

Nigeria – Population: 162.5 million

Roughly half of Nigeria’s population is in the workforce. The country does not have a formal OEM medical structure for delivery of services, and less than 200 OEM physicians, trained abroad, are in practice. The leading occupational health organization is the Society of Occupational and Environmental Health Physicians of Nigeria, and its executives are trying to create a greater awareness of the benefits of occupational medicine, including developing standards and guidelines for OEM practice, as well as engaging in discussion with the government.
Norway – Population: 5 million
Approximately 2.3 million Norwegians are in the workforce, which is rapidly aging. Over the last decade, a significant number of jobs in the country have been filled by immigrants. Two organizations represent OEM physicians, the majority of whom are age 55 or older. A major expansion of OEM services for workers occurred in 2009, and the country is experiencing problems in recruiting OEM physicians to meet demand. The OEM specialty is trying to raise visibility and awareness of its work in Norway.

Philippines – Population: 98 million
Approximately 3,500 organizations in the Philippines employ 200 or more workers — one-third of whom work in the industrial sector. More than 2,500 employers provide OEM services, mainly in the manufacturing sector. The Philippines has experienced a recent increased interest in OEM among young physicians. Like much of Asia, the Philippines does not have a formal OEM residency training program, but the Philippine College of Occupational Medicine (PCOM) has developed a residency training program to be launched in 2014 in partnership with training hospitals/institutions. PCOM has more than 3,000 members, which includes multiple specialties.

Slovakia – Population: 5.4 million
Slovakia’s workforce numbers 2.3 million people. Occupational medicine had its beginnings in the country in 1932. The OEM society has approximately 127 members. OEM specialist training takes 4 years. There are currently 85 OEM providers for employers, which are obliged to ensure OEM service. Like many countries, Slovakia faces challenges in finding young physicians interested in specializing in OEM.

Switzerland – Population: 8 million
Switzerland has a strong economy, with just over 3 percent unemployment. The economy is based mainly in small to mid-size companies, and the workforce is quite healthy, with an average of 6 to 7 absence days per year. The mean retirement age in Switzerland is 63.5 years. Switzerland’s OEM society has 200 members, of which 120 are OEM specialists. It, too, is experiencing difficulty in finding young physicians to enter OEM practice.

United Kingdom – Population: 62.6 million
In the U.K., 70 percent of employees have no access to occupational health services. One of 5 workers who spend 6 or more weeks a year on disability will permanently leave the workforce (300,000 a year leave and end up on welfare). Tobacco use remains a major issue, with more than 80,000 dying annually from smoking-related disease. Sixty percent of the population is considered obese. At the same time, the number of physicians entering OEM training has fallen by half in the last 10 years. The majority of practicing OEM specialists are 50 to 64 years old.

United States – Population: 313.9 million
With a workforce of 150 million people in diverse settings, the need for occupational health services is high in the U.S. The leading occupational health organization is ACOEM with 4,400 members, the majority OEM specialists. The number of post-graduate training programs for new OEM physicians is threatened, and fewer young physicians are choosing the specialty. The rate of occupationally related injury is relatively high at 4 to 5 million injuries per year.
DISCUSSION: COMPARISON OF ISSUES, CHALLENGES AND GOALS

In the final segment of the meeting, IOMSC participants engaged in a roundtable discussion intended to identify common challenges, opportunities and potential goals for OEM globally.

Key Challenges:

- Workforces worldwide are aging, creating new challenges and threatening productivity.
- Chronic disease is on the rise, and it has the potential to seriously impact productivity among workers and employer costs. The impact of chronic disease on work absence and injury rates is a new and growing problem.
- Demand for OEM services is outstripping the supply of OEM physicians. Some countries face the issue of “brain drain” their OEM specialists are leaving to work in other, more receptive settings.
- Many countries face a diminishing number of OEM specialists in training; younger physicians do not have a strong interest in the specialty. In many countries there is a serious lack of OEM awareness, information and training in medical schools.
- The OEM specialty does not have high visibility with key government agencies in many countries; awareness of the specialty and its contributions to protecting and improving health is low among general populations.
- Psychological disability, brought on by workplace stress as well as general societal stress, is a growing issue for many workforces.
- Fatigue caused by shift work is also a serious growing health issue for many workforces.
- Attitudes about the concept of return-to-work (RTW) i.e., the idea that returning to work is a goal of good health and can aid recovery from injury or illness are inconsistent and in some countries the concept is not well accepted.
- Governmental policies, such as “right to work” laws, can complicate workplace health.
- A strong connection, understanding, and ongoing dialogue between primary care physicians (general practitioners) and OEM specialists is lacking in some countries. General practitioners may not fully understand some key OEM concepts, such as RTW.
- Among chronic diseases, obesity and diabetes are major issues. Modifiable behaviors, such as lack of exercise and poor diet, are key drivers of chronic diseases. While smoking is decreasing in many developed nations, it is becoming an increased risk in emerging markets.
Foreign/migrant workers are vulnerable in much of the world, encountering a lack of basic protections against environmental hazards and health risks.

Some governments are not doing enough to adequately ensure workplace health and safety through regulation and legislation. Government bureaucracies can create inefficiencies in the treatment of occupational diseases and injuries.

Many countries lack adequate funding for much-needed research on OEM issues.

**Key Opportunities and Goals:**

- International OEM societies have the opportunity to work together to create a strong case statement that explains the value of OEM to employers, worker populations, the medical community, and governments around the world.

- General awareness-building of the global benefits of OEM is greatly needed especially among younger people and medical students, who might be interested in OEM as a career.

- The scope of the definition of “workforce” should be broadened to encompass all workers including both the employed and the self-employed.

- Addressing chronic disease in the workplace should be a priority; by sharing resources and knowledge globally, OEM societies can make an impact.

- The RTW concept is not widely understood in many countries. OEM societies can collaborate together globally to help workers around the world understand that working is an important component of good health. OEM specialists are in a unique position to enable a cultural shift toward the value of work.

- OEM specialists can help increase awareness of OEM not in terms of its role in treating injury or illness but in terms of using its preventive strategies and risk assessments to prevent injury or illness. The future of OEM rests strongly on moving workplaces toward preventive models based on primary, secondary, and tertiary prevention as follows:

  - Health promotion, health education, lifestyle management, safety engineering, job ergonomics and organizational design, nutrition, prenatal care, immunizations and other wellness services are all **primary prevention strategies** because they help people stay healthy and productive.

  - Screening and early detection programs, health coaching, biometric testing and proactive work disability prevention programs are **secondary prevention strategies** because they can identify health conditions earlier than they would have been by typical clinical manifestation.

  - Disease management, evidence based quality care management, return to work programs, disability management and vocational rehabilitation are **tertiary prevention strategies** because they can provide earlier interventions, limit the destructive and often disabling impact of serious medical conditions on function in daily life and work, can protect or restore productive lifestyles, and can reduce future costs.
Workplace health protection (safety) and health promotion (wellness) enhances the overall well being of a workforce by more closely integrating health promotion and health protection activities along a continuum. In this model, health promotion interventions contribute dynamically to improved personal safety in addition to enhancing personal health, while occupational safety interventions contribute dynamically to improved personal health in addition to enhancing personal safety.

As a part of an overall awareness-building effort, OEM specialists can help employers understand the value of good health in enhancing productivity and profit.

By making a stronger business case for OEM in the workplace worldwide, OEM specialists can strengthen opportunities for a much stronger practice environment; increased demand will create more resources, which can advance clinical development, research and education.

Overall, OEM specialists have many opportunities to build stronger relationships with legislators and government regulators and to influence government policies related to worker health.

The lack of OEM training opportunities in many countries can be addressed through more proactive engagement between OEM societies and their respective governments.

OEM specialists have the opportunity to help integrate health-promotion activities by serving as an intersecting “bridge” between health promotion in the home and in the community. These efforts should be integrated to ensure maximum health of all people in all settings.

Today’s media environment, including rapid on-line communications, offers OEM societies the opportunity to increase public understanding of the importance of healthy workplaces. OEM should engage with marketing and communications specialists to tell a more effective story.

OEM specialists have the skills and knowledge to add their voices to the increasing dialogue about global health threats. By working together, they can important clinical and research resources to the effort of governments to address these threats.

OEM specialists have the opportunity to build stronger bonds and relationships with workers through the value they bring to workers’ lives. As a part of this process, they can help workers and employers work together toward common health goals through workplace strategies.

ADJOURNMENT/CONCLUSION

Following its general discussion of challenges, opportunities, and potential goals, the Collaborative began discussion of next steps, including plans to hold on-line meetings during 2013-2014. A second in-person meeting is tentatively scheduled to occur in conjunction with the 2014 SOM annual meeting in England.
**APPENDIX:**

**Proposed Consensus Statement of the IOMSC**

OEM specialists worldwide share common goals of safeguarding and improving the health and wellbeing of people at work, enabling them to have more rewarding working lives. Success brings benefit to individuals and their families, to employers, to communities and to the economy at large.

We seek to achieve these goals by ensuring safe and healthy work environments, promoting a balanced work-home life and psychosocial work environment, facilitating access to the personal health resources needed to keep employees healthy and prevent and/or manage chronic disease, and seeking to integrate workplace health with health in the home and in the community.

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*For more information about the International Occupational Medicine Society Collaborative, or to be added to the mailing list, e-mail [IOMSC@ACOEM.org](mailto:IOMSC@ACOEM.org).*