THE DASH AND Quick DASH

Disabilities of the Arm, Shoulder, & Hand

OUTCOME MEASURES e-BULLETIN FALL 2016

The Institute for Work & Health (IWH) is pleased to send you the Fall 2016 edition of the DASH and *Quick*DASH e-bulletin.

The aim of this periodic e-bulletin is to provide you with information about the following:

- research updates (as available) on DASH and QuickDASH;
- frequently asked questions (FAQs); and
- news on translations, associated tools and products in progress.

Research Updates
FAQs
Translation News
Useful Links

Research Updates

DASHBash: Celebrating 20 years

Throughout 2016, we have been celebrating the 20th anniversary of the DASH Outcome Measure. The year-long celebration, nicknamed DASH*Bash*, officially kicked off on Tuesday, February 23 at a plenary held at the Institute for Work & Health. DASH Developer Dr. Dorcas Beaton and DASH Coordinator Carol Kennedy looked back at the beginnings of the DASH Outcome Measure—the first patient-reported outcome measure



developed for the whole of the upper extremity. They reminded all in attendance of the hard work involved in the development of the DASH in the years before its release in 1996. They also sketched out the many ways in which the impact of the DASH has gone well beyond what was first contemplated. Making the occasion extra special was the presence of some of the core members of the DASH development team, including Claire Bombardier, Pam Hudak and Aileen Davis. The plenary wrapped up with—what else—a birthday cake!



The anniversary celebrations actually started in January 2016 at the annual conference of the American Association for Hand Surgery in Scottsdale, Arizona, where Dr. Beaton presented two seminars: one titled *DASH Users Viewpoint Clarifies Interpretation of Scores*, and the second titled *DASH 20 Years Old: The Little Tool That Grew*. The celebrations continued in June at PREMUS 2016, the 9th International Scientific Conference on the Prevention of Work-Related Musculoskeletal Disorders held in Toronto. A DASH display was available all four days of the conference, and Carol Kennedy presented a session titled *The DASH at Work: A Review of Its Use and Measurement Properties*. Dr. Beaton and Carol Kennedy then promoted the DASH at the 10th Triennial Congress of the International Federation of Societies for Hand Therapy (IFSHT) held in Buenos Aires, Argentina in October. They presented a paper titled *DASH Outcome Measure: Recap of the Last 20 Years.*

20 years of impact: The growing use and application of the DASH Outcome Measure

In the early 1990s, there was a growing recognition in the clinical world of the need for patient-reported outcome measures. Clinicians made the case that, not only were these selfreported measures more relevant to patients, research was also showing they correlated better with patients' functional ability.

Aware of this shift in focus, researchers and clinicians at the American Academy of Orthopedic Surgeons and the Institute for Work & Health decided to develop an instrument that would measure the impact on function of a wide variety of musculoskeletal conditions and injuries affecting the upper limb—the arm, shoulder or hand. The team agreed early on that the tool would measure function and disability among people with any disorder or multiple disorders of the upper limb. Such a tool would have broader clinical application and would also allow researchers to compare symptoms and treatments across different conditions and disorders.

From this collaboration, the full 30-item DASH Outcome Measure was published in 1996. A shorter, 11-item version called the *Quick*DASH was released in 2005. And in July 2013, an iPad app version of the DASH Outcome Measure was released, providing real-time administration, scoring and tracking over time, making it easier for clinicians to use the measure and interpret results.

The DASH Outcome Measure has proved to be very popular. In 2015 alone, the DASH website was viewed 314,433 times, with a total of 89,377 unique visitors and an average of 332 visits a day. That same year, there were 18,338 downloads of the *Quick*DASH and 13,617 downloads of the DASH questionnaires. By the end of 2015, the measure had appeared in 1,948 peer-reviewed journal articles, including 1,594 articles where it was used to measure study outcomes.

The popularity of the DASH extends around the world. As of mid-2016, research groups, university departments and clinical centres had translated the DASH and *Quick*DASH into 38 languages and 17 dialects. There are now DASH questionnaires available in Arabic, Hindi, Persian, Slovene and Yoruba, just to name a few examples.

How health-care providers are using DASH

For clinicians, the DASH has proved a valuable tool in two ways: to describe the disability experienced by people with upper limb disorders, and to monitor changes in symptoms and function over time.

Kenneth Wilson, a certified hand therapist who's now director of health occupation programs at Jefferson College in Hillsboro, Missouri, says when he was working in the clinical setting, the DASH helped him identify which items were difficult for patients. Wilson says this saved him time in the assessment phase, because he could focus directly on items that patients had indicated as difficult. "I then took the high scoring items on the DASH, and those immediately became the functional goals for my patient," he adds.

Dr. Sue Dahl-Popolizio, a clinical assistant professor at Arizona State University and a certified hand therapist with over 20 years of clinical experience, has spoken of the value of the DASH and *Quick*DASH in assessing function and measuring change over time. When working in clinical practice, she used it at initial assessment and then at discharge from treatment to track the patient's progress.

In the United States, some health insurance companies require functional limitation reporting (e.g. Medicare). The DASH and *Quick*DASH have been identified by the Orthopedic Section of the APTA (American Physical Therapy Association) and EDGE (Evaluation Database to Guide Effectiveness) workgroups as recommended measures: www. ptnow.org/FunctionalLimitationReporting/ TestsMeasures/ That tracking utility has become even more important to practitioners in the United States as of 2013. Under a new program mandated by federal legislation in 2012, the Centers for Medicare and Medicaid Services (CMS) now requires clinicians treating Medicare patients to submit information regarding patients' functional limitations, therapy services provided and outcomes achieved on patient function. In response to the new requirement, the American Physical Therapy Association provided members with a list of outcome measures to consider using for each specialty. The DASH Outcome Measure appeared on several lists, including oncology, geriatrics and home health, orthopaedics, and hand rehabilitation specialties.

In Canada, administrative bodies are also requiring clinicians to use the DASH. For example, the Workplace Safety and Insurance Board (WSIB) in Ontario operates a "Program of Care" for workers with shoulder injuries. At two points in the program—initial assessment and discharge—the program requires clinicians to complete, record and submit *Quick*DASH results to the WSIB. WSIB uses these results to measure the success of the Shoulder Program of Care and of the health professionals delivering the program.

Several studies now describe the application and testing of the DASH and *Quick*DASH for more than just patients with musculoskeletal disorders. It's also being used beyond the body regions, types of disorders and age groups for which it was originally developed, including among breast cancer patients. The DASH can accurately be described as the little measure that grew.

Quick Updates

IWH launches new DASH website

In February, IWH launched a new DASH website. Some of its features include:

- a new look
- mobile compatibility
- automated user profile submission.

If you haven't seen it yet, take a look: www.dash.iwh.on.ca

DASH team coordinator changes

Some personnel changes have been made to the DASH team since the last newsletter. Greer Palloo retired after 25-plus years with IWH, which means she also retired from her role as the DASH Coordinator. She is currently enjoying life going between Toronto and Trinidad. We send enormous thanks to Greer Palloo for all her dedicated years working on the DASH. Jocelyn Dollack has taken over as the new DASH Coordinator.

Frequently Asked Questions

1. Is the DASH app available for smartphones or android devices?

The DASH is currently only available an an iPad app. However, we are in the process of developing an android app.

2. Is the iPad DASH app available in any languages other than English?

The iPad DASH app is currently only available in English. However, we are working on a translation protocol that will enable users to apply to mount an approved translation onto an app platform. Stay tuned!

3. Has DASH/*Quick*DASH been incorporated into any Electronic Medical Record systems (EMRs)?

More and more clinics and health-care institutions are using EMRs, and we have begun to receive requests to incorporate the DASH into various EMRs and other medical record software programs. In 2015, IWH launched a pilot project with several organizations interested in doing this, including Checkware and Press Ganey. If you are interested in incorporating the DASH and/or *Quick*DASH into an EMR that your organization is using, or would like more information, contact us at dash@iwh. on.ca.

4. Can DASH/*Quick*DASH be used in paediatric (under 18 years of age) populations?

The DASH and *Quick*DASH were developed to assess upper extremity disabilities in adults. While there is no set age limit, general guidelines are 18 to 65 years of age.

Translation News

New translations

Since the last edition of the DASH e-bulletin, the following translations have been added:

English (UK)

Contact: Alison Hammond University of Salford, Salford, United Kingdom a.hammond@salford.ac.uk

Nepali

Contact: Darren Reed, University of Sydney, Lidcombe, Australia darren.reed@sydney.edu.au

Maltese

Contact: Christabel Giordimaina, University of Malta, Msida, Malta christabel.giordimaina.12@um.edu.mt

Bahas (Indonesia)

Contact: Margareta Arianni Huang, Premier Bintaro Hospital, Tangerang Selatan , Banten, Indonesia margarethuang1313@gmail.com

Igbo (Nigeria)

Contact: Peter Olanrewaju Ibikunle, Nnamdi Azikiwe University, Nnewi, Nigeria po.ibikunle@unizik.edu.ng

Khmer

Contact: Alexander Schade, University of Bristol, Bristol, United Kingdom as0358@my.bristol.ac.uk

Hindi

Contact: Deepti Karl, New Delhi, India deeptikarl16@gmail.com

Available translations

All translations are available at: www.dash.iwh.on.ca/available-translations

Translations in progress

A list of translations in progress is available at: www.dash.iwh.on.ca/translations-in-progress

Useful Links

DASH Website: www.dash.iwh.on.ca/home

Translations: www.dash.iwh.on.ca/translations

Conditions of Use for the DASH and *Quick***DASH:** www.dash.iwh.on.ca/conditions-use

Information About DASH and *Quick*DASH Outcome Measures Licences: www.dash.iwh.on.ca/licences

Recommendations for the Cross-Cultural Adaptation of Health Status Measures (PDF, 393KB): www.dash.iwh.on.ca/system/files/X-CulturalAdaptation-2007.pdf

Translating the DASH Outcome Measure, the *Quick*DASH and Related Scoring Instructions: www.dash.iwh.on.ca/translating-guidelines

Free Scoring Systems Service Courtesy of Orthopaedic Scores, U.K.: www.orthopaedicscore.com



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