### HHS Department Actions Addressing Myalgic Encephalomyelitis/Chronic Fatigue Syndrome

### Background

In March 2011, Secretary Sebelius convened a meeting of the Agency heads within the Department of Health and Human Services (HHS) to provide impetus to expand, clarify, and coordinate activities to advance research, clinical care, and education about Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS).

Following the meeting, Agency representatives continued to discuss potential approaches, then initiated an inventory of ME/CFS activities within the Department that laid the groundwork for understanding the ways agencies could better address ME/CFS.

Given the budget environment, it was important to determine how to best leverage these programs and resources to demonstrate how agencies' efforts address ME/CFS priorities, but also signal the Department's commitment to addressing the needs of people living with ME/CFS.

Therefore, the HHS *Ad hoc* Workgroup on ME/CFS was established in February 2012, led by Dr. Nancy C. Lee, Deputy Assistant Secretary of Health – Women's Health, Office of the Assistant Secretary for Health (OASH). The Workgroup is a forum to discuss agency accomplishments and explore opportunities for future activities. Several agencies are investing in future programs that will specifically address ME/CFS while others have resources geared toward a wider population that could benefit people with ME/CFS and their families. The workgroup has produced its first report, "*Addressing Myalgic Encephalomyelitis/Chronic Fatigue Syndrome: HHS 2011, 2012 Accomplishments*" which highlights accomplishments and recently initiated efforts. The agencies participating in the workgroup and a summary of its findings follow.

## HHS Ad hoc Workgroup ME/CFS

ACF – Administration for Children and Families
AHRQ – Agency for Healthcare Research and Quality
ASPE – Office of the Assistant Secretary for Planning and Evaluation
CDC – Centers for Disease Control and Prevention
CMS – Centers for Medicare and Medicaid Services
FDA – Food and Drug Administration
HRSA – Health Resources and Services Administration
NIH – National Institutes of Health
OASH/OWH – Office of the Assistant Secretary for Health/Office on Women's Health
SAMHSA – Substance Abuse and Mental Health Services Administration

# Workgroup Findings: HHS 2011, 2012 Accomplishments

- In FY11, HHS spent \$11 million for myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) research, patient care and provider education.
- The Chronic Fatigue Syndrome Advisory Committee (CFSAC) continues to provide advice and recommendations to the Secretary of HHS, through the Assistant Secretary for Health, on issues related to ME/CFS. Issues have included factors affecting access and care for persons with ME/CFS; the science and definition of ME/CFS; and broader public health, clinical, research and educational issues related to ME/CFS. CFSAC held four public meetings in 2011 and 2012. The last meeting was held October 3-4, 2012. Members of the CFSAC Subcommittee on Research were among the coauthors of a journal article entitled "*Minimal Data Elements for Research Reports on CFS*."" Jason LA, Unger ER, Dimitrakoff JD, et al. Minimum data elements for research reports on CFS. Brain Behav Immun (2012), doi:10.1016/j.bbi.2012.01.0"

### Theme Area 1: Research and Development

### National Institutes of Health

- In April 2011, NIH convened 32 investigators from a variety of scientific disciplines to discuss ME/CFS research as part of a *State of the Knowledge Workshop: Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) Research*. The Workshop enabled the identification of gaps and opportunities to improve the understanding of the complexities of ME/CFS and its diagnosis and treatment. Over 1,000 people attended the meeting either in person (>100) or virtually (>900).
- The Trans-NIH ME/CFS Working Group (WG) is developing priorities based upon the recommendations from the April 2011 *State of the Knowledge Workshop on ME/CFS*. The Trans-NIH ME/CFS WG is also meeting monthly to stimulate ME/CFS research across NIH through various means. For example, the WG provides researchers with resources and connects extramural and intramural researchers who perform clinical research.
- The NIH has issued funding announcements to support research that examines the etiology, diagnosis, pathophysiology, and treatment of ME/CFS via investigator-initiated research grants (RO1) and exploratory (R21) grants. Rolling deadlines enable applicants to submit proposals from FY2012 FY2014.
- In fiscal year 2011, NIH funded 20 research projects on ME/CFS, including two projects for clinical trials.
- In September 2011, NIH held a grant writing workshop for attendees of the biennial conference of the International Association for Chronic Fatigue Syndrome/Myalgic Encephalomyelitis.
- NIH funded a study titled, "Multi-Center Blinded Analysis of XMRV/MLV in Chronic Fatigue Syndrome" (NIH/NIAID funding to Columbia University, Dr. W. Ian Lipkin under grant number AI1057158) to explore the existence of Xenotropic murine leukemia virus-related virus (XMRV) and murine leukemia virus (MLV) in biological samples from well-characterized ME/CFS patients. The results from this study showed no association of XMRV/MLV with CFS (doi:10.1128/mBio.00266-12).

- NIAID released a Notice for the NIH Guide to Grants and Contracts regarding an open competition for the use of the remaining samples from this study (http://grants.nih.gov/grants/guide/notice-files/NOT-AI-13-005.html).
- In April 2012, NIH submitted a manuscript for publication based upon the *State of Knowledge Workshop on Myalgic Encephalomyelitis/Chronic Fatigue Syndrome*. It is now published at <a href="http://orwh.od.nih.gov/research/me-cfs/pdfs/ORWH\_SKW\_Report.pdf">http://orwh.od.nih.gov/research/me-cfs/pdfs/ORWH\_SKW\_Report.pdf</a>.

# Centers for Disease Control and Prevention

- In July 2011, CDC provided the Blood System Research Institute with samples to support population-based, metagenomics research which seeks to identify pathogens in ME/CFS samples to examine the possibility of an infectious etiology.
- In September 2011, CDC issued three 12-month awards to fund collection of standardized data to characterize all domains of illness in CFS patients from the clinical practices of seven clinicians with expertise in CFS/ME. The data will be used to evaluate the extent of heterogeneity of illness among clinics and to provide data that could be used in evaluation of case definition and diagnostic criteria. The study will be continued in FY2013, subject to availability of funds.
- In October 2011 data from the CDC's two-day clinical assessment of CFS in Wichita, Kansas, were made accessible to researchers through CDC's National Center for Health Statistics Research Data Center.

## Food and Drug Administration

- During the November 2011 CFSAC meeting, FDA provided information about the pathway now available for qualification of biomarkers and clinical trial outcomes assessment measures without the need to tie the qualification to a specific drug development program.
- In FY2011, FDA developed in-house expertise on ME/CFS through education of reviewers. It also improved its infrastructure for drug development addressing ME/CFS by centralizing ME/CFS application review. Doing so facilitates uniform criteria for drug development and review of drug applications.
- The FDA is overseeing eight active Investigational New Drug Applications for CFS research or commercial applications. FDA staff members provide technical assistance by advising developers on the regulatory process and providing them with feedback on the design of protocols.
- In 2011, FDA researchers published three articles on the absence of detectable XMRV in healthy blood donors, /CFS patients, or Type 1 HIV patients, respectively. During 2012, FDA reached out to patient advocates to better ascertain achievable goals for a planned stakeholders meeting. The FDA Athritis Drug Advisory Committee held a meeting on December 20, 2012 to discuss new drug application 22151, rintatolimod injection (proposed trade name AMPLIGEN) submitted by Hemispherx Biopharma, Inc. for the treatment of CFS patients. A cross-agency, multidisciplinary workshop for scientists, advocates and other stakeholders, addressing drug development and clinical trial outcome measures for CFS is planned for 2013.

# Agency for Healthcare Research and Quality

• In September 2011, the AHRQ Medical Expenditure Panel Survey (MEPS) program produced a brief on Health Care Use and Expenditures for Pain Conditions among Women 18 and Older, U.S. Civilian Non-institutionalized Population. CFS patients were one of the included populations but, unfortunately, the sample size for the CFS was insufficient for separate analyses.

### Theme Area 2: Patient Care

### Centers for Disease Control and Prevention; Centers for Medicare and Medicaid

• CDC and CMS employ a deliberative process to solicit comments from the general public and primary users of the International Classification of Diseases (ICD), through the ICD-9-CM Coordination and Maintenance (C&M) Committee, which was created as a forum for proposals to update ICD-9-CM. A representative from CDC's National Center for Health Statistics (NCHS) and one from the CMS co-chair the ICD-9-CM C&M Committee meetings. Responsibility for maintenance of the ICD-9-CM is divided between the two agencies, with classification of diagnoses (volumes 1 and 2) by NCHS and of procedures (volume 3) by CMS. The compliance date for ICD-10 was changed to October 2014 in order to give providers and other covered entities more time to prepare and fully test their systems to ensure a smooth and coordinated transition among all industry segments. This will allow for better collection of clinical data including clinical data specific to ME/CFS.

A proposal to revise ICD-10-CM coding for ME/CFS was presented to the C&M Committee by an advocate organization in September 2011. Coding for ME/CFS was also on the agenda for the C&M meeting held on September 19, 2012.

### Food and Drug Administration; National Institutes of Health

• The FDA provided NIH investigators managing the NIH Patient Reported Outcomes Measurement Information System (PROMIS) initiative with input regarding qualification of its Patient Reported Outcomes instruments for use in collecting symptom and quality of life data from people with ME/CFS during clinical trials. PROMIS is a publicly available internet resource with health-related quality of life domains.

#### **Theme Area 3: Provider Education**

## Centers for Disease Control and Prevention

- In March 2012, in collaboration with MedScape Live, CDC launched a free, web-based continuing medical education course on ME/CFS. It has reached more than 5,000 health care providers thus far and the course remains available via the Internet. In August 2011, CDC educated clinicians on optimizing emergency-preparedness management of ME/CFS as a part of a Clinician Outreach Communication Activity (COCA). The slides, webcast, audio, and transcripts remain available on the CDC website.
- In 2012, CDC completed the development of two continuing medical education (CME) courses on the clinical diagnosis and management of ME/CFS, as well as ME/CFS and sleep. The course was posted to the web in June 2012.

#### Health Resources and Services Administration

• In 2012, HRSA distributed information about the CDC-supported ME/CFS CME for clinicians through an invitation to grantees and clinicians participating in various HRSA programs. Using

email listservs, Twitter and Facebook, the invitation was sent to approximately 20,000 HRSA contacts.

- In September 2012, HRSA hosted a Webinar with over 250 Area Health Education Centers (AHECs) that included an overview of ME/CFS and an introduction and request for further distribution of the CDC-sponsored CME. The Webinar presentation was done in collaboration with the CDC and emphasized the importance of provider education about diagnosis and treatment. The AHECs received an open invitation to provide feedback and requests directly to the CDC about the types and modalities of training needed by clinicians in this regards.
- In September 2012, HRSA hosted a meeting between their Rural Health Policy's Office for the Advancement of Telehealth and AHRQ's CFSAC Ex-Officio to explore the infrastructure and functionality of the HRSA funded Telehealth Networks to participate in provider education and clinical services for patients with ME/CFS delivered via telehealth technologies. To create learning networks that include feedback and "reverse translation" capabilities, meeting participants agreed the priority next steps are to explore how the AHRQ registries and the NIH Cathepsin A (CTSA) organizations can work with the Telehealth network.