

2024 MDA Clinical and Scientific Conference
Orlando, FL
March 3-6, 2024

Activity Overview

The 2024 MDA Clinical & Scientific Conference will provide a comprehensive exploration of pre-clinical, translational, and clinical research and care for individuals with neuromuscular disease (NMD), with particular attention to some of the changes the field is undergoing in response to the approval of new therapies.

Target Audience

This activity is designed for an audience of nurses, nurse practitioners, pharmacists, physicians, physician assistants, and social workers.

Learning Objectives

Upon completion of the educational activity, participants should be able to:

Allied Health Symposium

Navigating Challenges in Care Transitions & Coordination

- Identify challenges to coordinating care and navigating care transitions in NMD.
- Identify care center-specific solutions to care challenges in NMD.
- Tailor best practices in coordinating care from exemplary institutions to institutional needs.

Track: Clinical Considerations

Rapid-Fire Clinical Case Reviews Part 1: *Motor Neuron Disease & NMJ Disorders*

- Identify SOD1 phenotypes, including the most severe and most mild forms of ALS
- Evaluate potential risks of available therapies for specific phenotypes.
- Examine the role of nutritional deficiencies and supplementation strategies in neuromuscular disease.
- Identify ways to accelerate diagnosis and opportunities to increase access to genetically targeted NMD treatments.
- Identify strategies to communicate with families resistant to treatment plans.
- Identify ways to involve external entities when the well-being of a child is at stake.
- Increase vigilance and follow-up testing to avoid potential newborn screening “misses”, even in states that have adopted specific NMDs into their statewide screening programs.
- Integrate differential diagnosis of NMJ disorders into care, including assessment of NMJ dysfunction in patients presenting with proximal weakness.

Rapid-Fire Clinical Case Reviews Part 2: *Muscle Diseases*

- Adopt strategies to identify and manage cardiovascular obstetric complications of pregnancy in people with NMDs.
- Identify diagnostic challenges in pediatric NMD, including limitations of current genetic testing 3. Identify phenotypes among the broad spectrum of titinopathies.
- Adopt strategies to investigate VUS identified by NGS in TTN, such as muscle imaging, family studies, and new in silico tools.
- Recognize when to utilize broad genetic testing, additional phenotyping, or biochemical testing for a specific disorder or complex case.
- Anticipate genetic risks and communication needs with patients regarding family planning 7. Identify examples of diversity in genetic muscle disorders and related opportunities to optimize management for better patient quality of life.

Challenges Facing the Clinician in the Era of Treatment

- Identify corticosteroid regimens used in management of neuromuscular diseases; advantages, disadvantages and potential challenges when evaluating potential corticosteroid regimens.
- Identify key questions to ask when discussing treatment options with families.
- Identify FDA-approved treatments for NMDs and recognize differences in approved therapies based on indication, age range, stage of disease.
- Explore clinical challenges/implications of accelerated vs full approval types (biomarker-based vs demonstrated clinical benefit).
- Explore the utility of biomarkers as a clinical endpoint, especially as it applies to exon skipping and gene-based therapies.

- Consider restrictions to therapy access, including FDA labeling, payer approvals, biases in equitable access, and local barriers to access, including personnel requirements.
- Identify strategies by pharma/ government to alleviate access challenges (eg, sponsored programs, “right to try” legislation).
- Recognize considerations for using combination therapies in DMD and SMA.

Setting Patients up for Success: Life Transitions

- Identify at least 3 types of common transitions experienced by the neuromuscular patient population.
- Identify at least one opportunity for improvement in their own clinics regarding successful transitions.

Overview of Therapeutics for FSHD

- Recognize clinical presentation and disease progression.
- Discuss the current multidisciplinary approach to care for FSHD.
- Recognize the role of aerobic exercise in cardiovascular health for FSHD, and be able to provide guidance for resistance training for FSHD
- Discuss the current treatment landscape, recognizing small molecule therapies targeting DUX4 expression and evaluating the impact of non-DUX4 targeted therapeutics in FSHD.
- Discuss the mechanistic argument for disease targeted therapies, and future approaches for gene therapy.

Track: Clinical Approaches to Streamlining Care

Newborn Screening in NMD

- Recognize newborn screening pilot study design and the importance of early detection.
- Compare benefits and drawbacks of newborn screening for Duchenne muscular dystrophy using creatine kinase -MM and sequencing methods.
- Describe potential algorithms for newborn screening for Duchenne muscular dystrophy.
- Discover Minnesota’s experience with NBS in Pompe disease and compare Pompe Disease Screening Protocols Worldwide.
- Compare and contrast the Ethical and Social Implications: What We Know from Minnesota.

Pediatric Neuromuscular Disease

- Recognize ways to collaborate / share in care of pediatric NM patients with their primary care physicians.
- Recognize ways to collaborate / share in care of pediatric NM patients with school based physical therapists.
- Recognize ways to collaborate / share in care with emergency medicine doctors, clear communication of NMD patients risk factors leading to need for emergency medical attention.
- Discuss strategies for successful transition of pediatric patients to an adult setting.
- Compare the variety of strategies used across different regions.

Engaging Primary Care and Non-NMD Experts

- State two ways to engage with the clinical community for NMD patients
- State two strategies to ensure the identification of critical clinical stages in NMD and that appropriate referrals are made
- State two ways to provide educational opportunities to facilitate comprehensive clinical workup, diagnostic testing, and expedited referral to NMD specialists
- Utilize case studies presented to facilitate understanding of engaging primary care of non-NMD providers in the clinical care of NMD patients.

Novel Strategies for Clinical Trial Recruitment & Participation

- Recognize what constitutes a Recruitment Plan.
- Utilize social media platforms to aid in recruiting a diverse audience.
- Identify why diverse representation is crucial for clinical research design.
- Identify strategies designed to include community experts in research design from implementation through retention.
- Implement CARE Research Center-designed solutions within existing clinical trial engagement.

Multidisciplinary Care Panels: Meeting the Needs of the Patient TODAY

- Explore the current data on patient health outcomes for multidisciplinary clinics.

- Recognize possible pitfalls and opportunities of starting a multidisciplinary clinic within the current US healthcare system.
- Discover different models of multidisciplinary care.
- Discover how to improve and optimize multidisciplinary clinic workflow.
- Recognize how to integrate physicians, allied health and patients/parents' perspective for quality improvement.

Underserved Communities & Working with What We've Got: Overcoming Challenges in the Healthcare System

- Learn collaborative strategies to provide complex treatment, especially in underserved communities.
- Recognize how to use outreach clinics to treat and educate patients and how to recruit rural patients for research studies.
- Discover how to navigate limited resources and care for a refugee population through the Polish National Health Service experience.
- Identify special cultural considerations in treating underserved communities through the Native American experience in the Southwest and how these principles can apply to many patients.
- Recognize the role of early diagnosis and treatment initiation in SMA (NBS, newly diagnosed patient's pathway).
- Recognize the need for disease modifying therapies (DMTs) criteria and coordination of care (our Polish SMA experience – a centralized system).
- Explore transitioning patients from pediatric to adult care.

Track: Practical Considerations in Gene Therapy

Where Are We in Gene Therapy in Clinical Practice?

- Identify conditions for which gene therapy is a treatment option.
- Recognize potential risks and benefits of gene therapy across neuromuscular diseases.
- Examine mitigation strategy when adverse events occur as part of gene therapy.
- Explore physiology of the immune response in gene therapy.
- Identify strategies to discuss gene therapy as a treatment option with families with NMD, and anticipate potential questions/ concerns that may be received from families.
- Identify ethical questions that arise with a unique therapy such as gene therapy.
- Recognize how gene therapy might impact families with a child undergoing gene therapy.

Is my Institution Prepared for Gene Transfer Therapies?

- Review considerations for clinical care pre- and post-gene transfer therapy administration.
- Discuss complexities of dosing day, including scheduling, patient readiness, and staff readiness. Explore the need for patient access to subspecialty centers.
- Identify necessary infrastructure components including specialized facilities/equipment, hospital leadership, clinical leadership, supportive personnel, and pharmacy considerations.
- Assess the current state of your institution's infrastructure and resources and develop a roadmap for addressing any infrastructural gaps or strengthening existing capabilities.
- Recognize the logistical considerations involved in sourcing and delivering gene therapies, including storage, transportation, and administration procedures.
- Review the end-to-end process for GRT from a hospital administration perspective.
- Identify necessary steps to prepare the child and family for the gene replacement therapy procedure.
- Develop a differential diagnosis for and management plan for nausea and vomiting occurring in a child who has received gene replacement therapy.

Orchestrating the Team and Planning for the Unexpected

- Identify gene therapy resources, educational opportunities and best practice sharing to support the MDA Care Center Network and the NMD community.
- Discuss the institutional experience for a gene therapy as a non-clinical trial site.
- Recognize potential safety issues that may arise during the monitoring period post viral mediated gene transfer, and the need for a gene therapy team to coordinate and monitor post gene transfer care.
- Explore the ongoing gaps in understanding related to post gene transfer monitoring – including: timing of vaccinations and while on high dose corticosteroids; precautions for patients post gene transfer; use of additional immune modulation beyond steroids; and follow-up safety monitoring labs.

Navigating Difficult Conversations

- Describe the process of determining eligibility for gene therapy.
- Recognize the nuances involved in the decision-making process such as assessing health literacy to guide patients/parents in decision making and helping decision makers through the fear and uncertainty involved.
- Recognize the barriers to access both external (insurance coverage, regional location) and internal (psychological, practical) barriers to access.
- Explore the ethical considerations associated with guiding parents and patients through the process.

Gene Therapy in DMD: Is It Now or Never

- Review current data on available DMD gene therapies.
- Review challenges related to DMD gene therapy and clinician and caregiver decision making.
- Outline case examples to highlight care and issues related to DMD gene therapies.
- Explore the progress made in the development and path to approval of dystrophin-targeted therapies in DMD.
- Recognize the current challenges and limitations for AAV-based gene therapy in human clinical trials for DMD.
- Review future opportunities and possible solutions for next generation gene-based treatments for DMD.

Criteria for Success

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If you have questions about this CE activity, please contact AKH Inc at wendi@akhcme.com



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IPCE CREDIT™

This activity was planned by and for the healthcare team, and learners will receive 16 Interprofessional Continuing Education (IPCE) credit for learning and change.

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Credit being awarded: 16 ANCC contact hours

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Commercial Support

There is no commercial support for this activity.

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