

falls. Only pain interference remained significantly associated with falls in multivariable regression analysis (OR = 1.02; 95% CI 1.00 to 1.05; $p = 0.03$). The model explained 25% of the variance in falls. Pain intensity was not associated with falls (OR = 0.98; 95% CI 0.95 to 1.01; $p > 0.05$) in multivariable regression analysis. DISCUSSION/SIGNIFICANCE: The findings suggest that pain is associated with falls among PwMS. Interventions designed to reduce falls incidence among PwMS may consider the inclusion of pain management as an integral component of those programs.

493

Knowledge of Familial Hypercholesterolemia Among Cardiology Healthcare Providers

Isha Kalia¹, Lusha Liang², Ronald Shope¹, Muredach Reilly³ and Lisa Schwartz¹

¹George Washington University; ²Columbia University Irving Medical Center and ³Columbia University Irving Medical Center

OBJECTIVES/GOALS: Familial Hypercholesterolemia (FH) is a common disorder that is vastly underdiagnosed and causes an increased risk for sudden cardiac death. Cardiology providers (CHCPs) are in an ideal position to care for patients with FH. This research aimed to assess the knowledge of CHCPs in the screening, diagnosis, and management of FH. METHODS/STUDY POPULATION: Adaptation of an existing knowledge tool guided survey development. FH knowledge domains included description of FH, prognosis, prevalence, inheritance, diagnostic criteria, and management options. CHCPs were asked to select their provider type (MD, PA, NP, RN) and years in clinical practice (less than 1-5 years, 6-10 years, 11-20 years, and greater than 20 years). Convenience and snowball sampling recruited CHCPs in the Division of Cardiology at Columbia University Irving Medical Center (CUIMC). Descriptive statistical analysis was performed on quantitative survey data using R. Frequency counts of provider type and years in clinical practice were calculated. Comparisons of scores between provider types and years in clinical practice were made using ANOVA. RESULTS/ANTICIPATED RESULTS: 70 surveys were analyzed (30.2% response rate). 50% of CHCPs identified as MDs, 24.2% as RNs, 12.9% as NPs, and 12.9% as PAs. With regards to clinical experience, 21.4% of CHCPs had 1-5 years, 25.7% had 6-10 years, 24.3% had 11-20 years, and 28.6% had greater than 20 years. The average overall score across all CHCPs was 55.4%, with the highest on the description knowledge domain (81.4% correct), followed by management (61.8%), diagnostic criteria (60.6%), inheritance (58.6%), prevalence (44.3%), and prognosis (25.2%). Physicians had the highest average score of 66.0%, followed by NPs (50.3%), PAs (49.7%), and RNs (39.3%). There was no significant difference in scores across experience levels, provider types, and knowledge domains based on experience levels. DISCUSSION/SIGNIFICANCE: CHCPs across all provider types and years of experience had limited FH knowledge. There exists an opportunity to improve CHCPs' knowledge of FH through education (didactic knowledge) or practice (experiential knowledge). Future interventions should aim to increase didactic and experiential knowledge of CHCPs through a variety of methods.

494

Expert group decision making for pharmacogenomic testing in Ontario

Samuel Neumark¹, Mary Schmitz², Ayesah G. Mohiuddin³, Daniel Gillespie⁴, Zubin Austin², Richard Foty² and Joseph Ferenbok²

¹Translational Research Program, Department of Laboratory Medicine and Pathobiology, University of Toronto; ²University of Toronto; ³The Centre for Addiction and Mental Health and ⁴Ontario Health

OBJECTIVES/GOALS: There is a need to better understand how governments develop strategies to adopt, evaluate, and implement novel health technologies in a public healthcare system. The goal of this project is to understand this strategy development process for the translation of pharmacogenomic (PGx) testing in Ontario, Canada. METHODS/STUDY POPULATION: This observational case study of the Ontario Health PGx Working Group focused on developing recommendations for a PGx testing implementation strategy in the province. The group included 9 individuals affiliated with Ontario Health and 13 healthcare experts from multiple clinical fields. Ontario Health is the government agency that oversees provincial healthcare planning and service delivery. Guided by the Translational Thinking Framework and qualitative research methods, we observed the working group's activities for eight months. We collected meeting recordings, slideshow decks, emails, and group characteristics. We used descriptive statistics and a nine-step inductive approach to analyze the data to create process maps, a case report, and key decision summaries. RESULTS/ANTICIPATED RESULTS: There were 19 meetings conducted remotely with video-conferencing technology. Throughout the working group's activities, we identified 15 key decisions related to either administrative processes or PGx scientific content. We further stratified these two categories into four main themes relating to decisions about 1) membership involvement, 2) logistical management, 3) discussion and recommendation scope, and 4) information dissemination. These four decision themes represent tools by which Ontario Health guided the expert group activities and achieved their goal of generating a strategic roadmap for PGx testing implementation in Ontario. DISCUSSION/SIGNIFICANCE: The Ontario government makes decisions about how expert groups function by monitoring and controlling the group's activities to ensure efficiency, standardization, and practicality. Describing expert group decision-making increases transparency and highlights the critical role they play in the translational pathway of health technologies.

496

Urinary Exosomal MicroRNA as Early Markers of Diabetic Kidney Disease in African American Adults

Maurice B. Fluit¹, Neal Mohit², Mykaiya Sumling³, Baiyee-Ndang Agbor-Baiyee², Kanwal K. Gambhir², Gail Nunlee-Bland⁴, Constance Mere⁵ and Maurice B. Fluit^{2,6}

¹Howard University; ²Endocrinology and Metabolism, Department of Medicine, Howard University College of Medicine; ³Department of Biology, Howard University; ⁴Diabetes Treatment Center, Howard University Hospital; ⁵Division of Nephrology, Department of Medicine, Howard University College of Medicine and