

# Developing Genomics Literacy in Nursing Practice Across Maryland

N. Mollenkopf<sup>1</sup>, L. Francis<sup>1</sup>, J. Bodurtha<sup>2</sup>, C. Applegate<sup>2</sup>, T. Luperchio<sup>1</sup>, P. Davidson<sup>1</sup>  
<sup>1</sup>Johns Hopkins School of Nursing; <sup>2</sup>Johns Hopkins School of Medicine

## Background

- Genetics and genomics is revolutionizing healthcare
- Evidence indicates today's nursing workforce lacks resources, knowledge and skills in this field
- Must prepare nursing students at the prelicensure and graduate level to deliver genomic care
- Challenged by a lack of nursing school faculty trained in genetics and genomics AND dearth of robust continuing education in this area

## Objectives

- Engage practicing nurses in community of learning in genetics and genomics
- Provide opportunities for nurses to learn about genetics and genomics
- Increase nurses and nursing student knowledge, skills and competencies in genetics and genomics

## Development

- Nurse Support II Program, funded by the Maryland Higher Education Commission 1-year planning grant awarded
- Developed academic-practice partnership with the Johns Hopkins McKusick-Nathans Department of Genetic Medicine
  - Intrinsically interprofessional
- Invited nurses, faculty and nursing students to participate in the Genetics and Genomics Community of Practice (CoP)

## Methods

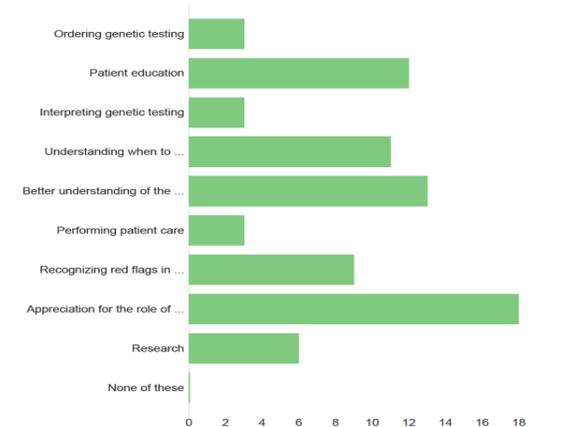
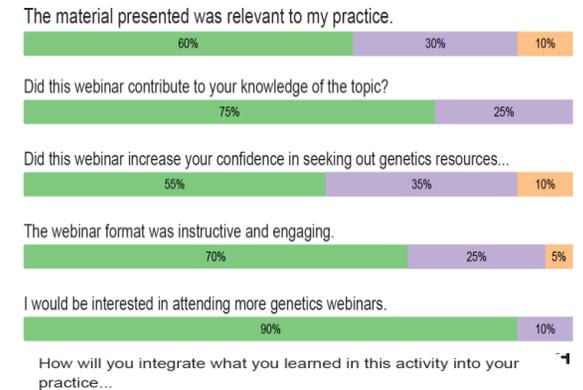
- Plan a Nursing Genetics and Genomics Community of Practice (CoP)
  - Invited faculty participants from all schools of Nursing in Maryland via Deans and Directors List Serve
  - Invited nursing genetics experts and enthusiasts from Johns Hopkins Health System and National Institutes of Health
  - Invited non-nurses including medical geneticists, genetic counselors and pharmacists to participate
- Plan continuing education opportunities for nurses to learn about genetics and genomics
  - Assessed literature and web resources to identify genetics and genomics education opportunities
  - Developed "Conversations in Genetics Webinar Series"

## Results

- Genetics and Genomics CoP "stats"
  - Launched in September 2020
  - Participants from 11 Schools of Nursing in Maryland
  - 58 current members, including practicing nurses, nursing school faculty, and nursing students at all levels
- Current CoP projects :
  - Development of genetics and genomics curated resource list
  - Development of genetics and genomics education modules on Cystic Fibrosis and Sickle Cell Disease for use in Schools of Nursing
  - Genetics and genomics educational resources website
- "Conversations in Genetics" Webinar Series
  - Extensive participation from CoP members and healthcare community
  - Webinar participants' background shows a diverse group consisting of nursing students, faculty at all levels, practicing and retired nurses

Topic	Attendees	Month 2020-2021
Genetics and Genomics	43	October
What We Say Matters	46	November
Engaging Nurses in Genetics - the Future is Here	48	December
Genetics and the Newborn Screen	73	January
Pharmacology	75	February
Using Genetics in Clinical Cardiology Practice	46	March
Demystifying Genetic Testing	24	April

## Figures



## Conclusions

- Nurses in Maryland are eager to learn more about the field of genetics and genomics and its application to clinical practice
- Community of Practice is an effective method to engage nurses on this topic
- Continuing education opportunities are desired by nurses in this area