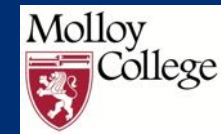




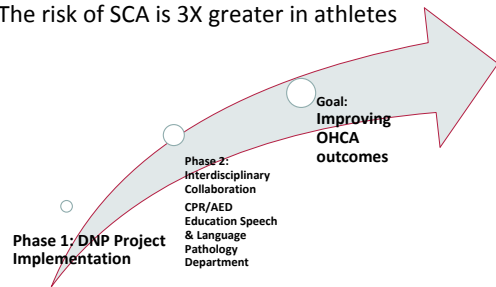
# Expanding the Campus-Wide Sudden Cardiac Arrest Safety Net: DNP Project Sustainability With Interdisciplinary Collaboration



Mary McCormack, DNP, FNP-C  
The Barbara H. Hagan School of Nursing

## BACKGROUND/SIGNIFICANCE

- Nationally, approximately 326,000 episodes of out of hospital cardiac arrest (OHCA) occur annually
- < 6% of victims of OHCA survive to hospital discharge
- Rates of bystander CPR and automatic external defibrillator (AED) training have been reported at less than 3% annually in the United States
- The risk of SCA is 3X greater in athletes



## PROBLEM STATEMENT

### Relevance:

- Speech & language pathology (SLP) students/faculty work with patients at risk for Sudden Cardiac Arrest (SCA)
- SCA costs the U.S. healthcare system \$33 billion dollars annually

### Question:

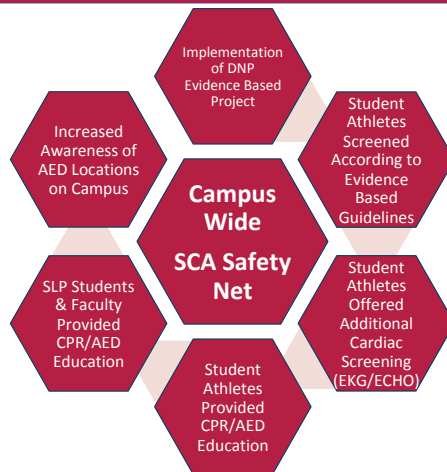
What is the knowledge level of SLP students and faculty in CPR/AED use?

Will there be a change in the knowledge level of SLP students and faculty in CPR/AED use after completion of the American Heart Association's (AHA) CPR in Schools Program®?

## ROL/EVIDENCE

- Provision of bystander CPR for SCA in the community has been noted to increase survival rates two to three fold
- 75% of the population in Kings Co., WA has received CPR training and reports the highest nation-wide survival rate from SCA due to ventricular fibrillation at 62%
- Most important factor affecting survival is early defibrillation
- Survival and future neurologic status post SCA are directly dependent upon how quickly the victim receives emergency medical treatment

## DNP PROJECT SUSTAINABILITY



## METHODS

- Interventional Pre/Post test design
- Implementation of American Heart Association CPR in Schools Program®
- Setting: Liberal Arts College, Nassau Co., NY
- Multiple Sessions
- Convenience sample ( $n = 86$ )
  - Age ( $M = 24$ ), 96.5% Female
  - Undergraduate 15%, Graduate 77%, Faculty 8%

## RESULTS/FUTURE PLANS

- There was a significant difference in the mean scores for the pre test ( $M = 2.95, SD = 1.59$ ) and post test ( $M = 6.84, SD = 0.40$ ),  $p < 0.005$
- Participants reported an 80% increase in comfort level performing Hands Only CPR if they witnessed an OHCA on the post test.
- These results support that implementation of the AHA CPR in Schools Program improves knowledge level of CPR and AED use in this group of SLP students and faculty

Partial Funding received from Molloy College Sigma Theta Tau Epsilon Kappa Chapter Supported by the Nurse Practitioner Healthcare Foundation/Astellas Heart Health Through the Life Span Award Program, funded by a charitable donation from Astellas

Anderson, M. L., Cox, M., Al-Khatib, S. M., Nichol, G., Thomas, K. L., Chan, P. S., ... Peterson, E. D. (2014). Cardiopulmonary Resuscitation Training Rates in the United States. *JAMA Internal Medicine*, 174(2), 194–201. <http://doi.org/10.1001/jamainternmed.2013.11320>  
 Institute of Medicine. (2015). *Strategies to improve cardiac arrest survival: A time to act*. Washington, DC: The National Academic Press.  
 Maron, B., Haas, T., Murphy, C., Ahluwalia, A., & Rutten-Ramos, S. (2014). Incidence and causes of sudden death in U.S. college athletes. *Journal of the American College of Cardiology*, 63(16), 1636-1643. doi:10.1016/j.jacc.2014.01.041  
 Resuscitation Academy. (2014). *Strategies to improve survival from cardiac arrest: An evidence-based analysis*. Seattle, WA: Resuscitation Academy.