Cost Effectiveness Analysis of Pharmacist versus Peer Delivered Vaccine Education in a Senior Center Model of Care Setting: Intervention Development

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Low vaccination rates in elderly populations, especially among African American communities, greatly contribute to the significant amount of vaccine preventable illness and death throughout the United States. A previous educational intervention study discovered that when a pharmacist educates patients about vaccines, activation rates increase and beliefs about vaccines become more positive. Despite the program's successes, pharmacist delivered interventions can be expensive. The present study examines how peer delivered education (PEER) will impact beliefs regarding vaccinations as well as activation steps; this will help to determine whether peer delivered education is a more cost effective option than a pharmacist led program (PHARM). The objective of the whole study is to compare the overall costs and outcomes of peer delivered education versus pharmacist delivered education among a predominantly African American sample of older adults in the Philadelphia region. The objective of the SURF project was to develop the PHARM intervention, as a critical first step towards trial implementation. Using Center in the Park Senior Center as our main source of patients, we will split all patients into two groups, PEER and PHARM. The PEER group will receive vaccine education in a small peer led groups that involves skits and other materials. Each arm will then be analyzed for cost versus educational effectiveness. The PHARM group will receive vaccine education through a didactic lecture by a pharmacist. PHARM was developed via the following steps: 1) a literature search was conducted to examine previous healthcare practitioner-delivered vaccine education interventions; 2) the PHARM presentation was drafted. A panel including two pharmacist faculty members and two research staff members providing ongoing feedback during the PHARM development process. As a next step, PHARM will be pilot-tested using a focus group of older Philadelphians at a participating senior center. Although the study is still ongoing our research team has several hypotheses for this study:

- 1) PHARM and PEER will achieve similar improvements in older adults' knowledge of vaccine preventable diseases (primary hypothesis)
- 2) PHARM and PEER will improve beliefs about vaccine-preventable disease
- 3) PEER will be a lower cost approach to educating participants in the senior center compared to PHARM
- 4) PHARM and PEER will result in similar rates of participants taking one or more activation step(s) to obtain vaccination
- 5) Participants will be highly satisfied with the PHARM and PEER interventions

