Effectiveness of Community-Based Hemorrhage Control Education

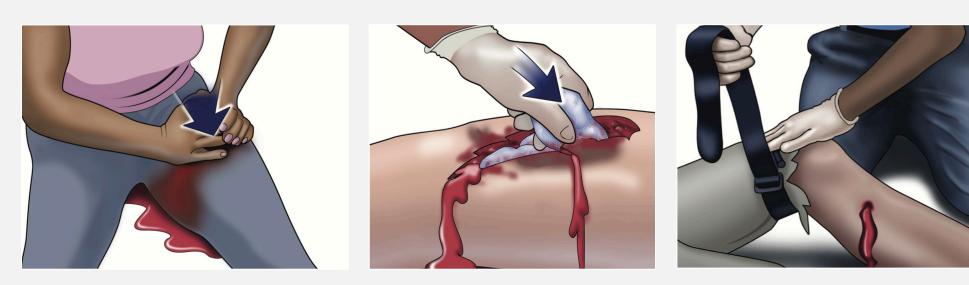
THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, DC

Background

- □ Salmon, Idaho was at-risk and unprepared for a bleeding emerge
- EMS struggled with recruiting and retaining an adequate workfo to meet population needs, so residents relied on volunteer provi with lower-level skills and prolonged response times
- Patients with severe injuries had to be transferred at least 160 miles away to higher level of care
- Only 0.5% of Idahoans completed STOP THE BLEED[®]

Objective

□ Implement an evidence-based bleeding control (BCon) course on how to identify and control life-threatening bleeding with direct pressure, wound packing, and tourniquet application



Primary Outcome Aims

INCREASE Willingness

INCREASE Confidence

INCREASE Knowledge DECREASE

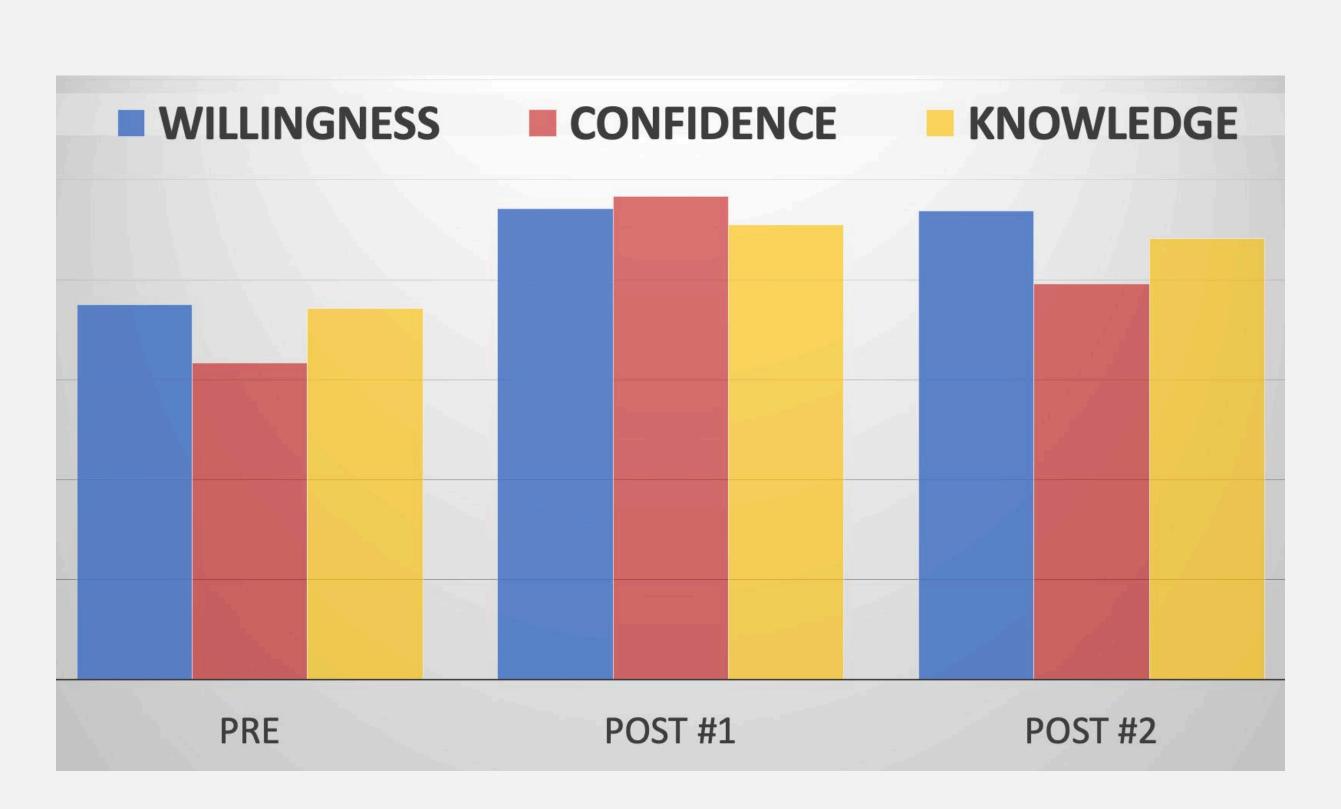
Methods

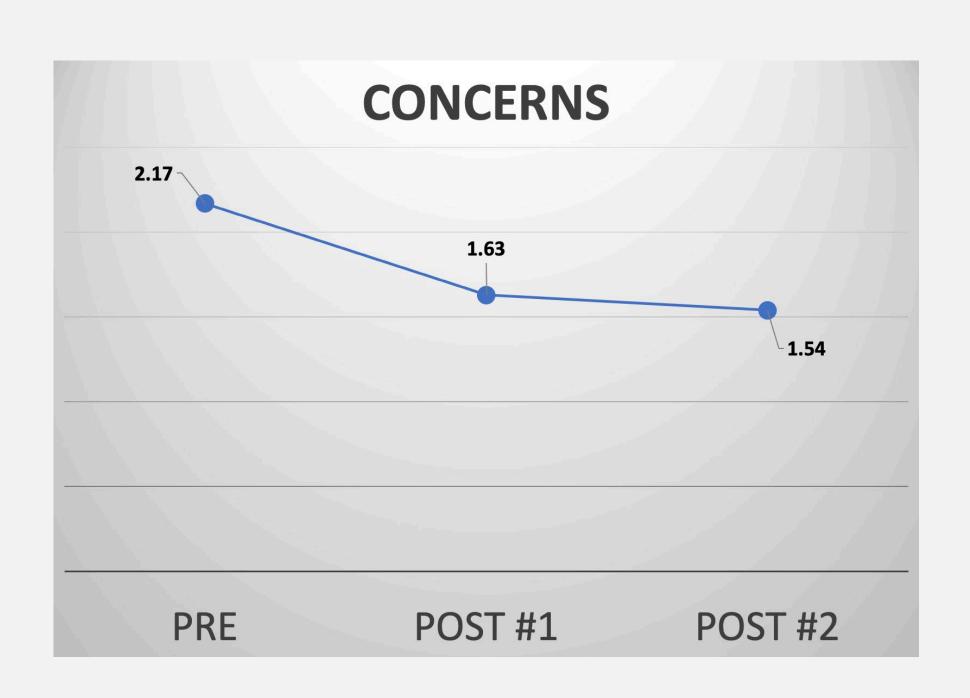
- Quality improvement project with pre-post same subject design
- \Box Convenience sampling method, excluded children \leq age 12
- 22-item survey administered prior to (pretest), immediately after (posttest #1) and within 4 months of training (posttest #2)
- Descriptive statistics, McNemar's test, and paired t-test used to analyze data

Kristin Conti, MSN, APRN, FNP-C, RN, CCRN Qiuping (Pearl) Zhou, PhD, RN, George Washington University School of Nursing Colleen, Brooks, Trauma Services at Inova Fairfax Medical Campus

Results

- From July to September 2020, nine STOP THE BLEED[®] courses were taught Sample (*N* = 33) consisted of employed (45.4%) white (97.0%) females (57.6%) with a median age of 61 years (interquartile range, 18-79) and high school or some college education (54.5%)
- Most participants had prior first aid or medical training (67.0%) and one participant had prior BCon training (3.0%)
- \Box Willingness to help a stranger (70.0% vs 96.7%, p = 0.021) and render aid without a BCon kit (60.0% vs 86.7%, *p* = 0.008) INCREASED on posttest #1
- Confidence INCREASED on posttest #1 (63.3% vs 96.77%, p = 0.002)
- BCon knowledge scores INCREASED from 74.3% to 91.0% (p < 0.001) and remained 88.3% (*p* < 0.001)
- Average number of concerns DECREASED from 2.17 to 1.63 (*p* = 0.047) and to 1.54 (*p* = 0.006)



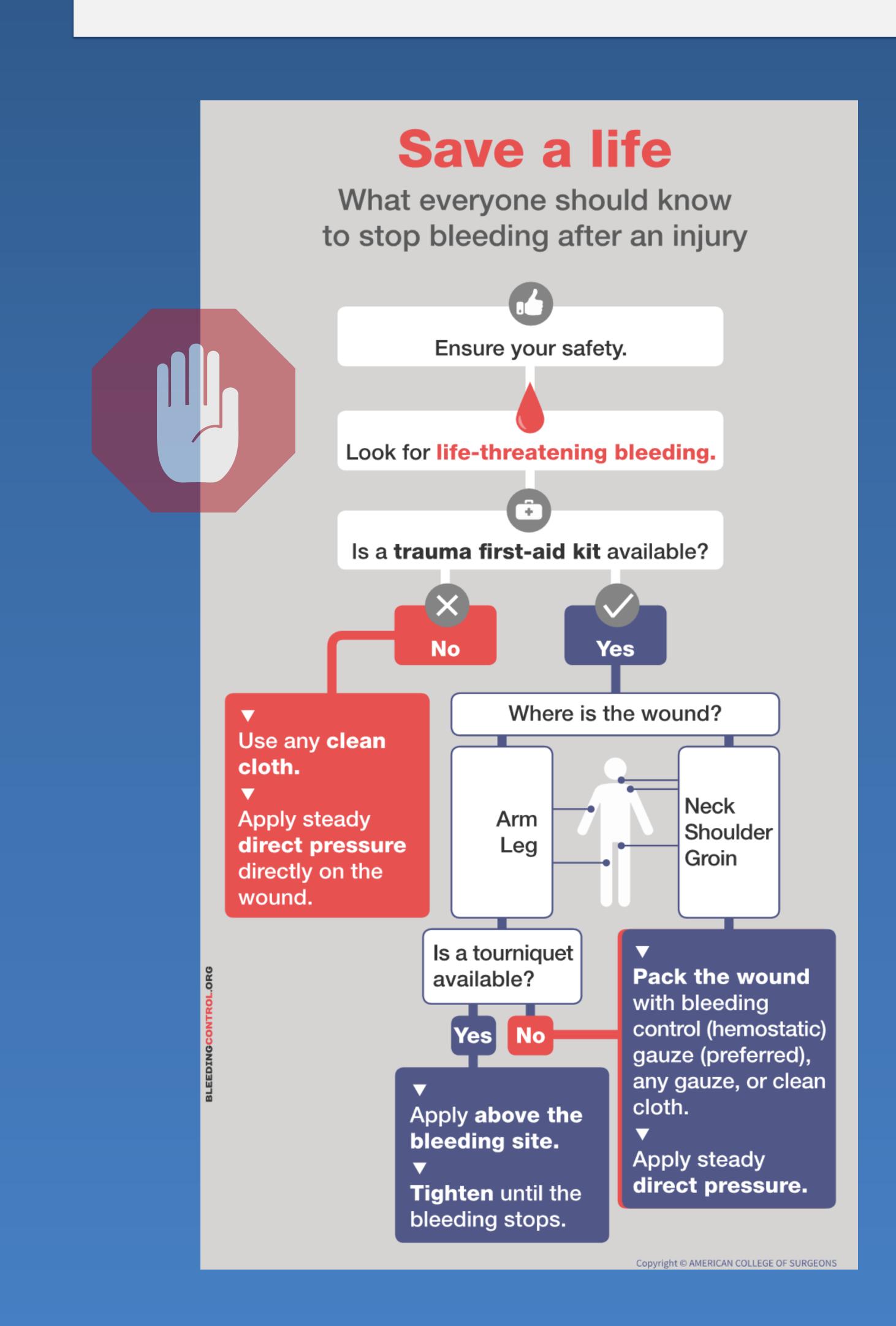


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- STOP THE BLEED[®] effectively INCREASED willingness, confidence, and BCon knowledge, while DECREASING concerns
- Community-based BCon education should continue to be a priority
- Online course option recommended for wider distribution, along with development of standardized evaluation tool
- More research needed to determine when and how recertification should be achieved



Conclusion