

## WATER SAFETY EDUCATION AND DROWNING PREVENTION EDUCATION IN CLINICAL SETTINGS

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**Category:** Population and Public Health

### Background

Drowning is a leading cause of death for children under the age of 14 nationally. In 2017, Texas was ranked in the top three states for drowning deaths in children between 1-4 years of age.

### Objectives

The overall aim of this project is to engage pediatricians to increase the rate of drowning prevention counseling provided to families with children aged 0 to 10 years, based on AAP Bright Futures guidelines. We also aim to improve drowning prevention knowledge for both providers and caregivers.

### Methods

This is a pilot phase of three resident continuity clinic sites which utilized provider pre-and post-intervention and caregiver post-intervention surveys to inform development of the physician quality improvement project for Part 4 ABP MOC (American Board of Pediatrics-Maintenance of Certification) credit. Residents, and attendings at one site, were given a drowning prevention presentation along with pre-intervention survey. Two resident sites each implemented 2 PDSA cycles which involved hanging educational posters in exam rooms and distributing educational materials, with caregivers surveyed after each intervention. Providers were re-surveyed at the end of their participation in the project.

### Results

There were 42 and 41 completed pre-and post-intervention provider surveys respectively. Provider behavior on discussing water safety during patient visits increased from 2% “always” to 32% “always” after intervention. Provider use of educational materials increased from 5% "often" or "always" to 41% "often" or "always." Providers correctly answered that drowning is the second leading cause of death in children ages 1-14 years (64% to 95%) and that for every child who drowns, four others suffer brain damage from water-related injury (21% to 66%) [Image 1]. There were 103 and 39 completed caregiver surveys in PDSA cycle 1 and 2. Caregivers learned the most important method to prevent drowning is direct adult supervision (41% to 70%) and replied “somewhat agree” or “strongly agree” in learning new information about drowning prevention and planned to use the water safety suggestions heard during their clinic visit in both PDSA 1 and 2 [Image 2].

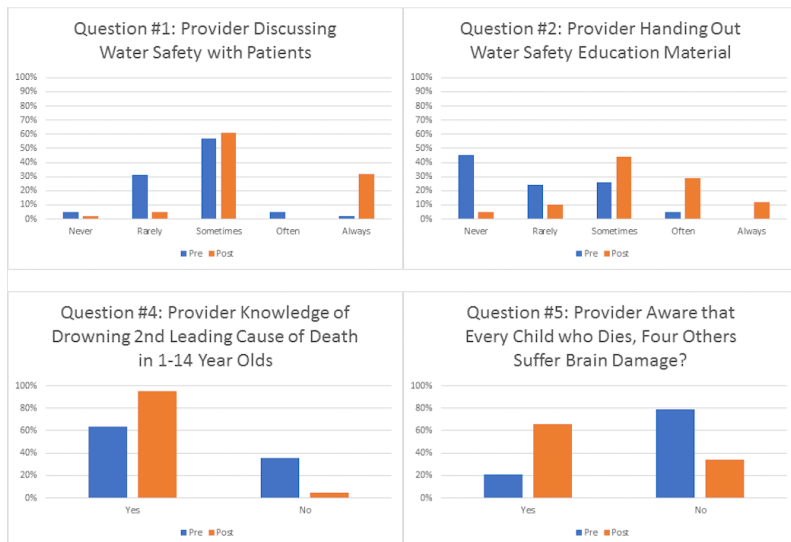


Figure 1

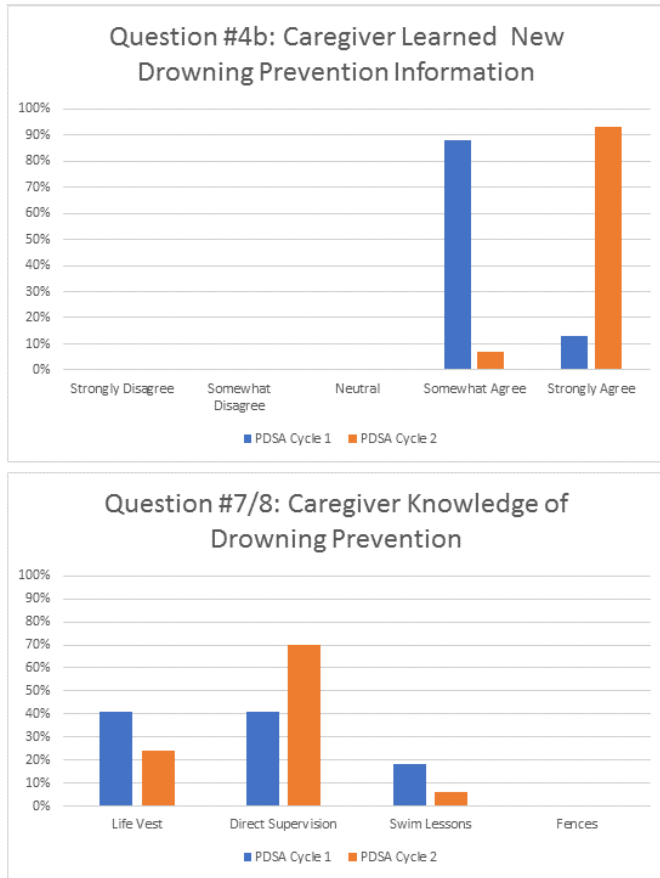


Figure 2

### Discussion

Drowning prevention and water safety are important education topics for both providers and caregivers of young children. Pediatricians demonstrated increased water safety counseling with their patients after a brief, targeted educational intervention. Both provider and caregiver knowledge increased at the end of the pilot phase. Caregivers found the information useful and were eager to implement water safety suggestions their doctor provided.