

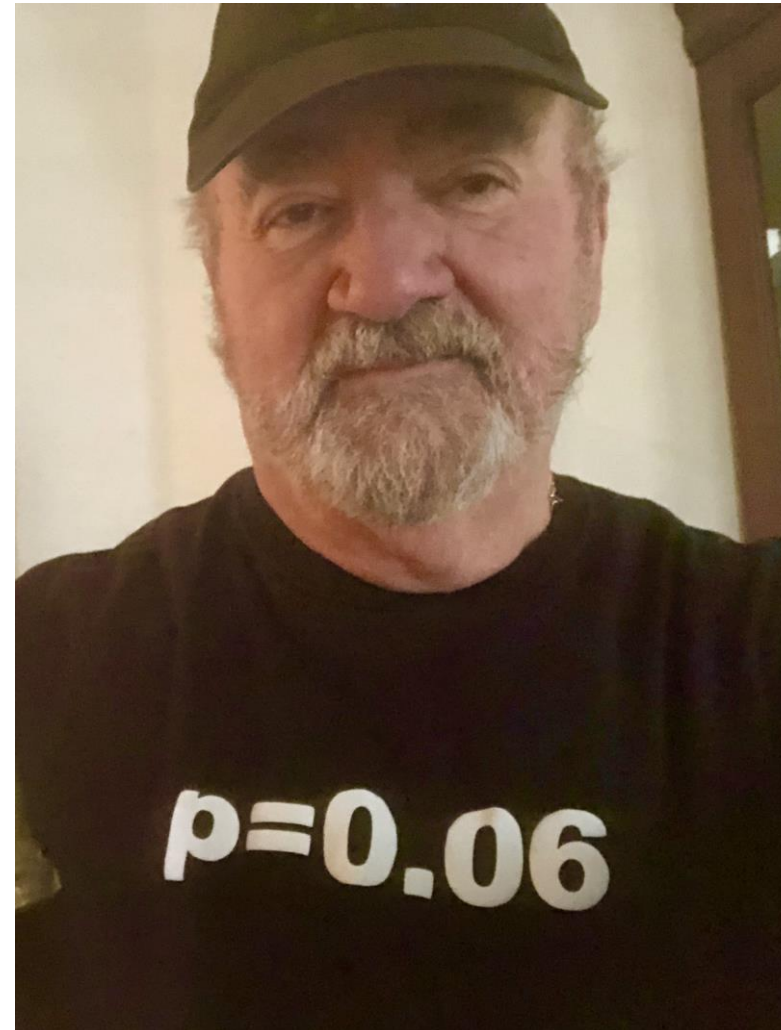
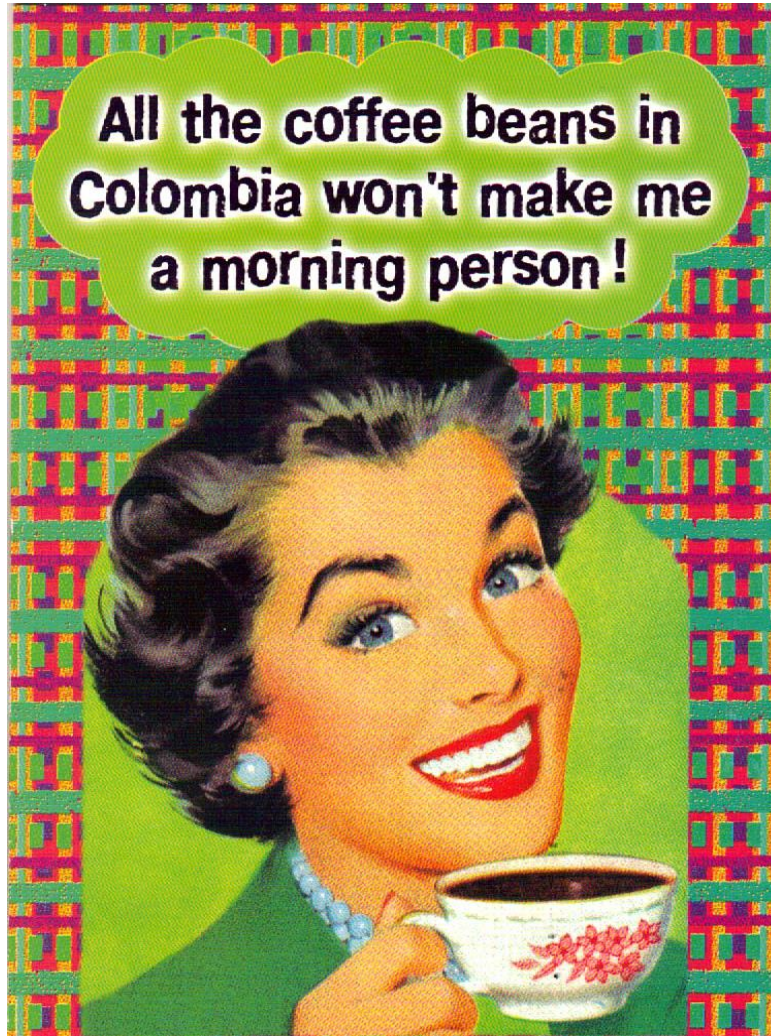
Deployment of Automated External Defibrillators by a Major Supermarket Chain: *Results & Implications*



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Disclosures

Nil !!



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Introduction / Objective



- **Deployment of Automated External Defibrillators (AEDs) in Many Public Settings Has Become Commonplace.**
- **However, with the General Exception of Certain Highly-Trafficked Venues (airports, sports venues / exercise gyms), AED Retrievals Involving Actual Shocks Can Be Relatively Infrequent.**
- **As There Are Still Significant Upfront and On-Going Costs Incurred for Training, Monitoring and Battery/Pad Replacements, Certain Frequently-Visited Businesses with Higher Risk for Out-of-Hospital Cardiac Arrest (OHCA) Cases (due to customer age and other factors) Would Benefit from Data that would Further Encourage Justifications for Widespread AED Deployment.**

Therefore, as a Pertinent Example, the Specific Aim Here was to Track the Frequency of Shockable Cases Following Corporation-Wide Installation of On-Site AEDs across a Large U.S. Supermarket Chain.

Barriers to Program

- **Concerns Regarding:**
 - Liability
 - Cost – Initial and Ongoing
 - Training
- **First Use: Publix Employee**



METHODS



- **The Publix Supermarket Chain Deployed AEDs and Trained Employees in CPR/AED Use Across All of its 1,335 Locations (including 847 in Florida)**
- **A 6-year Prospective Observational Study Was Used to Document Device Retrieval/Activations in Florida**
- **Patient Characteristics, AED Retrievals, Shocks Delivered and On-Scene Outcomes Were Tracked Using Specialized Intake Forms at Publix -- Which Were Later Matched to the State EMS Data Repository**

RESULTS / OBSERVATIONS



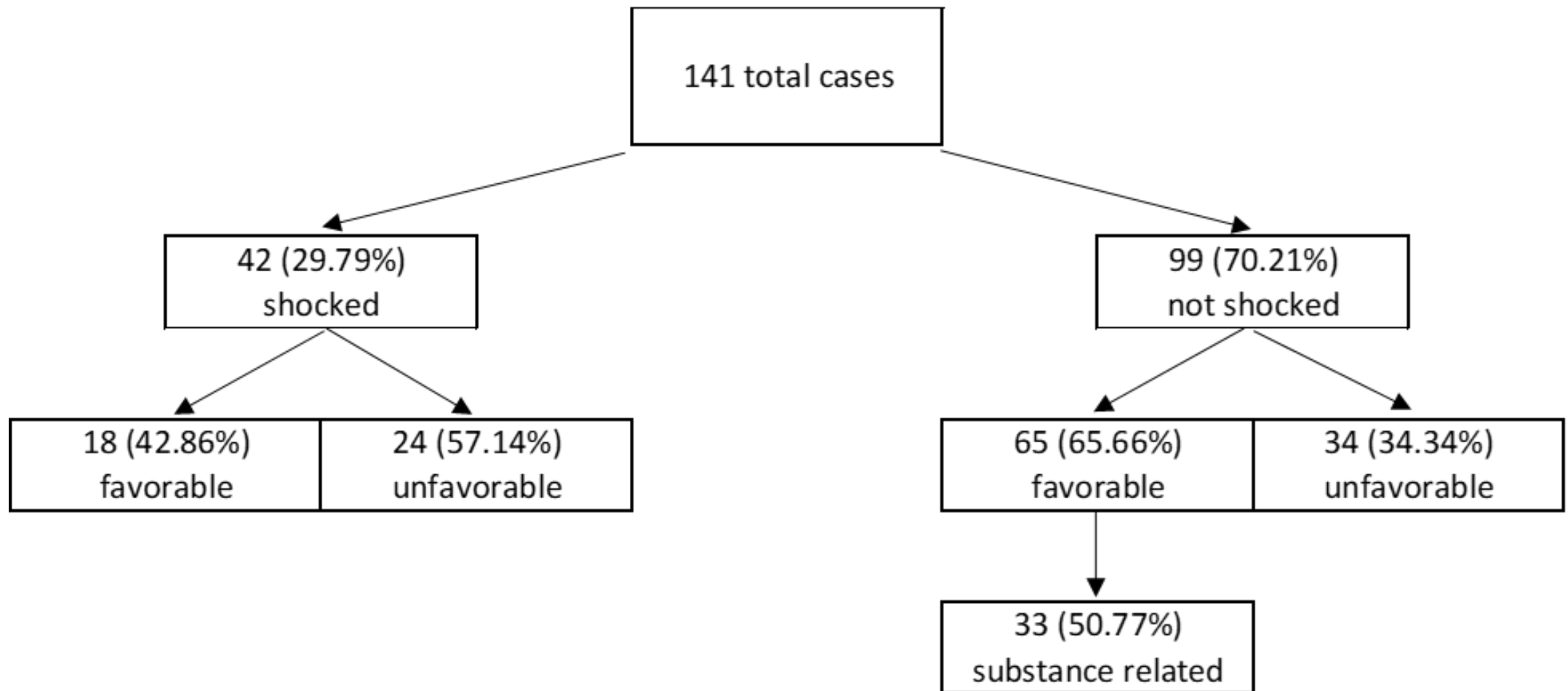
- 342 Publix AED Retrievals (~5/month)
 - 80% occurred inside the store
 - 20% outside
- AEDs Delivered 1 or More Shocks in 109 cases (33%) 1-2 cases/month
 - 75% received 1 Shock
 - 19% received 2 and 6% received 3
- Among Those Shocked, 68% were Men
- Overall Median Age was 60 years (IQR,48-70)
- Women's Mean Age was 55 years and Men's 61 years

RESULTS / OBSERVATIONS



- Of Note, in a Sub-Analysis of 2 Years During the COVID Pandemic the Publix Staff Members Documented Signs of Resuscitation (conscious, breathing, pulses) at the Time of Transfer to EMS in at Least 26 of 34 patient intake forms (77%)
- *Unfortunately*, at the Time this Initial Report, State EMS Records Were Still Being Obtained and Only Matched in 36 of 61 Shockable Cases
- Follow-Up Survival Data Were Readily Retrieved for only 13 of Those Cases
- **Nonetheless, Among those 13 Patients Who Could Be Tracked, 11 (85%) Had Survived to Successful Hospital Discharge**

EMSTARS and AHCA Database Linking



CONCLUSIONS



- Compared to Most Public Settings, AEDs Were Used Frequently with 1-in-3 Cases Receiving Shocks in Just One Supermarket Chain in One State (**~ 1 - 2 shockable case / month**)
- While Follow-Up Data Were Difficult to Retrieve and Thus Limited at the Time of This Analysis, There Were Enough Data to Still Indicate that On-Site AEDs in Supermarkets Can Significantly Contribute to Chances of Survival for a Large Number of Non-Elderly Persons
- In Summary, Similar Installations Should Be Provided Nationwide in Supermarkets and Similar Studies Conducted in Analogous Settings



