

A Survey of Primary Care Offices: Triage of Poisoning Calls Without A Poison Control Center

Travis Austin MS4*, Daniel E Brooks MD+, Sharyn Welch RN+, Frank LoVecchio DO+

*University of Arizona College of Medicine-Phoenix,

+Banner Good Samaritan Poison and Drug Information Center; Phoenix, AZ

Background

Past work has shown that Poison Control Centers (PCCs) can save health care resources, including the prevention of unnecessary emergency department (ED) visits and decreased lengths of stay for poisoned patients. A report from the United States Institute of Medicine estimates that the combined activities of all US PCCs save more than \$900 million annually.^{1,2} Despite these data, PCCs continue to be challenged with budget cuts. In order to further evaluate health care cost savings by PCCs, we identified primary care providers (PCPs) within our region and surveyed them regarding Poison Center Utilization. We hypothesized that PCPs would refer most poisoning related calls to either 911 services or an emergency department (ED) if our PCC were to close.

Methods

We conducted a cross-sectional telephone survey of PCP offices in our Poison Control Center's service region. Adult, family practice, and pediatric PCP offices were identified via an internet search. We developed a scripted survey with three poisoning-related scenarios based on common calls to our PCC, and a fourth question related to after-hours calls. Trained investigators contacted PCP offices via phone and asked to speak with an office manager or triage personnel. The first 100 consecutively completed surveys were recorded and analyzed (see figure 1).

Results

The survey questions and results are in Tables 1 and 2. Responses included in the "Other" category were 'referral to an urgent care or pharmacy' and 'would discuss with the on-call physician.' We also asked "would there be a difference in handling these scenarios for after-hours calls?" (see Table 2). Responses to this question included: refer all patients to an ED (46%), no difference (25%), page the on-call physician (17%), call 911 (11%), and call a nurse line (1%).

Conclusion

Based on our survey, 82.5% of poisoning-related patient calls to primary care offices in our region would be referred to 911 or an ED if our poison center closed. These results support the role of poison control centers as a community asset by assisting with patient care and saving health care resources.

References Cited

1. Spiller HA, Griffith JRK. The value and evolving role of the U.S. poison control center system. Public Health Reports. 009;124:359-363.
2. Institute of Medicine Committee on Poison Prevention and Control. *Forging a Poison Prevention and Control System*. Washington, DC, USA: National Academies Press; 2004

Table 1: Survey Responses Questions 1-3

Survey Question	PCPs' Response to Survey Question (n=100)				
	Come to the office	Call 911	Go to the ED	Other	911 or ED
The patient (child) had an accidental ingestion of an unknown pill?	5	33	59	3	92
The patient (child) had an accidental exposure to fumes from an oven cleaner and has eye and throat irritation?	7	45	45	3	90
The patient (child) was stung on the foot by a scorpion and is having localized pain and paresthesias?	28	18	52	2	70

Table 2: Survey Responses Question 4

Survey Question #4	No	Yes
Would there be a difference in handling these scenarios for after-hours calls?	25	75