Child Passenger Safety: A Comprehensive Program is a Sustainable Program

Amanda Parris, MPH, Environmental Health Officer, Indian Health Service, Keams Canyon Service Unit, Polacca, Arizona

Introduction

Motor vehicle crashes are a leading cause of injury and the number one cause of death for American Indian and Alaskan Native (AI/AN) children.[1] Correctly used, child passenger safety (CPS) devices (hereafter also called "car seats") can reduce the risk of death in a crash by 40 -70%.[2] However, car seat use rates in many AI/AN communities are much lower than the national rate, which is 87% for children from birth to age seven.[3]

Implementing a car seat education and distribution program is an effective strategy to increase restraint use. A car seat education and distribution program is defined as one that 1) combines education about proper use of car seats with distribution of car seats; 2) targets parents and caregivers experiencing financial hardship or who do not understand the importance of obtaining and using a car seat; and 3) provides car seats to parents and caregivers through terms of a loan, low-cost rental, or give away.[4] Many communities, tribal and non-tribal alike, have initiated car seat education and distribution programs, only to see them disappear when a grant ends or volunteers lose interest. I sought to identify barriers and key elements to sustaining a CPS program in order to provide recommendations to tribes wanting to maintain their CPS program over the long-term.

Methods

I performed a literature review on CPS programs to develop a key informant interview guide. I then conducted twelve phone interviews with CPS program managers working in tribal communities across the US to identify challenges, lessons learned, and keys to sustaining a CPS program. The number of years as CPS program manager ranged from one to twelve, with an average of five years.

I also conducted two focus groups with parents and caregivers to understand their preferences and needs in a CPS program. Participants ranged in age from 21 to 64 years, with 34 years as the average age. Participants were mothers (n = 9), fathers (n = 2) and grandmothers (n = 2). All participants cared for at least one child, eight years old or younger, with the majority caring for a child under eight years old (n = 12). All participants were tribal members residing on reservation lands.

Eight Key Elements to Sustainability

The literature review, key informant interviews, and the focus groups identified eight key elements to sustaining a CPS program: 1) advocacy; 2) child restraint law; 3) resources; 4) partnerships; 5) policy; 6) accessible services; 7) data and evaluation; and 8) program coordination. Fulfillment of the eight key elements amounted to implementing a comprehensive CPS program. Thus, a comprehensive CPS program was a sustainable program (Table 1).

Advocacy

"Advocacy" means having a vocal and noticeable presence to influence leadership to make CPS a priority, parents and caregivers to buy-into CPS, and decision-makers to effect policy change and allocate resources. Support from the tribal council is necessary to secure funding, pass child restraint laws, and promote enforcement of the laws. Some approaches to advocacy include making an annual report to council that includes compelling data on restraint use and injuries, CPS activities conducted in the community, and barriers to increasing car seat use; having articles published in the local paper; sending e-mail quizzes about CPS to tribal employees with prizes for correct answers; and meeting with decision-makers, such as the chief of police, tribal judge, council members, prosecutor, and agency directors to discuss CPS issues.

Child restraint law

Lack of a primary child restraint law, or lack of its enforcement due to understaffing or lack of commitment, is a serious barrier to sustaining a CPS program. Without a tribal law, community members often perceive that car seats are only needed when driving off-reservation. Primary laws (where a citation can be issued based solely on the non-use of a car seat) have been demonstrated to be more effective than secondary laws (where citations can only be issued secondary to some other violation).[2]

Ways to increase acceptance of a primary child restraint law include issuing a written warning prior to a citation; having clear policies regarding penalties; and offering alternatives to monetary fines, such as attendance at a child passenger safety class or waiving a fine upon presentation of a car seat. Fines collected for car seat violations can be used to purchase new car seats or other resources for the community's CPS program.

Resources

CPS programs need a continuing supply of approved car seats, storage facilities, and funds for marketing, staff training,

Table 1: Keys To Sustainability

Advocacy	A vocal and noticeable presence that influences leadership to prioritize child passenger safety (CPS), parents and caregivers to buy-into CPS, policy change, and resource allocation.
Child Restraint Law	Ensuring a primary child restraint law is in place and vigorously enforced with provisions for alternative penalties such as attendance of a CPS class.
Resources	Identifying and obtaining funding or support for resources such as child restraints, a storage facility, trainings/certifications, and staff/volunteers.
Partnerships	Developing and sustaining partnerships with federal, tribal, state, and local programs working with children, or in the area of health and safety, collaborating with partners to provide services.
Policy	Ensuring written policies and procedures for providing CPS services are in place to support conservation of resources, management of liability issues, and provision of appropriate and uniform services.
Accessible Services	Ensuring it is easy for community members to locate and obtain CPS services, linking community members to services.
Data and Evaluation	Documenting program activities, managing program records, evaluating and reporting program activities and their impact on restraint use.
Program Coordination	Having a coordinator, preferably an individual, tie all the key elements together and manage the program.

and salary support. Programs most likely to be sustainable are those that have multiple funding sources, several of which are summarized in Table 2. Funding sources include direct support from tribes, grants and cooperative agreements, budgets for medical and preventive services, donations, and state support.[5-7] Examples of state support would be an injury prevention program within the state's Department of Health; Transitional Assistance For Needy Families (TANF) car seat reimbursements; or a Medicaid-based car seat distribution program, an approach demonstrated to be comparable in cost effectiveness to federal vaccination programs with coverage likely for special seats only at this time.[7,8]

Programs can estimate the number of car seats needed for one year based on the number distributed in previous years, the number of births per year data, tribal enrollment data, and data from other agencies serving children, such as Head Start and the Women/Infants/Children (WIC) nutrition program.

While the majority of interviewed programs distribute car seats without charging any fees, others collect funds from parents and caregivers. Primary reasons for the latter approach are that funds can be used to purchase more car seats or used for other operating expenses. Also, parents may be more likely to consistently place their children in a car seat if there is some financial investment in the purchase. The downside of charging fees is that cost is a barrier for low-income families, and managing money and keeping accurate financial records is burdensome for program staff. Loaner programs, where car seats are loaned to parents for a period of time based on the type of restraint (e.g., one year for infant seats, several years for toddler seats and combination seats) are less frequently offered as an alternative to the sale or free distribution of restraints to eligible families. Reasons for the decline in popularity of loaner programs include more complicated record-keeping, an increased exposure to liability issues, the need to inspect and clean returned car seats, unusable returned car seats, and low restraint return rates.[9-12] Loaner programs still have a role, especially for children with special needs requiring expensive, custom-designed car seats, or for programs distributing infant-only restraints, where the loaner duration is short.

Liability issues can be best managed through written policies and procedures for parent education and completion of liability release forms. The Safe Kids network provides CPS technician training and recertification services.[13]

Table 2: Funding opportunities for child passenger safety programs.

Opportunity	Who Can Apply	Resources	Scope
BIA Child Passenger Safety Grant	Tribal programs	Car seats	Reimbursement grant; for purchase of car seats to be distributed through an event/program. Apply annually.
BIA Indian Highway Safety Grant	Tribal programs	Car seats; Storage; Staff Training; Marketing; Staff Salary (depends on project)	Reimbursement grant; priority areas have been impaired driving, occupant protection, traffic records.
Governor's Office of Highway Safety Grant	Taxable and non-profit organizations; state, county, local government programs	Car seats; Storage; Staff Training; Marketing; Staff Salary (overtime)	Reimbursement grant; priority areas have been speed, impaired driving, occupant protection, emergency medical services.
IHS Ride Safe Program	Region XI AIAN Head Start programs	Car seats; Storage (Possibly); Staff Training; Marketing	Pre-designed program; CPS education for students and parents; provides a car seat for each student; requires evaluation and follow-up; mandatory 1 week workshop. Apply annually.
IHS Tribal Injury Prevention Cooperative Agreement Program	Tribal programs	Car seats; Storage; Staff Training; Marketing; Staff Salary for fulltime program coordinator	Reimbursement grant (draw-down); prioritizes injury prevention, all injury types, through use of evidence-based strategies.
CDC Motor Vehicle Injury Prevention Grant	Tribal programs	Staff Training; Marketing; Staff Salary for a full-time program coordinator	Reimbursement grant (draw-down); prioritizes prevention of motor vehicle crash injuries through use of evidence-based strategies.

Partnerships

The National Safe Kids Program attributes the success of their education and distribution program to partnerships and networking. The program has distributed nearly 100,000 car seats to low-income, underserved, culturally-diverse families through state and local Safe Kids coalitions.[14] At the community level, obvious CPS partners include programs that work with children, health and safety agencies, and law enforcement. Partners can link parents and caregivers to CPS services, help staff CPS clinics, promote CPS events in the community, and provide in-kind resources (e.g., storage space, or meeting rooms). For example, Safe Kids-certified CPS technicians have been recruited from IHS health care centers, tribal health services, and BIA law enforcement. Police officers who receive CPS technician training become advocates for CPS in both the community and within the police department.

One tribal community had difficulty obtaining a supply of car seats and managing the provision of services when grant funding for the CPS program was discontinued. In response, the local community coalition partnered with a county injury prevention program to provide car seat education and distribution services during outpatient clinics at the IHS health care center. In addition to providing enhanced resources and skills, partnerships can alleviate one of the major barriers to sustainability, staff turnover and understaffing. Staff turnover results in a loss of knowledge and experience, and understaffing makes it difficult to implement a comprehensive program.

Policy

Written policies and procedures are necessary to provide appropriate, fair, and uniform services, conserve resources, and manage liability issues. CPS policies address to whom, when, where, and how car seats will be distributed. For example, establishing a policy where only one restraint is provided per child per stage of life helps sustain a limited supply of restraints, allowing the program to serve a greater number of children. Written policies also guide how program activities are documented and records are maintained, how observational surveys of car seat use are performed, and what parents and caregivers are told about using the car seats and returning restraints involved in a crash.[4,9,10]

Accessible Services

"Accessible" CPS services are ones well-known to community members and easy for the target population to locate and utilize. They include both education and distribution services. Children in need of services can be identified by networking with local institutions such as schools or maternal and child health programs. Additionally, promoting and managing a CPS services referral system can help connect community members to services. Advertising can be done at health facilities via personal contacts, bulletin boards, and through closed-circuit television, by distributing flyers door-to-door, through radio public service announcements, and by road-side billboards. Educational services can be delivered at drive-through car seat events, in classrooms, and through one-on-one training sessions.

Focus groups or community surveys provide insight into community preferences and barriers to receiving services. They can help answer questions such as:

- Is it better to have appointments, walk-ins, or both?
- What are the best hours, days of the week, and locations for services?
- How long should training sessions last?
- Who besides parents might benefit from CPS education?
- Where would be best to advertise CPS services, using what methods?
- How much would families be able to pay for a car seat?

Data and Evaluation

Data are essential to document and improve program performance; provide accountability to the tribal leadership and funding sources; measure the program's impact; identify community needs; and justify requests for additional resources. Basic program data track the car seat inventory (what seats come in and what seats go out) by type of seat and by funding source, the names of children receiving services, referrals, services provided, and proof of liability release. Statistics to document the importance of CPS and the impact of the CPS program include police-reported crashes with child injuries; ambulance run logs; and the number of emergency visits and hospitalizations involving children injured in motor vehicle crashes. The annual number of citations or warnings issued for non-use of car seats reflects the level of enforcement of existing child restraint laws. Program impact should also be evaluated by conducting formal observational surveys of restraint use in the community.

Program Coordination

Establishing, coordinating, and maintaining the key elements of a CPS program involve many activities, among them:

- Serving as the CPS contact person for questions and referrals
- Networking and coordinating with partners and potential partners
- Uncovering and responding to program funding opportunities
- Monitoring income and expenditures
- Documenting inventory and services provided
- Conducting observational restraint use surveys
- Managing, summarizing, and analyzing CPS program data

- Arranging CPS technician training sessions and recruiting candidates for training
- Writing reports and making presentations to tribal leadership and community members.

A community CPS program should therefore support an official, salaried CPS program coordinator position. This person could be a Tribal Injury Prevention Program coordinator, or a community "champion." The role might be its own position, or a job duty listed under a new or existing position. The position could be housed in an existing community program, tribal agency, or IHS facility.

Conclusion

Sustaining programs over time is a challenge for all community-based efforts.[15-17] Sustainability is vital not only to meet the ever-continuing needs for CPS services, but also to prevent the disappointment, mistrust, and pessimism that inevitably results when valuable programs disappear for want of planning, resources, leadership, or community support. As long as children are transported in motor vehicles, every community needs a comprehensive, sustainable CPS program.

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The IHS Falls Prevention Initiative

CAPT Nancy M. Bill, MPH, CHES, Injury Prevention Program Manager, Indian Health Service Rockville, Maryland; and Bruce Finke, MD, IHS Elder Health Consultant, IHS Nashville Area, Northampton, Massachusetts

Unintentional falls are a leading cause of mortality and morbidity for persons age 65 and older in the US. A 2003 CDC cost study estimated that direct medical costs due to fall injuries among adults ages 65 year and older in the US totaled $0.2 billion for fatal falls and $19 billion for nonfatal fall-related injuries (source: National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention, June 10, 2008).

The IHS Injury Prevention (IP) program established unintentional fall prevention for adults 65 years and older as one of the two IP program priorities in 2008. Until recently, the IP program has worked solely in the arena of environmental home assessments in fall prevention. The IP staff focus was limited to receiving referrals from the public health nurse, community health representatives and others to conduct home assessments for fall risk hazards. The outreach to others in clinical settings was very limited. The IP program priority in unintentional fall prevention launched an important initiative to seek out key partners and evidence-based programs in fall prevention. One key partnership formed involved Dr. Bruce Finke who is the IHS Elder Health Consultant. This summary describes the preliminary work of a collaborative effort by IHS Elder Care and the IP programs to reduce fall-related injuries in the elderly.

The effort began in October 2009 with the identified aim of developing a comprehensive approach to the prevention of fall-related injuries in the elderly living in the community. The initial plan was to identify the best available evidence for effective public health injury prevention, clinical, and community-based interventions for AI/AN communities. The CDC Injury Prevention and Healthy Aging programs have been instrumental in this effort, providing both expertise and funding.

Three workgroups have been working on developing the initial background materials. Through web-based meetings the workgroups have addressed these specific assignments:

1. *Data*. Research current fall-related data to gain insight into the nature and extent of fall-related injury
2. *Evidence*. Identify strong, evidence-based strategies to reduce fall injury in the elderly
3. *Inventory*. Collect and catalogue the current work occurring in American Indian/Alaska Native communities

On April 30, 2010, a meeting was convened by all the group leads and others to explore and further develop their initial findings. The workgroups are now finalizing their reports to be assembled into a document that will serve as the basis for widespread review and discussion by stakeholders and program staff throughout Indian Country. Out of that broad-based review and discussion will emerge recommendations for action.

The fall prevention initiative has changed the approach in the IHS IP, merging effective strategies and forming new collaboration with clinicians (pharmacy, physical therapy, nutritionist, etc.) toward a comprehensive approach to prevent fall-related injury in the elderly living in the community. This effort supports the IHS priorities articulated by Dr. Roubideaux as we seek to improve the quality of and access to both clinical care and preventive services in close partnership with tribal programs. Please contact Nancy Bill, IP Program Manager (*nancy.bill@ihs.gov*) or Dr. Bruce Finke, IHS Elder Health Consultant (*bruce.finke@ihs.gov*) for more information.