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Corresponding Author: Jean T. Shope, University of Michigan Transportation Research Institute, 2901 Baxter Road, Ann Arbor, MI 48109-2150, USA., jshope@umich.edu.

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Translation to Primary Care of an Effective Teen Safe Driving Program for Parents

Jean T. Shope, MSPH, PhD[1], **Jennifer S. Zakrajsek, MS, MPH**[1], **Stacia Finch, MA**[2], **C. Raymond Bingham, PhD**[1], **Joseph O' Neil, MD, MPH**[3], **Stephen Yano, MD**[4], **Richard Wasserman, MD, MPH**[2,5], and **Bruce Simons-Morton, EdD, MPH**[6]

[1]University of Michigan Transportation Research Institute, Ann Arbor, MI, USA

[2]American Academy of Pediatrics, Elk Grove Village, IL, USA

[3]Riley Hospital for Children, Indianapolis, IN, USA

[4]Childrens' Medical Associates Inc, Aiea, HI, USA

[5]University of Vermont College of Medicine, Burlington, VT, USA

[6]Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, MD, USA

Abstract

Addressing teen driver crashes, this study adapted an effective Checkpoints™ program for parents of teen drivers for dissemination by primary care practitioners (PCPs) and the web; distributed the PCP/web program through pediatric practices; and examined dissemination to/implementation by parents. The website, youngDRIVERparenting.org, and brief intervention protocol were

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University Pediatrics–UHC Campus
University Pediatrics–Williston
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The Clinic

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developed. PCPs delivered interventions and materials to parents, referred them to the website, and completed follow-up surveys. Google Analytics assessed parents' website use. Most PCPs reported delivering interventions with fidelity, and thought the program important and feasible. Brief interventions/ website referrals, averaging 4.4 minutes, were delivered to 3465 (87%) of 3990 eligible parents by 133 PCPs over an 18-week average. Website visits (1453) were made by 42% of parents, who spent on average 3:53 minutes viewing 4.2 topics. This program costs little (its website, training and promotional materials are available) and could be one component of a comprehensive approach to reducing teen driver crashes.

Keywords

translation of evidence-based injury prevention; brief intervention study; teen driving; traffic accidents; Checkpoints™ program; adolescent risk taking; parents; primary care; Graduated Driver Licensing

Introduction

Among US teenagers, traffic crashes are the leading cause of death and fourth leading cause of nonfatal injuries.[1] This preventable threat to teenagers' health was addressed in the 2006 American Academy of Pediatrics (AAP) policy statement, that provided pediatricians with information and materials to facilitate appropriate counseling and anticipatory guidance, including recommending parent-teen driving agreements (PTDAs).[2] Yet pediatricians surveyed in 2009 rarely included the highest risk factors for teen crashes or recommended PTDAs in their teen driving counseling.[3]

Risk factors in teen driving and the parents' role in ameliorating them are outlined in Checkpoints™, a program with demonstrated efficacy and effectiveness. Developed by National Institutes of Health researchers, Checkpoints™ complements Graduated Driver Licensing (GDL), encourages parental monitoring of teens' independent driving, and has demonstrated success in different delivery modes evaluated in several controlled trials.[4–9] Statistically significant positive effects were found in greater PTDA adoption, stricter limits on high-risk driving conditions (night, passengers, high-speed roads, bad weather), less risky driving, and fewer traffic offenses.

Given recent calls for disseminating research and implementing evidence-based interventions,[10–12] it seemed appropriate to make an effective 30-minute Checkpoints™ classroom program[8–9] accessible to parents via a website, and to encourage its use through brief pediatrician interventions. Behavioral counseling interventions for various health issues have been implemented in primary care.[13] In collaboration with Pediatric Research in Office Settings (PROS), AAP's practice-based research network, this study evaluated translating Checkpoints™ for delivery via brief interventions by teens' primary care practitioners (PCPs). The intervention referred parents to a new Checkpoints™ website and encouraged them to register and use an interactive PTDA and other materials. Study objectives were to (1) adapt a classroom Checkpoints™ program for PCP/web dissemination, (2) distribute the PCP/web program through pediatric practices, and (3) examine dissemination to parents

(reach, exposure, exploration, access) and implementation by parents (initiation, adoption, maintenance).

Methods

Adaptation of Checkpoints™ to a Website

The new website (youngDRIVERparenting.org) was built from a website developed for a concurrent Michigan Checkpoints™ study (saferdrivingforteens.org). That website's structure, flow, and design followed an extensive process that included input from a graphic artist experienced in adapting scientific content for lay audiences as well as website navigation, and 2 urban/suburban/rural rounds of focus groups (predevelopment and with an early website version) with parents of teen drivers. The website methodically incorporated material from each component of the successful Checkpoints™ program delivered in driver education classrooms, [8,9] and added an interactive PTDA that parents could register for, save, revisit, and use to print updated copies (Table 1). The new website was modified with study logo/colors, each state's GDL program linked to a US map, and a webpage about PCPs' role in teen driving. To facilitate website navigation and increase the likelihood that users are exposed to the full Checkpoints™ program, a naviga-tional path was created marked by a blue arrow on each page's top banner.

The new website was and is open to the public for 2 reasons. It was important that parents have easy access without passwords, as is the case in the real world, versus what would be the case in a closed study. And if parents wanted others to have access, that would also be possible.

Conceptual Framework

The study team developed a conceptual framework that identified the behavioral targets and evaluation levels for examining the success of the PCP brief intervention/ web referral program (Figure 1). The framework focused on the study team's (*administration's*) program promotion to *practice partners* (PROS practices), PCPs' distribution of interventions with fidelity to parents, and *parents*' using the website (hearing PCPs' messages, going to the website, viewing/downloading materials, and making/signing/using PTDAs). These parental behavioral targets represent dissemination (reach, exposure, exploration, and access) and implementation (initiation, adoption, and maintenance).

Intervention, Materials, and Protocol

PROS leadership, including over 2 dozen practicing primary care pediatricians, was actively involved in developing a brief intervention that busy PCPs could feasibly implement, and materials that would help PCPs and their patients' families. Based on Brief Motivational Interviewing,[14,15] Checkpoints™ persuasive messages, and an Ask/Advise/Assess/Assist/Arrange approach,[15] a short (1 minute) sample discussion script was developed, pilot-tested, and finalized (Table 2). For delivery by PCPs, the intuitive script covered starting teen driving discussions, teens' crash risk, the parents' role, that Checkpoints™ helps, the website address, and reinforcement.

Promotional materials incorporated study colors and logo (website address youngDRIVERparenting.org). Single-page brochures (bookmarks) pictured parents with teen drivers, and listed important teen driving points and the website address. Attractive posters showed a parent with a teen driver and brief intervention points as a reminder for both parents and PCPs. Buttons for PCPs to wear said “Ask me about youngDRIVERparenting.org”, and key chains, notepads, and pens with the website address were made available. Additional materials for PCPs’ included: the website link for practices’ websites, video messages for streaming on practice monitors, and recorded messages for telephone callers on hold.

The protocol had a coordinator from each practice’s staff note when eligible parents were scheduled, track intervention counts, and display brochures in waiting areas and posters in examination rooms. The coordinators daily identified parents coming in with teens at or nearing their state’s driving age (this varied by state), and attached reminder cards to patients’ charts. PCPs wore “Ask me” buttons, and during well-child office visits of eligible families (and if queried by other parents of teens), they delivered brief interventions, gave parents key chains, notepads, and pens to reinforce messages, and reminded them to visit the website. After the office visits, PCPs marked the reminder cards whether or not they delivered interventions.

Recruitment

Based on numbers of PROS practices, ongoing studies, and engaged PROS leadership, 7 states were initially selected: California, Florida, Hawaii, Indiana, New York, North Carolina, and Pennsylvania. Nine were later added: Connecticut, Massachusetts, Maryland, Montana, New Jersey, Ohio, Utah, Virginia, and Vermont, and another research network, Pediatric PittNet, also recruited practices. PCPs who believed they could deliver 35 interventions (enough to measure dissemination) in the study’s time frame were recruited in several steps. A letter, flyer, and return participation form were faxed to practices. Interested PCPs were sent informed consent and local institu-tional review board assurance forms to complete and return. Nonrespondents were sent follow-ups after 2 weeks, and then personally contacted. Recruitment began October 2011 and continued through 2012, with enrollment simplified over time (not requiring PROS membership, and helping with local institutional review board applications). In all, 973 PCPs were contacted; 223 agreed to participate (of whom 212 enrolled); 44 agreed and then dropped out; 259 declined; and 447 did not respond.

PCP Intervention Training

Self-guided training manuals and study materials were developed and mailed to PCPs after their participation forms were received. The protocol and materials had been pilot-tested by 4 PCPs with 5 parents each in nonstudy states, and were minimally revised from their feedback. The self-study manual included 2 brief intervention scripts (parent with teen present, and parent alone (Table 2), teen driving facts, frequently asked questions/comments/answers covering material that might arise in discussions, a tour of the youngDRIVERparenting.org website, links to YouTube audio files with sample PCP-parent discussions, and a training certification form.

PROS staff called PCPs to review the materials and answer questions. To complete training, PCPs used the self-study manual, visited the website, listened to the audio files, and practiced delivering brief interventions to three parents. PROS staff also called practices' coordinators to review study procedures (daily review of eligible parents, provision of study materials, and weekly reporting of eligible parents/interventions completed). When training was complete, PCPs and coordinators returned their training certification forms and received follow-up calls as needed.

Data Collection and Evaluation

Because the study's purpose was to evaluate the translation of Checkpoints™ for delivery via brief PCP interventions encouraging parents to visit/use the new website, there were several evaluation components. One component was assessing objective 1, the adaptation of the Checkpoints™ classroom intervention into a website with fidelity to the initial effective program. Other components assessed objective 2, how well PCPs implemented brief interventions, and objective 3, the extent of parents' website utilization, both following the framework in Figure 1. Individual parents/teens were not consented and enrolled, nor were data collected from them, in order to study translation of an effective program into a real-world setting, without study constraints, time commitments, and selection bias.

Objective 1, website adaptation.—To test whether the youngDRIVERparenting.org website was an adequate adaptation of the effective classroom program, two groups of parent-teen dyads participated, with one group experiencing the classroom program followed by the website and the other group in reverse order. Trained research staff administered the 30-minute classroom program and guided participants through a 30-minute website exploration. Parents and teens then separated and provided feedback in group discussions facilitated by trained moderators using questions that compared the features of the two approaches.

Objective 2, PCPs' brief interventions.—Practice partners' (PCPs) institutionalization/*distribution* was assessed by counts collected from practice coordinators' weekly reports: eligible parents, parents who received interventions, and PCP-initiated versus parent-initiated interventions. PCPs' institutionalization/*fidelity* to script and protocol components, and intervention length were self-assessed through follow-up PCP surveys. Survey items covered each protocol component, asking PCPs how often each occurred: never, rarely, sometimes, often, or always.

PCP enrollment data provided demographic information about practices and the PCPs. Practice-level data included state, zip code, type (solo, 2-physician, pediatric group, multispecialty group, medical school/university, nonprofit community health center), and location (urban– inner city, urban–not inner city, suburban, rural). PCP-level data included sex, age, profession, and race/ethnicity. These data were analyzed for differences in intervention delivery (chi square), and fidelity (logistic regression).

Objective 3, parents' exposure to and use of the website.—*Dissemination* to and *implementation* by parents were assessed using Google Analytics, a publicly available web

analytic tool. Data included: number of website visits, if visitors were new or returning (determined by their computer's IP address), visit length, topics viewed, time spent, and website features accessed (reach, exposure, and exploration). For visitors registered to use interactive PTDAs, whether they made/signed/used an agreement (initiation, adoption, and maintenance) was captured. PCPs delivered interventions from March 15, 2012 to July 14, 2013; Google Analytics data, limited to IP addresses in the geographic regions of the participating PCPs, from March 15, 2012 to July 31, 2013 captured the study data.

Results

Objective 1, website adaptation

According to parent/teen test groups, the adapted website contained all the components, resources, materials, and the PTDA from the successful driver education Checkpoints™ classroom program. Parents/teens reported that the website's viewable/printable PTDA was comparable to the classroom program's paper version. Thus parents/teens found the website was adapted successfully from the classroom program, and was user-friendly.

Objective 2, PCPs' brief interventions

Of 212 enrolled PCPs, 133 delivered interventions, and were primarily female (57.6%), white (60.9%), MDs (90.9%), and with an average age of 52.3 years (±10.1). Most were from single specialty (pediatric) groups (74.1%), and half were from suburban areas (54.7%). States with the most PCPs were Pennsylvania (20, 15.0%), California (18, 13.5%), Massachusetts (16, 12.0%), and Montana (14, 10.5%). There were no statistically significant differences between those who delivered interventions or not in sex, race/ethnicity, age, or practice type; however, more suburban/rural than urban PCPs participated ($\chi^2 = 8.39$, $P = .04$).

Regarding *institutionalization/distribution* (Figure 1), practices reported 3990 eligible parents (average, 29.6/PCP; range, 1–75), with 3465 (87%) receiving brief interventions from the PCPs. The 35-interventions/PCP goal was met by 63 PCPs (47%), over a mean 17.52 weeks (range, 4–52). Most (94%) interventions were PCP-initiated (average length, 4.4 ± 2.4 minutes; range, 1–15 minutes), with 6% parent-initiated (average length, 4.0 ± 1.9 minutes; range, 1–10 minutes). Teens were "often/always" present for 98% of PCP-initiated discussions and 86% of parent-initiated discussions.

Regarding intervention protocol *fidelity*, Table 3 presents numbers/percentages of PCPs who reported completing each protocol component "often" or "always". In PCP-initiated discussions, 8 of 10 components occurred in more than 82% of interventions. The only PCP characteristic that was significantly related to component completion was age, with older PCPs more likely to discuss the parents' role (OR = 2.6; CI = 1.2–5.7; $P = .019$), introduce the Checkpoints™ program (OR = 3.1; CI = 1.1–8.8; $P = .034$), and refer to the poster (OR = 1.8; CI = 1.2–2.8; $P = .006$).

PCPs' follow-up survey comments were extremely positive. They believed the topic important, program delivery easy, the materials helpful; and many planned to continue using it. The few suggestions made were for expanding the program's reach through other venues.

Objective 3, parents' exposure to and use of the website

Regarding *dissemination/reach* (Figure 1), 3465 parents received interventions. There were 1453 new-IP-address website visitors (*exposure*), 42% of the number of parents who were given the website address. Website *exploration*, that is, browsing/viewing material, showed that 48% of visitors bounced off the website without viewing other pages beyond their landing page (which was the homepage for 81%). Website visits averaged 3:53 minutes, with visitors viewing 4.2 topics on average/visit (of 16 total topics). The topics most viewed were those with critical teen driving content. *Access* to website materials was assessed as specific pages visited and time spent on each page, indicating viewing/interacting with those pages (Table 4). 'Teen driving risks' (actually a 6-page sequence) was viewed the most. Other highly viewed pages were "account registration," "GDL Laws map" (with visitors probably clicking onto states' links), and "parent role in teen driving." The "PTDA-My Agreements" page, where families can complete their own agreement, and the "sample PTDA" (with recommendations included) were also frequently viewed. The most time was spent on the educational videos.

Implementation examines the extent to which parents used the PTDA website resources. *Initiation*, the goal of which was making a driving agreement, was assessed in 2 ways: (1) parents' use of the sample agreement (available in pdf and html) to initiate their PTDA or (2) parents' registration for an account and initiation of an interactive PTDA. The sample agreement was viewed by 346 unique visitors (24% of the 1453 new visits), who may have completed agreements offline. Registered accounts were opened by 142 visitors (10% of new visits). An interactive online PTDA was begun by 91 parents (6% of new visits; 64% of the 142 registered users).

Adoption of an online PTDA was measured by "signing" the interactive PTDA (clicking the "submit" button after completing information entry: driving privileges, rules, and consequences for the first time period covered) for at least 1 checkpoint. At least 1 checkpoint was completed/signed by 50 parents (3% of new visits, 35% of registered users, and 55% of those who initiated PTDAs).

Maintenance of an online PTDA was measured by parents' continued use of their PTDA. Of the 142 registered users, 87 (61%; 96% of those initiating PTDAs) viewed their PTDA one or more additional times (mean, 4.2 ± 5.5 times). Half (25, 50%) of those who completed at least 1 checkpoint added subsequent checkpoints™ (range, 1–6). Among registered users, 24 modified the consequences teens would face for violating their PTDAs (mean, 1.3 ± 0.9), and 22 modified the driving rules parents/teens agreed to follow (mean, 1.4 ± 0.6). Finally, 21 registered users (14.8%) "viewed all checkpoints™" to display all their entries in a printable format (mean, 2.2 ± 1.8).

Discussion

Teens' motor vehicle injuries/deaths have reduced since GDL's introduction, but remain seriously threatening to teens' well-being. Partnerships between public health and primary care can further reduce this threat. From primary care, the AAP's Council on Community Pediatrics' policy statement[16] argues that pediatricians should partner with public health to

prevent prevalent problems such as injuries. From public health, Gielen and colleagues[12] call for partnerships with practitioners to conduct translation research to implement and disseminate effective injury prevention programs.

This study represents such a partnership. Translation research focusing on health outcomes adapts research findings into practice, ensures new research knowledge reaches intended populations, and helps clinicians and patients change behaviors, including injury prevention.[17] Although the prevalence of injury prevention counseling is low and often incomplete, it is positively associated with families' safer behaviors,[18] and parents report interest in physician involvement on teen health issues.[19] Yet teens' driving risk is often omitted from adolescent health texts, adolescent risk studies, and PCPs' anticipatory guidance. Many PCPs do provide anticipatory guidance, screening, and counseling for adolescent risk behaviors, and these activities can be enhanced.[20]

It is cost-beneficial to prevent illnesses and injuries in young people, rather than provide long-term treatment later.[21,22] Although not simple counseling, PCPs can address the leading cause of teen deaths, traffic crashes and their contributing factors, beyond merely seat belt use. Pediatricians support teen driving counseling, but need assistance in covering important risk factors.[3] In 2007, following AAP's 2006 teen driver statement,[2] AAP provided pediatricians with an Implementation Guide for recommending PTDAs, yet in 2009 only 10% recommended an agreement.[3] Having PCPs deliver brief interventions to parents about their role in reducing their teens' driving risks, and introducing the Checkpoints™ website and the importance of making a PTDA is one way to help teen drivers stay safe. Pediatricians, as respected professionals, can communicate to parents that they are central to their teens' driving safety,[23] that driving is a serious risk to their teens, that parental management reduces teen driving risks, and that a PTDA will be effective in protecting their teens.

The current study demonstrated that such an approach was feasible, well implemented, and supported by PCPs, who disseminated interventions to a high percentage (87%) of eligible parents, considerably more than the percentages (30% and 35%) of eligible parents who attended driver education Checkpoints™ classroom programs.[8,9] Parents are difficult to engage online, and given that the intervention was delivered by different PCPs to parents of teens in a range of ages/driver stages, the website hit rate (42%), although not ideal, was substantial, exceeding the 30% to 40% anticipated by the study team. The bounce rate of 48% was average for a content website,[24] and the registration rate (10%) matched the study team's goal, which was based on the website development firm's experience. The percentage of registered users who began an interactive PTDA (64%) exceeded the team's anticipated 50%. Having more parents be more engaged with the website would be desirable, and future studies are needed to reassure parents that website registration is safe, and to persuade parents that a PTDA will help their teen even though they may believe their teen will not need one. Parents and teens may have benefitted from the program whatever their level of engagement—hearing PCPs' messages, receiving information they might not otherwise have had, or browsing/using the website, but identifying ways to increase their engagement and the program's potential effectiveness are needed.

This translation study had several limitations. PCP recruitment was slow, not related to the brief intervention but to other issues, and PCPs who had few teen visits had more difficulty completing the study. Brief intervention implementation (fidelity) was self-assessed because of cost and distance prohibiting objective assessment, although self-assessment is considered an acceptable approach.[25] In order to preserve the natural clinical setting, data were not collected from parents/ teens, so questions remain about their reactions/behavior change postintervention, and beyond the website activity assessed (eg, they may have used printed website pages later). Using Google Analytics data to track website activity, and privacy concerns limited the study's ability to track individuals (or to rule out visits by others than PCPs' families), or to compare practice/ PCP characteristics on website activity. Future research is also needed to determine if the desired health behavior outcomes (safe driving) can be achieved with this PCP brief intervention/website approach.

Nonetheless, this real-world translation study with unobtrusive data collection demonstrated that PCPs can efficiently deliver brief interventions to parents, generate considerable website activity on the leading cause of teen deaths, and potentially have a population impact even with low parental engagement. The program's evidence base and minimal costs make it potentially worthy of wider use, especially by suburban/rural practices with a good number of teenage patients. The Centers for Disease Control and Prevention now maintains the website, and AAP's healthychildren.org website adopted much of the website material, including a link to the youngDRIVERparenting.org website. Recognizing the important role of parents, several jurisdictions have begun requiring parents to attend a class or complete an online program before their teens become licensed, yet the content of those programs may not be theory based and has not been evaluated, whereas Checkpoints™ has an evidence base. Reducing teen driver injuries/deaths continues to be a challenge—PCPs personally introducing such a program as Checkpoints™ to parents could be one important component of an overall comprehensive approach to promoting teen driver safety.

Conclusions

This study demonstrated translation of an evidence-based teen safe driving program to a website promoted to parents by PCPs in their offices. Delivering the brief teen driving intervention/website referral was feasible for interested PCPs and a fair proportion of parents visited the website, although more website engagement would be desirable. The free program costs PCPs little in time and resources; the training, promotional materials, and website are available online; and the program can raise parents' awareness of their teen drivers' risks and an effective way to reduce those risks.

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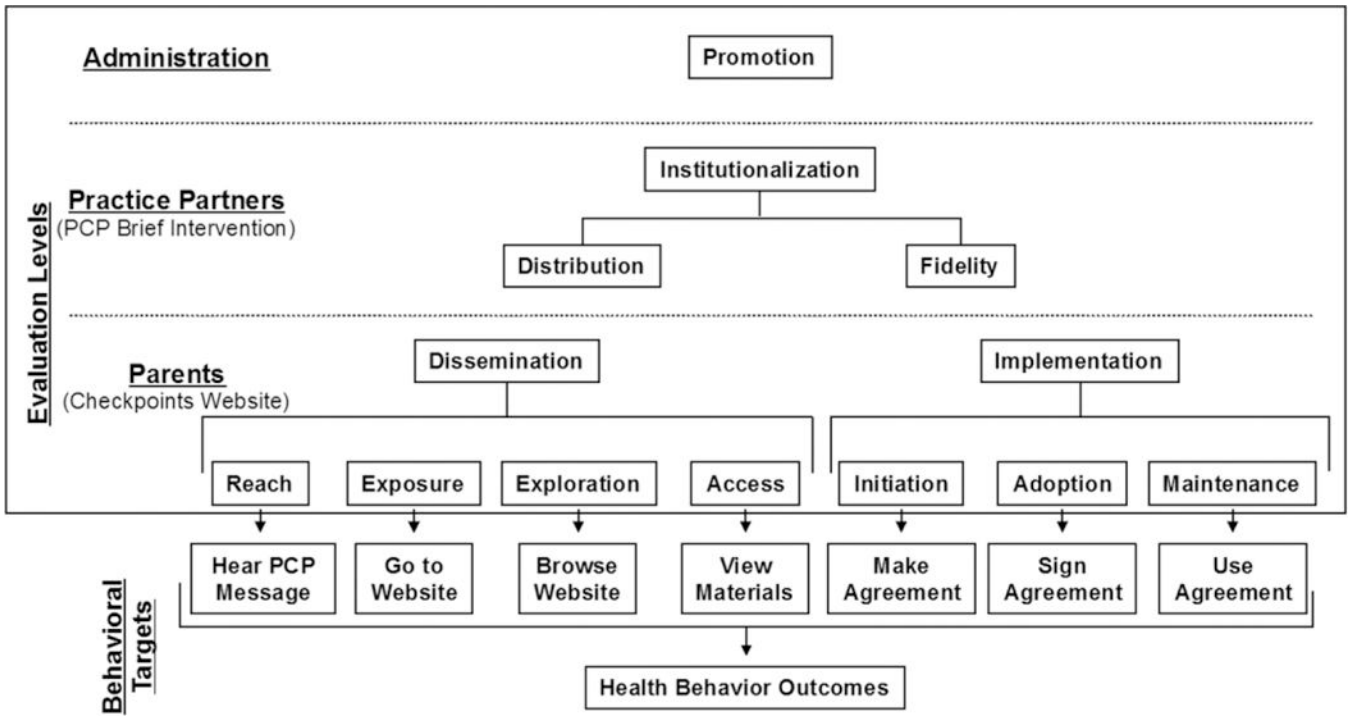

Figure 1.
Conceptual framework of translation study.

Table 1.

Adaptation of the Driver Education Checkpoints™ Classroom Program[8,9] Components to the youngDRIVERparenting.org Website.

Classroom	Website
Introduction	Home page
"Who Wants to Be a Driver?" video	Checkpoints™ Video Library, Parent Role, Risks
Presentation of risks and classroom figures Paper agreement	Parent Role, Risks Interactive agreement; pdf files
Presentation of recommendations and sample agreement; guided completion of agreement	Recommendations on Risks pages; instructions on My Agreements page, Help icons in agreement, Sample Agreement, Checkpoints™ Video Library
Interaction with transportation safety experts	FAQ, Contact Us, Resources, Partners pages
Interaction with other parents	Facebook page
Content from Checkpoints™ booklet	Risks, Parent Role, Graduated Driver Licensing laws
	Automated reminders to update agreement

Table 2.

Primary Care Practitioner Brief Intervention Script.

Key Discussion Points	Sample Discussion
Start teen driving discussion	*To Parent*: What are you thinking about [teen's name] getting licensed to drive? *(Reflect what heard from parent; nonjudgmental. "The goals of reflecting include demonstrating that the counselor has heard and is trying to understand the client, affirming the client's thoughts and feelings, and helping the client continue the process of self-discovery." Resnicow, Davis, Rollnick, 2006, page 2025)* *Basics of reflective listening*: • Restate and rephrase • *Statement of understanding (clarify meaning)* • *Build rapport and keep parent talking* *Sample reflections*: • *You're not ready to …* • *You're having a problem with …* • *You're feeling that …* • *You're looking forward to …* *You're having different thoughts about [teen's name] getting a license … (if teen adds comments that differ from parent's)*
Crash risk for *all* teens	*To Parent and Teen*: I'm concerned for [teen's name] and all my teen patients because driving is dangerous for teens. Traffic crashes are the leading cause of death for teens. Driving is especially dangerous: • in their first months with a license, • at night, and • with teen passengers in the vehicle
Parent role	*To Parent and Teen*: I want you to be active together in keeping [teen's name] safe. I'd like to recommend a program to you that helps parents and teens work together to do that. (Point to poster; have key chain, pen, and note pad ready)
The Checkpoints™ Program helps	*To Parent and Teen*: This program is called Checkpoints™ (point to poster). Checkpoints™ is free and it *works*, to help parents and teens set good rules for safe driving, and then loosen the rules as the teen becomes more experienced.
Checkpoints™ website address	*To Parent*: I want you to go to this website (hand parent key chain, pen, and note pad), learn more and talk with [teen's name]. If [teen's name] is ready to drive, be sure to do the parent-teen driving agreement as soon as you can. Ok?
Reinforce	*To Parent*: This is a great resource because it has been tested in several studies, it works, and it's from a trusted source, so it is safe to register on the website and create your own agreement. I'll be eager to learn that you are using Checkpoints™, are watching [teen's name]'s driving, and that [teen's name] is doing well.

Table 3.

Numbers[a] and Percentages of Primary Care Practitioners (PCPs) Who Reported That They Often or Always…

	n	%
PCP-initiated discussions[b]		
Asked parents if they were thinking about teen getting licensed	89	73.0
Discussed teen crash risks	111	90.2
Discussed the parents' role in teen driving[c]	106	86.2
Introduced the Checkpoints™ program[d]	109	88.6
Encouraged parents to visit the website	121	98.4
Gave parents a website key chain	107	87.0
Reinforced his/her encouragement to visit the website	101	82.1
Referred to the poster during the discussion[e]	60	49.2
Achieved the objectives for the discussion	108	87.8
Did a good job conducting the discussion	104	86.0
Parent-initiated discussions		
Introduced the Checkpoints™ program	54	81.8
Encouraged parents to visit the website	61	92.4
Gave parents a website keychain	46	71.9
Referred to the poster during the discussion	33	50.8
Achieved the objectives for the discussion	54	83.1
Did a good job conducting the discussion	53	81.5

[a]Numbers based on 122 PCPs who returned follow-up surveys.

[b]Logistic regression was used to determine if implementation of eight intervention components listed first varied by PCP or practice characteristics.

[c]Older PCPs significantly more likely to implement often or always (OR = 2.6; CI = 1.2–5.7; $P = .019$).

[d]Older PCPs significantly more likely to implement often or always (OR = 3.1; CI =1.1–8.8; $P = .034$).

[e]Older PCPs significantly more likely to implement often or always (OR = 1.8; CI = 1.2–2.8; $P = .006$).

Table 4.

Parent Access of youngDRIVERparenting.org Website Topics (of 1453 Visits[a]).

Topics	No. of Views (% of Visits)	Average Time Spent (Minutes)
Teen Driving Risks (a sequence of 6 pages)	1034 (71.1)	1:50
Account Registration	757 (52.1)	1:11
GDL Laws Map	687 (47.3)	0:27
Parent Role in Teen Driving	446 (30.7)	0:54
PTDA–My Agreements	420 (28.9)	0:32
Sample PTDA	346 (23.8)	1:16
Videos	278 (19.1)	4:59
Sample Driving Rules	212 (14.6)	0:38
Teen Driving News	104 (7.2)	1:51
PCPs' Role in Teen Driving	95 (6.5)	1:14
Additional Resources	93 (6.4)	0:46
Program Partners	79 (5.4)	0:21
FAQs	41 (2.8)	0:43
About the Checkpoints™ Program	30 (2.1)	0:37
Privacy Information	28 (1.9)	0:31
Contact Us	26 (1.8)	1:09

Abbreviations: GDL, Graduated Driver Licensing; PTDA, parent-teen driving agreement; PCP, primary care practitioner.

[a]Visits include those that bounced immediately off the website. If those visits were not included, the average time spent on each topic would be higher.