Is your older patient at risk?

Evaluation of a web curriculum that educates physicians regarding assessing, counseling, and treating older drivers

Joanne Schwartzberg, MD; Cheryl Irmiter, PhD; Lela Manning, MBA, MPH; Karen Peters DrPH

American Public Health Association
140th Annual Meeting & Expo
San Francisco, CA
October 27 - 31
Presenter Disclosures

Cheryl Irmiter & Karen Peters

(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

Cheryl Irmiter has no disclosures.

CONSULTANCY: Karen E Peters served as a program evaluation consultant at the request of the American Medical Association for this project.
Developed in cooperation with the National Highway Traffic Safety Administration as part of the AMA Older Drivers Project

Special Thanks to Essie Wagner!
Overview

• Objectives
  – Older driver safety awareness
  – Pilot a web based curriculum

• Methods
  – Six pilot sites (n = 260)
  – Primary vs. secondary audience

• Results
  – 89% practice behavior change
  – 86% relevancy to participant's position
Aim: Develop a Web-based Training Program

1. Increase knowledge base on older driver safety
2. Accommodate demand for self-directed training
3. Simultaneously target young physicians in training and those already in practice
4. Eliminate issues with first live train-the-trainer program
   - Labor-intensive
   - Time-consuming
   - Limited reach
   - Expensive
Goals of a Web-Based Course

Objective #1: Reach more than 50,000 physicians over a two year period

Objective #2: Develop and pilot a web-based curriculum for:

- Residents from multiple specialties
- Practicing physicians interested in completing PI CME (course with performance improvement component leading up to 20 AMA PRA Category I credits)
Going Viral: A web curriculum that educates physicians regarding assessing, counseling, and treating older drivers

1. Web-based
2. Self-directed
3. Tools include:
   - Assessments for medical safety to drive
   - Counseling
   - Treatment options
   - Resources
4. Engagement techniques
   - Case Studies
   - Benchmarks of progress
Project Questions:

1. How do the residents, physicians, directors, and/or others evaluate the course?

2. How does each group’s score compare with the other groups with regard to:
   – Evaluation
   – Content

3. What types of practice implementation were completed by the physicians with the learning logs?

4. What was the overall utilization of the course?
Hypotheses:

- Comparable satisfaction scores regarding course content across participants

- Difference in course interest among the groups
  - Increased interest and greater material download rates among residents

- Directors will recognize that the web-course exemplifies training in the ACGME core competencies for residents

- Physicians who engage in PI-CME will be satisfied with the process
Methods: Sample

Pilot project sites → six academic/clinical settings nationwide

- Physician practices
  2 Practices
- Resident programs
  4 University Settings
- Other health care professionals (HCP)

- Internal medicine
- Family medicine
- Geriatrics
- Ophthalmology
- Emergency medicine
- Psychiatry
- Neurology
- Physical Medicine and Rehab
- Other
Methods: Sample Recruitment

1. Pilot Sites:
   - Email
   - Phone calls
   - Flyers
   - Face to face
   - Presentations

2. Incentives for participation
   - Gift certificates/gift cards: local bookstores, Amazon.com, movie theater tickets
   - CME credits
Outputs of the Pilot Project

Web based Pilot Project

- Others evaluation of web based course
- Physician evaluation of web based curriculum
- Pre and post test on Knowledge change
- Resident evaluation of web based curriculum
- Utilization of the web based curriculum
- PI-CME learning logs
- Resident learning portfolio
Methods: Data Gathering

1. Qualitative analysis
   – Residency program director feedback
     • Encourage use of the Learning Portfolio
     • Individual completion of program evaluation
     • End-of-pilot response
   – Ongoing discussion materials

2. Quantitative analysis
   – Pre-Post Tests
   – PI-CME
   – CME
Results: Characteristics of Sample Participants

- Pre and post test (n = 260)

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>149</td>
</tr>
<tr>
<td>Physicians</td>
<td>65</td>
</tr>
<tr>
<td>Health Care Providers (HCPs)</td>
<td>46</td>
</tr>
</tbody>
</table>
Results: Quality of Training

**Q: What do you think about the pace of the course?**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just right</td>
<td>185</td>
</tr>
<tr>
<td>Too fast</td>
<td>2</td>
</tr>
<tr>
<td>Too slow</td>
<td>73</td>
</tr>
</tbody>
</table>

**Q: The course attended to:**

| Clarity and conciseness of content | 91% agree/strongly agree |
| Appeal of learning style | 87% agree/strongly agree |
| Visual interest and engagement | 92% agree/strongly agree |
| Relevance of content to your position | 86% agree/strongly agree |

**Total Minutes to Complete Course**

- 60: 4%
- 75: 10%
- 90: 20%
- 105: 65%
Results: Usefulness of Materials to Enhance Knowledge and Skills

<table>
<thead>
<tr>
<th>Section Questions</th>
<th>Counseling on driver retirement</th>
<th>Case Illustrations</th>
<th>Legal Information</th>
<th>Learning portfolio</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>91%</td>
<td>91%</td>
<td>90%</td>
<td>86%</td>
<td>77%</td>
<td>56%</td>
</tr>
</tbody>
</table>
Results: Materials Most Likely to be Used When Providing Care to Patients

- Medical/medication impact on driving: 45.5%
- Counseling of driving/driving retirement: 39.3%
- Legal and ethical considerations: 36.2%
- Intervention to minimize deficits of driving ability (DRS): 35.8%
- Assessment of driving related (ADRes) battery: 31.3%
Results: Strength of Content

Breakdown of “strongly agree/agree” responses by group

- Address listening, interviewing, and assessment: 95%
- Counseling patients and their families: 95%
- Identifying resources: 93%
- Legal and ethical issues: 92%
- Public health issues: 91%
### Health Professional Confidence and Knowledge

#### Pre/Post Change in Agreement regarding:

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Percentage of Agree/Strongly Agree (n=260)</th>
<th>Results (Mean and p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ confidence in knowledge of how medical conditions and medications may impair a patient’s driving ability</td>
<td>91.6% (26.3% increase)</td>
<td>3.6 to 4.2 (p&lt;0.001)</td>
</tr>
<tr>
<td>✓ confidence in counseling patients who may be medically at-risk for unsafe driving</td>
<td>85.1% (40.8% increase)</td>
<td>3.2 to 4.1 (p&lt;0.001)</td>
</tr>
<tr>
<td>✓ familiarity with driving rehabilitation options available to patients</td>
<td>80.9% (69.9% increase)</td>
<td>2.7 to 4.0 (p&lt;0.001)</td>
</tr>
<tr>
<td>✓ familiarity with state driver licensing reporting laws and regulations</td>
<td>71.0% (40.0% increase)</td>
<td>2.9 to 3.8 (p&lt;0.001)</td>
</tr>
</tbody>
</table>

#### Agreement that the course attended to:

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Percentage of Agree/Strongly Agree (n=260)</th>
<th>Results (F and p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ counseling older patients and their families</td>
<td>95.00%</td>
<td>F=5.620 (p= 0.004)</td>
</tr>
<tr>
<td>✓ Identifying resources</td>
<td>93.50%</td>
<td>F=5.91 (p=.003)</td>
</tr>
<tr>
<td>✓ Identifying and responding to legal/ethical issues</td>
<td>92.30%</td>
<td>F=3.182 (p=.043)</td>
</tr>
</tbody>
</table>
Results: Reported Potential Practice Changes*

*All results significant p < 0.001
Results: Follow Up

<table>
<thead>
<tr>
<th>Course question</th>
<th>Affirmative Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course will change your practice behavior in regards to addressing older driver issues?</td>
<td>89%</td>
</tr>
<tr>
<td>Did you learn specific techniques/tools that will enhance your practice in this area?</td>
<td>87%</td>
</tr>
<tr>
<td>Are you interested in obtaining additional follow-up training?</td>
<td>40%</td>
</tr>
<tr>
<td>Are you interested in completing PI-CME credits?</td>
<td>26%</td>
</tr>
</tbody>
</table>
Results: Open-ended Response

Q: Additional comments on experience with the course?

☑ Good overview, tips, refresher
☑ Information helpful/important to practice
☑ Supplemental material was useful
☑ Need to give topic higher priority in practice/working with older persons
☑ Need to identify local resources
Performance Improvement Continuing Medical Education (PI-CME)

• “I have learned a great deal of information after completing this performance improvement process compared to other activities that I have previously participated in.”

• “Chart audits made me more aware of opportunities for intervention.”
Performance Improvement Continuing Medical Education (PI-CME)

• “I like that I didn’t have to leave my office to participate and could share information with my colleagues and staff almost immediately.”

• “By doing the audits, I feel more confident in making changes, involving staff, and has made the learning process better than other activities I have done in the past.”
Results: Qualitative Feedback

Pilot Sites Lessons Learned

• Incentives worked
• Champions
• Face to face communication with program leaders
• Creative marketing worked
• Blended learning
Qualitative Results: Areas of Interest

- Interventions
- Electronic document of course/certificate
- Specific visual acuity cutoffs for driving
- State specific laws

- More information on local/community resources
- More information on Safety/Adaptive equipment, drivers assessment
- How to contact a DRS
Going Viral: What Will it Take?

Geriatric Competency – set the expected standard

#25. Identify Older Persons at safety risk including unsafe driving and develop a plan for assessment/referral.

Williams, BC et al. (9/10) Medicine in the 21st Century: Recommended essential geriatric competencies for Internal Medicine and Family Medicine Residents. Journal of Graduate Medical Education

Marketing Strategies
  • Residents
  • Practicing Physicians
Closing Comments

“It is very useful and we barely have time to assess elderly drivers. Our clinic is busy, time is limited, government is not paying for [the] assessment. I believe this study will alert legislators to the importance of this topic and to bring it to the frontline. This is as important as vaccine history, osteoporosis, memory evaluation etc., but even geriatricians are not doing it.”

“This course was well-designed and would likely benefit both clinicians experienced in counseling older drivers, and also those clinicians with little or no experience in this regard.”
Questions?

Thank you for your kind attention

*Medical Fitness to Drive* will be available this fall at:  
[www.ama-assn.org/go/olderdrivers](http://www.ama-assn.org/go/olderdrivers)

Cheryl Irmiter, LCSW  
[Cheryl.Irmiter@ama-assn.org](mailto:Cheryl.Irmiter@ama-assn.org)

Joanne Schwartzberg, MD  
[Joanne.Schwartzberg@gmail.com](mailto:Joanne.Schwartzberg@gmail.com)