

Attachment 13. Web Survey Question Categorization

Research Question	
Key topic: Challenges that Rural Clinicians Face in Diagnosing and Managing TBI across the Severity Spectrum	
Web survey Question	Purpose
Q7: What is the State and County in which you practice <i>most</i> of the time (e.g., more than 50% of your time)?	All research questions under this key topic will utilize the results of this question. This information will be used to classify respondents into either “urban” or “rural” for analysis
Q9: In the past 12 months, have you evaluated any patients to determine whether they experienced a TBI? For this question, please consider all levels of severity of TBI.	All research questions under this key topic will utilize the results of this question. This question will allow us to separate providers who have seen patients with TBI in the past 12 months from providers who haven’t when assessing challenges; providers who have seen cases in the past year can be assumed to have more experience with this issue.
Q10: What is the approximate number of patients you diagnosed with TBI in the previous 12 months?	All research questions under this key topic will utilize the results of this question. Similar to Q9, this question is asked to assess the level of experience that providers have with TBI. The more patients a provider has seen, the more knowledge they will have about the challenges in treating these patients. Plus, this question will tell us an average number of TBI patients that a provider sees by rurality/urbanity.
<i>Research Question: What challenges exist for [urban/rural] providers as they relate to access to services following TBI (across the spectrum of TBI severity)?</i>	
Web survey Question	Purpose
Q11: What percentage of your mild TBI patients present on the day of the injury or the following day? Q12: How many of your patients with mild TBI do you refer to a specialist (e.g., sports medicine clinic, trauma clinic, neurologist) after their initial visit? Q13: In the past 12 month, how often did you continue to manage a mild TBI patient who may have benefited from referral to a TBI specialist (e.g., sports medicine clinic, rehabilitation, state services, trauma clinic, neurologist), but you did not refer due to barriers to access? Q14: What are the main reasons you refer a mild TBI patient?	This series of questions allows us to see the percentage of TBI patients that delay care, the proportion that a provider refers out, the reasons for referral/non-referral, and whether this differs by urban/rural; it is possible that a lack of resources or specialists nearby (which may be more of an issue in rural than urban areas) may prevent patients from quickly seeking care or the provider from referring the patient out for specialized care.

Attachment 13. Web Survey Question Categorization

Q15: What are the main reasons you do not refer mild TBI patients?	
Q16: How far away are the nearest specialists who are able to provide follow-up care for patients with mild TBI? Q17: Of your patients with mild TBI who require follow-up care, how often do they return to the clinic or see specialists as recommended? Q18: Which of these services are available in your community to support persons living with mild TBI?	These questions will help determine if the distance to specialists (where follow-up care may occur) differs between rural and urban settings, whether there are difference in terms of who follows up when referred, and whether there are TBI-supportive services in the community. If the specialists are generally farther in rural settings and therefore these patients are less likely to return for follow-up care, for instance, this creates a challenge in effectively diagnosing, treating, and managing TBIs.
<i>Research Question: What obstacles do [urban/rural] providers see in their patients/community to either obtaining initial care following a TBI or for getting follow-up care?</i>	
Web survey Question	Purpose
Q19: Please consider the list of challenges below that patients may experience when seeking the help they need to recover from mild TBI. Select the percentage of your patients with mild TBI who experience each type of challenge.	This question looks at the challenges question from the patients' perspective. Are there patient-level barriers to getting adequate TBI care? This question will also allow us to see whether these variables are more prominent in urban or rural areas.
<i>Research Question: What TBI-related information is lacking among [rural]/urban health care providers?</i>	
Web survey Question	Purpose
Q31: How confident are you in your ability to: diagnose a mild TBI, treat prolonged postconcussive symptoms, identify risk factors for prolonged symptoms	This question lets us assess how confident clinicians are in diagnosing and treating TBI. If we find that there are urban/rural differences in confidence, it will be clear that information is lacking in a certain area. For example, if we determine that rural providers are not confident in their ability to treat prolonged postconcussive symptoms, we can work on creating some materials for dissemination that can educate them on this process.
Q32: How familiar are you with the following tools that focus on TBI diagnosis or management?	Similar to the question above, responses to this question will allow us to see whether familiarity with these important TBI tools vary by urban/rural. If one group is not familiar with the PCSS, for example, and research shows that this scale aids in accurate concussion diagnosis, we can help create educational dissemination materials about it.
<i>Research Question: Do rural and urban providers know and follow their state policies on Return to Learn (RTL) and Return to Play (RTP) following a TBI?</i>	
Web survey Question	Purpose

Attachment 13. Web Survey Question Categorization

<p>Q22: Consider the pediatric patients that you have diagnosed with TBI in the last 12 months. When treating these patients, how often have you engaged in an on-going collaboration with school personnel to manage their return to school after their injury?</p>	<p>This question assesses providers' experience of RTL/RTP policies and whether their care of TBI patients typically cover RTL/RTP issues. These questions will also allow us to analyze whether awareness or incorporation of RTL/RTP into care varies by urban/rural.</p>
<p>Key Topic: Develop a Knowledge Base to Address Gaps in Services to Improve Clinical Care</p>	
<p><i>Research Question: What resources are needed for [rural/urban] providers to improve their TBI-related practice, including any training and decision support tools?</i></p>	
<p>Web survey Question</p>	<p>Purpose</p>
<p>Q20: Please rate your familiarity with the following: (state's youth sports concussion policy, return-to-school protocols, TBI symptoms checklists, etc.)</p>	<p>This question assesses providers' familiarity with a list of TBI awareness, diagnosis, and management tools. It will allow us to assess whether familiarity with these tools varies by urban/rural.</p>
<p>Q21: What best describes your recommendation for someone returning to activity in the short-term after experiencing a mild TBI?</p>	<p>This question measure respondents' knowledge about current return-to-activity best practices and will help determine which information/knowledge is lacking based on their responses. This question will help us determine how knowledge varies by urban/rural and what sorts of trainings are most needed in each community type.</p>
<p>Q23: Does your practice or clinic have an electronic health record (EHR)? Q24: Is a decision support tool integrated into your EHR to help diagnose and treat TBI?</p>	<p>These questions will allow us to see how many rural health care providers (compared to urban providers) have access to EHR and whether this correlates with other challenges listed. This will also allow us to see which information is lacking. We anticipate much less access to EHR and decision support tools among rural providers would could hamper them in patient follow-up and referral.</p>
<p>Q25: Do you use a validated symptom inventory during your evaluation of a mild TBI? Q26: Does your hospital, practice, or clinic have discharge instructions specifically for mild TBI?</p>	<p>Validated symptoms inventories and discharge instructions are a useful resource to help providers diagnose patients with TBI and manage the treatment and follow-up care of their patients. A lack of such a tool and instructions would be an area for improvement. These questions will show us whether the frequency of availability of such tool varies by urban/rural.</p>
<p>Q27: Do you believe that you have had adequate training to address the needs of patients with mild TBI? Q28: How often do you receive continuing education about mild TBI?</p>	<p>This series of questions gets at what kind and how much of TBI-specific training the providers have had and what types of training they would like to receive in the future. Answers to these questions will allow us to</p>

Attachment 13. Web Survey Question Categorization

<p>Q29: Where have you receive continuing education about mild TBI? Q30: Do you feel like you need additional education or training specific to mild TBI?</p>	<p>analyze whether previous training varies by urban/rural and whether there are urban/rural differences in types of training that are needed in the future.</p>
---	--