Emergency Medical Service, Nursing, and Physician Providers' Perspectives on Delirium Identification and Management

Michael A. LaMantia, MD, MPH,[1,2] Frank C. Messina,MD,[2,3] Shola Jhanji, MA,[4] Arif Nazir, MD,[2] Mungai Maina,[1] Siobhan McGuire, MPhil.,[1] Cherri D. Hobgood, MD,[3] Douglas K. Miller, MD[1]

1. Indiana University Center for Aging Research and Regenstrief Institute, Inc., Indianapolis, IN

2. Department of Medicine, Indiana University School of Medicine, Indianapolis, IN

3. Department of Emergency Medicine, Indiana University School of Medicine, Indianapolis, IN

4. Indiana University-Purdue University, Indianapolis, IN

Corresponding Author:

Michael LaMantia, MD, MPH

410 West 10th Street, Suite 2000

Indianapolis, IN 46032

Tel: 317-274-9139

malamant@iu.edu

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ABSTRACT:

Purpose of the Study: The study objective was to understand providers' perceptions regarding identifying and treating older adults with delirium, a common complication of acute illness in persons with dementia, in the pre-hospital and emergency department (ED) environments.

Design and Methods: The authors conducted structured focus group interviews with separate groups of emergency medical services (EMS) staff, emergency nurses, and emergency physicians. Recordings of each session were transcribed, coded, and analyzed for themes with representative supporting quotations identified.

Results: Providers shared that the busy ED environment was the largest challenge to delirium recognition and treatment. When describing delirium, participants frequently detailed hyperactive features of delirium, rather than hypoactive features. Participants shared that they employed no clear diagnostic strategy for identifying the condition and that they used heterogeneous approaches to treat the condition. To improve care for older adults with delirium, emergency nurses identified the need for more training around the management of the condition. EMS providers identified the need for more support in managing agitated patients when in transport to the hospital and more guidance from emergency physicians on what information to collect from the patient's home environment. Emergency physicians felt that delirium care would be improved if they could have baseline mental status data on their patients and if they had access to a simple, accurate diagnostic tool for the condition.

Implications: EMS providers, emergency nurses, and emergency physicians frequently encounter delirious patients, but do not employ clear diagnostic strategies for identifying the condition and have varying levels of comfort in managing the condition. Clear steps should be taken to improve delirium care in the ED including the development of mechanisms to communicate patients' baseline mental

status, the adoption of a systematized approach to recognizing delirium, and the institution of a standardized method to treat the condition when identified.

KEY WORDS:

Delirium, Dementia, Focus Groups, Geriatrics, Emergency Department

INTRODUCTION

In 2009, American emergency departments (EDs) provided care to an estimated 19.8 million older adult visitors.(Pines, Mullins, Cooper, Feng, & Roth, 2013) Older adults' visits to the ED have been described as more challenging, costly, more resource-intensive, and longer than visits by younger adults.(Baum & Rubenstein, 1987; Carpenter & Platts-Mills, 2013; Lowenstein, Crescenzi, Kern, & Steel, 1986; Miller et al., 2011) And while younger adults may possess the cognitive reserve necessary to interact with a new set of providers while suffering from an acute illness, older adults with dementia may not be able to either participate in the development of their plan of care within the ED or worse, understand the many interactions with providers that occur during the course of a visit to a busy ED. Persons with dementia are recognized to have higher rates of ED use and hospitalization than persons with normal cognition(Grober, Sanders, Hall, Ehrlich, & Lipton, 2012; Phelan, Borson, Grothaus, Balch, & Larson, 2012; Stephens, Newcomer, Blegen, Miller, & Harrington, 2012; Zhao, Kuo, Weir, Kramer, & Ash, 2008) and are particularly vulnerable during episodes of acute illness. Acute illness in persons with dementia may precipitate the development of delirium, a common complication that is characterized by inattention and a fluctuating course.(American Psychiatric Association. & American Psychiatric Association. Task Force on DSM-IV., 1994)

Delirium affects approximately 7 to 10% of older adults who are evaluated in the ED (Lamantia, Messina, Hobgood, & Miller, 2014) and places patients at higher risk for institutionalization, hospital readmission, long-term cognitive impairment and death.(Lewis, Miller, Morley, Nork, & Lasater, 1995; Naughton, Moran, Kadah, Heman-Ackah, & Longano, 1995; Pandharipande et al., 2013; Witlox et al., 2010) Older adults who are discharged from the ED with undetected delirium die at higher rates than patients whose delirium is detected.(Kakuma et al., 2003) As a result, delirium is now recognized as a

major threat to the health of older adults and early detection is believed central to improving the management and patient outcomes associated with this serious condition.(Carpenter et al., 2011; Kakuma et al., 2003; Monette et al., 2001)

Delirium remains, however, an under-recognized condition in many clinical settings. Within the ED, delirium identification rates have remained consistently low (approximately 17% to 35%) across time and geographic settings.(Han et al., 2009; Lamantia et al., 2014; Lewis et al., 1995) These persistently low rates suggest a lack of improvement in recognizing the condition despite considerable recent attention in the literature. Prior studies investigating delirium recognition rates have relied largely upon chart reviews, a practice that has been shown to be inaccurate compared to direct query of providers.(Callahan, Dittus, & Tierney, 1996; Chisholm, Weaver, Whenmouth, Giles, & Brizendine, 2008) Uncertainty over whether emergency providers in fact recognize delirium among older adults but fail to document its presence is an important problem because it confounds our ability to improve the evaluation and management of this condition.

To our knowledge, no research has evaluated the facilitators and barriers to delirium identification as perceived by providers in the pre-hospital or ED environments, despite calls by to national organizations to improve its identification.(Carpenter et al., 2011; Rudolph, Boustani, Kamholz, Shaughnessey, & Shay, 2011) Further, we are not aware of prior research that has evaluated these providers' comfort with the identification of delirium in the older adult population or their opinions of what steps might be needed to improve care for older adults with delirium in the ED. As a result, we conducted structured, focus group interviews with emergency medical services (EMS), emergency nursing, and emergency physician providers to understand medical professionals' experience with, barriers to, and strategies for identifying and treating older adults with delirium in the pre-hospital and ED environments.

DESIGN AND METHODS

Study Design

We conducted a series of semi-structured focus group interviews, a qualitative research approach, with study participants. Each focus group interview was audiotaped, transcribed and coded. This study was approved by the Indiana University Institutional Review Board. All study participants provided signed informed consent for their participation.

Study Setting and Population

Our study was conducted with three groups of medical professionals engaged in emergency care: physicians, nurses, and EMS providers. We conducted two focus groups with emergency medicine physicians and two focus groups with nurses. Both groups provide care to patients through the Indiana University Department of Emergency Medicine at two hospitals, Wishard Hospital (now known as Eskenazi Health) and Indiana University Health Methodist Hospital in Indianapolis, Indiana. Collectively, these EDs receive transfers from more than 50 nursing homes in the Indianapolis area and are the two busiest EDs in Indiana. They have a total of approximately 200,000 patient visits each year, including over 20,000 annual visits by older adults. In two additional focus groups, we interviewed EMS members who work for Indianapolis Emergency Medical Services. This group provides the 911 emergency ambulance services to the city of Indianapolis and surrounding townships, as well as transports between nursing homes and EDs. Participants for these focus group sessions were recruited by e-mail solicitation, face-to-face inquiries, and announcements made at faculty and staff meetings.

Study Protocol

Prior to our first focus group session, we developed an interview guide to structure the discussions. A list of the questions used in our focus group sessions are noted in Table 1. Each focus

group session was led by a focus group moderator (ML) who was assisted by a second member of the research team (FM). Participants were provided with a complimentary meal for their participation in the study.

Measurements

In our work, we were interested in the perspectives and opinions of our focus group participants on the identification and management of older adults with delirium in the acute care environment. Before the start of the focus group sessions, we decided a priori to explore the following themes with our study participants: (1) providers' strategies used to identify delirium, (2) barriers to delirium identification, (3) facilitators to delirium identification, and (4) provider comfort with identifying delirium in older adults. Although it was our intention to focus discussion around these areas of study, participants were encouraged to discuss any other related topics of interest that emerged during the course of the interview sessions.

Data Analysis

We evaluated our data using a general thematic analysis.(Braun & Clarke, 2006) Each interview was analyzed by a reviewer (SJ), while a second reviewer (ML) oversaw coding and theme development to ensure validity. First, each interview was transcribed verbatim. Transcripts were then coded line by line to ensure that as much useful information was extracted as possible. Focus coding was also used to draw out emerging themes, and to highlight important quotes. Next, memos were developed that allowed us to ascertain themes that developed as the focus group sessions were examined.

RESULTS

We conducted six focus groups with a total of 31 providers. Table 2 lists the professions of our study participants for each focus group session. Participation by the professionals was balanced across

the three disciplines: 11 nurses, 11 EMS providers, and 9 physicians participated. Seven themes emerged from the initial analysis of these recorded interviews; four of these themes were subsequently merged together into two larger themes given their overlapping content. These themes and supporting quotations from focus group participants are detailed below.

Impressions of Caring for Older Adults with Delirium in the Emergency Department

Providers identified that caring for older adults with delirium was challenging in the ED. Several focus groups expressed that the greatest challenge to recognizing and treating delirious older adults in the ED was the ED environment itself. The following quote from a physician is representative: "The biggest challenge is the Department. You've got limited time and resources to dedicate to one patient at one moment in time. Period. You've got a static snapshot of a dynamic disease or process. The way that departments are across the country, ours no exception, is that will be the greatest challenge for any ED physician, right, is the actual physical department and the challenges based on patient flow and numbers."

Providers agreed that the ED environment not only affected diagnosis of the delirium, but also the management of the condition. One nurse stated, "I think [delirium is] difficult to manage in the emergency because it's not a controlled environment." According to our participants, the busy ED environment can also constrain nurse's options for managing the condition. One nurse related, "Days like today, for example, I can see us, like, maxing out those prns just to keep them in that bed, because you have too many other patients." This dynamic can challenge staff and cause staff to interact with older adults with delirium in less than ideal ways, as one nurse explained: "Or you hear the nurses across the room, three of them at once yell, 'Get back in bed.' And that's not really therapeutic for [the patient]."

Defining Delirium

When asked to describe delirium, many participants provided short descriptions of patient behavior including: “confused,” “combative,” “agitation, confusion, inability to focus or to respond appropriately.” Other respondents described conditions that could precipitate delirium including alcohol or drug use and infections, particularly urinary tract infections. One nurse responded with a brief description of one particular form of delirium followed by her approach towards management: “ICU psychosis, get ‘em out of the department before it sets in.” And while many of the providers’ descriptions of delirium were of hyperactive features of the condition, not all were. At least one physician described a patient who displayed features of hypoactive delirium: “The patient who is having trouble staying, you know, attending to your questions and is falling asleep, not falling asleep, but seems lethargic and is unable to respond.” And while participants generated descriptions of many of the features of the delirium, no respondent provided a comprehensive depiction of the condition that approximated the DSM IV or V definition of delirium.

Barriers to and Strategies for Recognizing Delirium

When asked to speak about challenges in recognizing delirium, emergency physicians, ED nurses, and EMS personnel all stated that delirium recognition can be seriously hampered by not having a sense of the baseline cognitive state of the patient, particularly among those with pre-existing cognitive impairment. Often this information can be provided by family members or friends as one EMS provider described: “If there are family and friends on the scene, too, kind of separating the two and trying to figure out. Cause the patient you know may provide you with a solid argument that they’re fine and their mental status is fine, but then the family member is like, you know, ‘You’ve got to listen. Like this is not how they are reacting.’ So, sometime getting, you know, like I mentioned, using the friends and family to your advantage to figure out what the situation is.” Emergency physicians and nurses both expressed frustration at the difficulty in obtaining a patient’s cognitive status once they

arrived in the ED, particularly if the patient came from a nursing home. As one nurse stated, "Well, the lack of history. It's a big [challenge]. To me anyway, cause you get a lot of them, they just come in and you have no --- you have what they can tell you but you don't know how reliable that is. Is this their baseline?" As a physician elaborated when asked this question:

> The other negative line that I know that we've all had at some point is the nursing home resident who's older and non-communicative, non-communicating who comes in for an "altered mental status" and then you don't know what her baseline is, there's very little in the documentation of what the change in mental status is, just "altered." You know, you end up spending a fair amount of time trying to figure out even through the old records or calling the nursing home to figure out ok, what is it that's changed today. To figure out, well, how aggressive do I need to be in my work-up? Cause you know if you're like this all the time, we probably don't need to do anything…

One physician offered up practical solutions to this phenomenon, calling for his EMS colleagues to do a better job of establishing patient's baseline status and the development of check-lists that could better communicate this information:

> One of the most difficult things is trying to get EMS people to do a good job of asking the caretakers what their [the patient's] personal best is, because I'm always left with a patient who truly is altered but I doubt has, is oriented x 3 on a good day. And so, I'm talking to you about some challenges, but one of them would be having some sort of a record or easy check-list that people in nursing homes could provide us to say, this is their baseline.

Nurses identified that they use other clues beyond an established baseline to raise their suspicion for delirium. Some nurses stated that they look for new symptoms or illnesses that might

predispose patients to becoming delirious: “Anybody with a UTI” or “High fever.” Other nurses stated that they ask patients routine questions to see how well they are oriented to their environment and situation. Still, other nurses stated that they relied upon odd behavior to cue them into the presence of delirium: “Sometimes, it’s just their behavior. You look across the room and you see ‘em making their bed or up walking around the side and looking under it. Taking their clothes off.”

Physicians, while aware of delirium and the need to obtain patient’s baseline cognitive status, were very clear that they did not employ a strategy to aid in its identification. This exchange among a group of physicians in the first of our two physician focus groups is representative:

> Doc 1: I don’t use any [strategy]. To be honest, not one. Not a single one that I, cause as I thought of this focus group, I’m like, I just, I assume I’m just using clinical gestalt and acumen. But I don’t do anything, you know, I don’t, I used to do occasionally a mini-mental status, but I don’t do that. You know, it takes too long. I don’t do a screening test. I don’t do squat, I just don’t. Unfortunately.
>
> Doc 2: Unfortunately, I agree. It’s almost exactly the same concept I had when looking at this. Just going, well, I don’t think I have any strategy. Maybe I can learn something here. Maybe there are some strategies cause I’m probably not diagnosing delirium as much as I should.
>
> Doc 3: Yeah, the ones I can diagnose are the ones that the janitor will tell you –
>
> Doc 2: Yeah, right the medical student can say, ‘Hey you’re delirious.’ So, I’m hoping to get something from this.

> Doc 4: I agree, I don't have a strategy except clinical gestalt and using you know four, four or five questions to test their memory. You know, instant recall, remote memory. I mean, I think like I'm aware of the mini mental, that it takes 10 minutes to administer that. I think it probably takes longer to use the CAM test or the CAM-ICU test…
>
> Others: I knew there were tests. [Laughing] Somewhere in med school.

A physician expanded on this idea by clarifying that his approach to delirium identification was largely dependent on the patient deviating from the physician's expectation of him or her:

> The agitated patient. I mean, things that get your attention. So, an agitated patient. The patient that says something that is outlandish. Or, something that's clearly nonsensical. Those are the things that I think probably are the easiest to pick up, those are the most obvious… I mean, if you're good at it, and I'm not, if you've got some suspicion that somebody's not quite functioning properly, then just questioning will usually get you there. Why are you here today? Where are you? And letting them talk and watching them confabulate or watching them create a dialogue that makes no sense at all. But, you know, probably, at least from my standpoint, it all depends on what I think when I go in the room, which is probably wrong. You know, if this patient is billed as something, and I go in the room, and they're, yeah, that looks right. Probably, I'm done.

In our second physician focus group, the physicians were equally clear that they employed no coherent strategy to identify delirium. When pressed to name a strategy, this exchange occurred:

> Doctor 1: [Physician simulated a shotgun noise] I mean, when in doubt, you're going to work them up. So, when you don't have, you can't find that information or you don't have time to find that information a lot of times, you'll launch into a work-up to try and make sure there's no reversible causes or medical things that are contributing to the situation.
>
> Moderator: Do you use any screening instruments at all?

Doctor 4: Accucheck. [laughing]

Moderator: Accucheck. Ok.

Doctor 5: Vitals or MMSE?

Moderator: MMSE or any other cognitive tests?

Doctor 5: I don't, I don't.

Doctor 1: Every once and a while, I'll do the 3 item recall. Maybe, when I say every once in a while, I mean maybe like three or four times, I can count the number of times in one year on one hand. So, it's not that often.

Physicians reiterated though that easily accessible information, either from family or nursing home staff, on the patient's baseline mental status can be the most helpful to them in recognizing and diagnosing delirium among older adults.

Comfort with and Strategies for Treating Delirium

When asked about their comfort in treating delirious patients, EMS and physician focus group participants' responded that they felt very comfortable. As one EMS provider stated, "I mean, we are pretty much comfortable in any situation you put us in. We have to be." One physician stated clearly that he was very comfortable in treating evident delirium, but simultaneously aware that he was not identifying all delirium cases: "Well, I think the point to go at is that I think all of us in the room is that we're comfortable with obvious delirium. We're all petrified, and we, at least I know my own limitations is that I guarantee you I'm missing patients who have it. And so what would make me comfortable is that when you come back to me and you said, hey we've got a thirty second test that is pretty good at screening for delirium. That's what would make me comfortable. "

On the other hand, nurses admitted to more discomfort with treating delirium. Some nurses stated that treating physicians would prescribe multiple medications on a prn basis with overlapping indications leaving them unsure of which medication to choose. Still, other nurses admitted to feeling

overwhelmed by the burden of caring for an older adult with delirium in the busy ED environment. The following quote is representative of this sentiment, "I think it's difficult to manage in the emergency because it's not a controlled environment and you always get new patients and there's stuff going on, and it takes a lot of manpower when you have somebody that's trying to get off the bed or is needing things constantly or you're having to spend a lot of time trying to, you know, make them safe or help them calm down."

Strategies for managing delirium varied by profession of the focus group participant. One EMS provider stated that his approach was to "try not to do anything to upset them." In a similar vein, nurses' approach reflected the close, personal nature of their frequent interactions with their patients. As one nurse offered, "Consistency. And usually, they'll pick up at least on your face." Another nurse stated, "Reassurance is a lot of it…just constantly reassure them that they're, you know, they're in a safe environment of we're going to take care of you." Still, other nurses emphasized that they felt a key priority in delirium management was keeping the patient safe. Doctors identified a range of options to manage patients with delirium, including medications, restraints, and the engagement of families. As one physician stated, "One thing that we probably don't do enough of…is sometimes when family members show up too, you don't have to sedate them."

Steps Needed to Improve Care for Older Adults with Delirium

Participants felt to varying degrees that more education was needed around delirium for emergency providers. According to our participants, any education that providers had previously received had been provided rarely in a formal venue and was more often obtained on the job. Nurses in particular asked for more education, whether this was in the form of an "in-service" education session that could provide a brief overview of the condition or more guidance on the use of medications used to treat delirium. EMS crews asked for more support in managing agitated and delirious patients during the ambulance ride to the ED as well as guidance from ED staff on what information they should collect

from the patient's home environment. Physicians felt that more attention could be directed towards obtaining and communicating patients' baseline mental status at the time of their arrival in the ED. As one physician directly stated, "Obviously, EMS gets history, they're probably our best help out there to get the history, which is what we really need."

Beyond these suggestions, both physicians and EMS staff stated that more effort could be devoted towards the development of simple tools to help them diagnose the condition. As one EMS provider stated, "We are a group that likes tools." One physician went further to detail the characteristics of such a tool, "One, it has to be easy to administer. And then after that, it had to make our lives easier. And it's not because we're selfish, but because, if it doesn't, it will be forgotten…So you need to have one of the big three things that make us move which is treatment, diagnosis, or disposition." Other physicians stated that the tool had to be "physician proof," simple to document, not open to interpretation, brief to administer, and "better than our judgment."

DISCUSSION

We present a novel, qualitative evaluation of the opinions of EMS staff, nurses, and emergency physicians regarding their experiences with, barriers to, and strategies for identifying and treating delirium in the ED, a common complication of the care of persons with dementia. During our conversations with these providers, our focus group participants identified several barriers to improving delirium care but also generated several ideas to improve care that merit further development and investigation.

Providers who work in the pre-hospital and ED environments believed that they interact routinely with delirious individuals and were able to name several of the features of delirium. Descriptions of the older adult with delirium were often focused on the hyperactive features of delirium and not of the hypoactive features. Older adults with hypoactive delirium are known to be less

frequently recognized by emergency physicians(Han et al., 2009) and patients who are discharged from the ED with their delirium undetected have been observed to have higher 6 month mortality rates than patients whose delirium is detected.(Kakuma et al., 2003) Further, patients with hypoactive delirium have been observed in other settings to have higher mortality rates than patients with either hyperactive or mixed delirium.(Bellelli, Speciale, Barisione, & Trabucchi, 2007; Kiely, Jones, Bergmann, & Marcantonio, 2007) Providers shared with us that their approach is not standardized and relies on identifying obvious, often hyperactive, cases of delirium or is dependent upon obtaining a history that is either not provided on the patient's transfer to the ED or can only be obtained from family members who are not present. All of this, of course, is made more challenging because the evaluation of delirium occurs in a busy department were providers are under time pressure and almost always managing multiple patients at once.

Emergency providers reported varying levels of comfort in treating delirium among older adults in the ED. To our knowledge, this is the first report of these types of data for the ED in the literature. Providers' approach to managing and treating delirium varied according to their role, with EMS providers' and nurses' approach relying upon face-to-face interaction with the patient to control their behavior and physicians' approaches centered on medications, use of restraints, and engagement of patients' families. Notably, nurses reported that they feel that physicians often leave them with too many medication choices to address patients' delirium and could use more education in this regard. In our local environment, no delirium management protocols exist, though delirium management programs have been developed for use in other areas of hospitals that have proven successful at improving patient-oriented outcomes.(Flaherty et al., 2010; Flaherty et al., 2003; Inouye, Bogardus, Baker, Leo-Summers, & Cooney, 2000)

When asked to provide us with suggestions for how delirium care might be improved in the ED, emergency nurses stressed their desire to receive further training surrounding the condition. While education may be necessary to improve care around the condition, it alone may not be sufficient.(Davis, Thomson, Oxman, & Haynes, 1995; Smith, 2000) Physicians and EMS personnel called for the development of short tools that aid in its identification and described several desirable attributes of such a tool if it is to be useful in the ED. A previous systematic review conducted through 2013 has shown that few delirium identification tools have been tested in the ED,(Lamantia et al., 2014) though further work has been done in in the interim on the development of promising new tools and processes to identify delirium in the ED.(Han et al., 2013)

From our discussions with emergency providers and a review of the literature to date in delirium identification, it is possible to outline several possible steps that will be needed to improve the care of delirium in the ED. First, mechanisms will need to be developed, refined, and disseminated that improve the communication of baseline mental status when patients seek care in the ED. This need has been previously identified(Terrell et al., 2005) and some progress has been made in developing tools to aid in this communication process.(Ouslander, Bonner, Herndon, & Shutes, 2014) Next, EDs will need to adopt a systematic approach to identifying the presence or absence of delirium, rather than relying upon clinician intuition or gestalt to recognize it. While timely evaluation and stabilization of the patient's acute medical condition should be a priority, many patients may survive an episode of critical illness, but are left with long-term cognitive impairment, the severity of which is made worse by the development and duration of delirium,(Pandharipande et al., 2013) highlighting the needs for prevention, recognition, and early treatment. Finally, treatments for and, though not discussed by our study participants, strategies to prevent the development of delirium in the ED will need to be established. If interventions for delirium prevention are started early in a patient's hospitalization, particularly among those patients believed to be at moderate to high risk for the development of

delirium, there is evidence that the rate of delirium development and days spent with delirium can be reduced.(Inouye et al., 1999) Given that the ED serves as the starting place of care during many critically ill older adults' hospitalizations, it makes logical sense to expend greater effort on the identification of those patients with or at risk for the development of delirium earlier in the course of their hospitalizations.

Our study has several limitations that should be noted. First, our work was conducted with staff at a single academic emergency medicine program and with members of one EMS group. This may constrain the generalizability of our findings. Still, our physicians and nurse participants work at the largest two EDs in our state and our EMS participants provide services across the entire city of Indianapolis, a large metropolitan area. Next, our study participants represent a convenience sample as we did not survey the opinions of every provider who works in our pre-hospital and ED environments. In our interviews, we did however provide adequate time for all focus group participants to express their opinions on delirium identification and management as well as speak about other relevant topics that arose during conversation. Finally, our work did not query patients or patients' caregivers about their experiences related to delirium identification and management in the ED. These experiences are important and will need to be explored in future work.

In summary, delirium is a life-threatening condition associated with multiple adverse outcomes that frequently goes unrecognized in the ED. Our work shows that there are numerous barriers and facilitators to the improved identification and treatment of delirium in the ED. In reviewing the literature and in reflecting on the statements of our focus group participants, it is possible to identify potential strategies to improve delirium identification and management, including the development of mechanisms to better communicate patients' baseline mental status, the adoption of a systematized approach to delirium recognition, and the institution of a standardized method to treat delirium once

identified. The efforts of emergency providers, geriatricians, brain scientists, and implementation experts will be needed to further develop and test these responses to this challenging clinical condition.

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Table 1: Focus Group Questions*

Focus Groups Question Guide
Introductory: 1. Tell me about a memorable interaction you've had with a senior in the ED. 2. When you hear the word delirium, what comes to mind? Transition Questions: 1. Tell me about the last time you interacted with a delirious patient. 2. How do you deal with patients with delirium in the ED? Key Questions: 1. What strategies do you use to identify patients who are delirious in the ED? 2. What factors make identifying patients with delirium easier? 3. What factors make identifying patients with delirium harder? 4. How has your training prepared you to identify delirious patients? 5. How comfortable do you feel treating someone who is delirious? 6. What would make you feel more comfortable? Ending Questions: 1. We are going to be putting together a program to improve recognition of delirium in the ED. As we begin this project, what advice do you have for us? 2. Have we missed anything that someone would like to add about this topic?

*Additional questions were not excluded, if they arose during the course of the interviews.

Table 2: Focus Group Participants

Participant Category	**Focus Group 1**	**Focus Group 2**	**Focus Group 3**	**Focus Group 4**	**Focus Group 5**	**Focus Group 6**
Physician	0	0	0	0	3	6
Nurse (RN, LPN)	8	0	3	0	0	0
EMS provider	0	7	0	4	0	0
Total (n)	**8**	**7**	**3**	**4**	**3**	**6**

RN=registered nurse; LPN=licensed practical nurse; EMS=emergency medical services