

RESEARCH REPORTS

# ASSESSING PARAMEDICS' PERSPECTIVES ON AN EMERGENCY DEPARTMENT VIRTUAL OBSERVATION UNIT FALL PREVENTION PROGRAM

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## Abstract

*Introduction:* Falls are the leading cause of fatal and nonfatal injury for older adults. We created the Emergency Department Virtual Observation Unit (EDVOU) to provide observation level care for older ED patients in their homes and better assess their fall risks. Mobile integrated health (MIH) paramedics visited patients' homes where they conducted a multicomponent fall evaluation and facilitated an emergency medicine telemedicine consult. We aimed to understand paramedics' experiences in our EDVOU Fall Program.

*Methods:* We conducted a qualitative study through semi-structured interviews of EDVOU Fall prevention paramedics to determine how comfortable they were with implementing the EDVOU fall program. Interviews were transcribed, independently reviewed by multiple team members, and subsequently coded into themes.

*Results:* Fifteen of thirty-six (42%) paramedics were interviewed. Three main themes emerged: 1) learning new skills otherwise not included in paramedic training, 2) having unique perspectives and interactions with patients in the home environment where most other clinicians do not have insight, and 3) being more integrated in a team to play a bigger role in patient care.

*Discussion:* MIH paramedics had an overwhelmingly positive experience with the program. Paramedics felt they played a pivotal role in fall prevention, as the program allowed them to learn more skills, form and share unique relationships and clinical perspectives given their role, and feel more valued as part of a patient team/care continuum. Paramedics' unique role of entering the home to provide medical care are an untapped resource in preventative care, particularly as part of a virtual fall program.

## INTRODUCTION

Falls are the leading cause of fatal and nonfatal injury as well as injury-related death for adults 65 years or older, with approximately 1 in every 4 older adults reporting a fall every year and around half being recurrent falls (Akyol, 2007; "Centers for Disease Control and Prevention, National Center for Injury Prevention and Control," n.d.; R. Kakara et al., 2023; R. S. Kakara et al.,

2024). Furthermore, older adults have the highest risk of serious injury or death following a fall (Falls, n.d.). Of the estimated 2.4 million Emergency Department (ED) visits and >700,000 hospitalizations from injury mechanisms among adults 65 years old, unintentional falls accounted for 91.8% of incidences (Moreland & Lee, 2021). Despite the frequency of falls and ample ED opportunities to prevent their recurrence, fall risk is rarely assessed in the ED (Davenport, Alazemi, et al., 2020; Tirrell et al., 2015). A study found that physicians and advanced practice providers felt they lacked adequate time in the ED to assess for fall risks due to limited resources and ED crowding (Davenport, Cameron, et al., 2020).

Telehealth/Mobile Integrated Health (MIH) programs present an emerging option for assessment of fall risks (Jiang et al., 2025). We created the ED Virtual Observation Unit (EDVOU) in January 2022 to provide observation level care for ED patients in their homes (Harper et al., 2021; Hayden et al., 2024). Within the EDVOU program, a pilot falls prevention program was created to better assess and manage fall risks for older patients. A crucial aspect of the fall program was the MIH paramedic visits. During these visits to the patients' homes, which happened one day after ED visit and took on average 30-40 minutes, they conducted a home safety evaluation, a medication safety evaluation, and the Timed Up and Go (TUG) Test, a common functional test to determine fall risk (Jones et al., 2024).

In recent years, there has been a movement towards involving paramedics and/or Emergency Medical Service (EMS) personnel in healthcare, particularly in preventative services (Creating New EMS Education Standards, n.d.). The Community Health Assessment Program through Emergency Medical Services (CHAP-EMS) study found that EMS personnel successfully provided diabetes and cardiovascular health prevention through a weekly program (Agarwal et al., 2016). Given the untapped resource and potential benefits of paramedics being on scene to see patients in their homes, Speier et. al performed a literature review on the effectiveness of EMS's involvement in fall prevention (Speier et al., 2024). They found mixed to successful results for EMS's role in assessing and referring patients who had fallen or were at risk for falling. They also identified two studies in the United States that established a Community Paramedicine/Mobile Integrated Health (CP/MIH) program, both of which saw a significant decrease in falls and fall-related 911 calls (Camp et al., 2024; Quatman-Yates et al., 2022).

However, there is scant literature documenting paramedics' perspectives and experiences being involved in fall risk prevention programs, particularly a VOU Falls program. To date, only one study has investigated paramedics' experiences assisting older adults with falls and found that their experiences were mostly positive, aside from a lack of services and situations that required complex decision-making (Watkins et al., 2024). Yet, there is still little literature looking into paramedics' perspectives on being the central provider in a fall prevention program that includes an in-person MIH visit and ED telemedicine consult.

Given the gap in literature on MIH paramedics' perspectives on their central role in an EDVOU Fall Prevention program, our study objective was to better understand their experience. We specifically sought to understand their viewpoint, particularly in performing the multicomponent fall evaluation, to improve this program as well as other potential MIH programs.

## METHODS

### STUDY DESIGN

We conducted a qualitative observational case study by interviewing paramedics involved in the pilot EDVOU Fall prevention program. Details of the EDVOU Fall prevention program have been published elsewhere (Jones et al., 2024). In brief, we implemented a pilot EDVOU Falls prevention program in July of 2022 at a tertiary academic ED with 120,000 annual visits and approximately 25% geriatric volume in the Northeast. The study was designed and conducted using the Consolidated Criteria for Reporting Qualitative Research (COREQ) criteria (Choo et al., 2015; Dossett et al., 2021; Ranney et al., 2015).

### SUBJECT SELECTION/ENROLLMENT

All paramedics who staffed the EDVOU/MIH program were included and invited to be a part of this study, which was approved by MGB IRB and deemed exempt. All paramedics were emailed at least three times with invitations to participate in the study. Interviews were held in February and March of 2024.

### DATA COLLECTION

We designed a semi-structured interview guide (Supplement) to determine how comfortable paramedics were with conducting the home safety evaluation, medication safety evaluation, and TUG test. We invited all 36 paramedics affiliated with the EDVOU to participate in interviews and conducted interviews until we reached thematic saturation. Trained female research assistant AEJ, BS and GW, MS/MPH, medical student conducted and recorded interviews on Zooms or Teams, which were transcribed via a transcription program TranscribeMe! All identifiable information was removed prior to any analyses.

### ANALYSIS

Several transcripts were independently reviewed by multiple team members, and subsequently one coded the rest after an agreed upon code list. Each co-investigator independently generated codes using an inductive approach, which were then coalesced using qualitative research methods based on grounded theory. Team members (SWL (MD), AEJ (BS), GW (MS/MPH), KS(MD)) met to discuss common themes generated using the codes. Data analysis occurred in tandem with data collection. Recruitment ended when thematic saturation was reached.

## RESULTS

Fifteen paramedics were interviewed. Responses to semi-structured questions can be seen in Table 1. Three overarching themes emerged from our interviews and are as follows: 1) learning new skills otherwise not included in paramedic training, 2) having unique perspectives and interactions with patients in the home environment where most other clinicians do not have insight, and 3) being more integrated in a team to play a bigger role in the care of patients. Quotes from participants can be seen in Table 1.

THEME 1: LEARNING NEW SKILLS OTHERWISE NOT INCLUDED IN PARAMEDIC TRAINING

Interviewees expressed great interest and excitement in learning new skills and high levels of comfort in practicing new skills and the program itself. Specifically, paramedics appreciated learning how to perform the home safety evaluation, medication safety evaluation and TUG Test, tasks not included in their general paramedic training:

*“It’s the pinnacle of my career as a paramedic where I get to literally work at the highest end of my scope of practice.” [UI 15]*

Once paramedics had obtained program training as part of the EDVOU Falls program, paramedics felt comfortable performing such evaluations. A majority of paramedics mentioned “using validated measures such as the TUG test or any other sort of fall assessment... that’s not part of paramedic training, but I would say it was really easy” [UI 2] and being “fairly comfortable... have done it a few times. It’s kind of become a second nature thing to me and my career.” [UI 12] Overall, continuous learning and skill expansion increased paramedic satisfaction.

Learning and using new skills/role	But in EMS specifically, you're there only after someone calls you specifically and something bad happens, which is either the fall or you go somewhere for another medical emergency and you realize that there is a further fall risk there. And usually we don't have the time or the bandwidth of the resources to discuss fall mitigation in that instance. UI 10
	So like this is where we now kind of have this new role of a Community paramedic where that is the intent is to go in and almost prevent these falls from potentially even taking place. UI 15
	So I mean, we're getting specialized training and we kind of get to work a little bit outside of our regular protocols and scope of practice, which is nice... So it really does force you to actually still wanna learn and still wanna do a deep dive into medicine like you actually have to know what medicines our pre hospital. UI 15
Comfort with fall program and elements	It's kind of become a second nature thing to me and my career just generally when I walk into a home, I kind of start looking for hazards and stuff anyways, so I'm fairly comfortable with that. UI 12
First on scene and ability to see patients in their home	EMS has more access to patients' houses than I think anybody because you do have those patients that don't qualify for VNA or don't have the services or don't need the services. So you see EMS [sees] these residents more than any[one]. So they're the ones that are helping, and they're the ones that are seeing the situation. So I think out of most people in the medical community, they see it more than anything. UI 4
	I think that there's a unique perspective that EMS providers have because we see the patients in their home and the things that are around their home and kind of supports they may or may not have. So I think that that's unique to EMS. UI 6
	Uh, sure, I think, uh, we kind of have a unique perspective where we often are in the patients home. So we can really see trip hazards. You know how their housing is set up. You know where they keep various items like for a daily living and that sort of stuff. Uh, so I think we have a unique experience where we can kind of be the eyes on a situation that can hopefully help. You know, get geriatric patients set up for success and to help prevent falls in the future. UI 12

Table 1: Sample responses from paramedics by themes

Ability to hear patients' perspectives	<p>So I think that they would listen to the provider if they're in the emergency room proper. But when they get home, they're like, 'Meh.'</p> <p>UI 1</p>
	<p>There's been a good amount of buy-in from the patients that I've worked with that they think it's great. They might not fully understand it either. I think that they just sometimes hear you know that we'll come to their house and try to work with them at home. And that's what they understand. Family members, I think, are really appreciative of it, though. I think that they really enjoy that aspect so that they don't have to go anywhere.</p> <p>UI 6</p>
	<p>You know, it might just be brushed over slightly during the intake or the patient might, in the moment, say, "Yeah, that's fine." Say they're sitting in the ER. They say, "Yeah, check. I agree. I understand they're going to do this with my meds. I agree. And then you get home." And then they go, "No, I didn't agree to that." Or no one told me what they're saying. So it's one of those things where you know we're trying to do it properly, but we're also trying to avoid unnecessary conflict and accommodate patients.</p> <p>UI 7</p>
	<p>Everyone's saying they love not hearing call bells and you know everything else. The demented patient two doors down. The last time they were in the hospital, they listened to scream for 10 days straight.</p> <p>UI 7</p>
	<p>You know, so they're just trying to maintain some sort of control over their own personal freedoms in, you know that that that, that can be a tough a tough hurdle, you know, a tough. We're doing this in their best interests and they may understand that, but at some point, you know, everybody wants to have control over their own personal being in, you know, it's hard to accept that it, you know, when you get to be in that age group.</p> <p>UI 11</p>
	<p>Some patients are initially hesitant, and it feels like a little intrusive, having us like, come into their homes and stuff, but the vast majority, once they've been in the program for a day or so, they much prefer it to being in a hospital. And I think most patients overall have a better outcome like you know medically and honestly, umm, like emotionally I think they really invest themselves. So I think a lot of patients really enjoy it.</p> <p>UI 12</p>
	<p>Excuse me, I have yet to come across a patient who does not at least appreciate the idea of it. I think there's some patients who, like I said, might not understand and I don't wanna use the word intrusive, but just how? We come to the home. I think that that is probably one of the biggest turnoffs I've seen and felt from patients as they're just like how many more are you coming today? When they are approached in the hospital, they may not get a full picture of what the program looks like because again, at that point we are just like up against the clock to like, hey, is this what you wanna do? ... Ohh so I think we're obviously doing a really good thing and I think a majority I would say 99.3 percent of patients are over the moon about the program and the services they receive from it.</p> <p>UI 15</p>
Forming unique relationships and interactions with patients	<p>I get so much positive feedback from patients about it. I mean, I've worked pre-hospital for years, and I very rarely get complimented by patients for what we do. But since doing VOU, it's all positive feedback from all the patients. They love it. They love being able to be home and be treated there.</p> <p>UI 3</p>
	<p>That one's hard to pinpoint because I had a lot of good experiences. You can give a few if you can't pinpoint one, or? Honestly, it's just building these relationships with patients. You know They welcome you into their home and they want to make you breakfast. And you know there was one family that I was going to see for three days in a row, and his wife would send me off with a snack. Like I wouldn't sit down and you know because we were still wearing masks at the time. So she would send me you know say our goodbyes, and she always sent me with a snack and water, so. That's so nice.</p> <p>UI 5</p>
	<p>And therefore we're in their space for a lot longer. I joke with my staff that there is no such thing as a home game at home hospital every amount of care we provide is an away game because we're on the we're on the patient's turf. And so everything we do is in their space. And so it's up to us to respect their space. But in doing so, we get to build these connections with people. Who would you know who would know not have that opportunity? Otherwise, who would not have the opportunity to be heard to be, you know, felt to be listened to in the, you know, medicalized and sterilized hospital environment. And I think that that's been an experience that I've had more than once in my experience and an experience that a number of my paramedic team has, you know, referenced to me that how special that feels.</p> <p>UI 16</p>

Table 1 (continued): Sample responses from paramedics by themes

<p>Playing a bigger role in the care of patients</p>	<p>I mean, like I said, the one woman who just kind of threw a bunch of little white ones together, and they were like very varying different medications that were very intense to group together, like to just kind of take as a, "Oh, well, I think it's that one." So like I said, though, I had recommended to the doctor. Could we try to get her a V&amp;A service or something to help her or like a blister pack from her pharmacy? UI 3</p> <p>I think you know as a paramedic for a very long time, there's been so many times where you know you recognize the problem. You know what the patient needs, and you still have to bring them to the hospital because you're limited as to what you can provide them. And to be able to see them in their home, work with a physician to you know get a proper diagnosis and a treatment plan and leave them in their home, to me, is like that is like the best part of my job is like because I think people do better when they are at home. And if we can bring medicine to them, you know I think outcomes are just better for that UI 9</p>
<p>Paramedics being more valued by other members of the care team</p>	<p>So when I go in and introduce myself as paramedic, they understand, but then they actually see what we do and they're impressed by the amount of stuff that MIH brings to the table. UI 11</p>

Table 1 (continued): Sample responses from paramedics by themes

**THEME 2: HAVING UNIQUE PERSPECTIVES AND INTERACTIONS WITH PATIENTS IN THE HOME ENVIRONMENT WHERE MOST OTHER CLINICIANS DO NOT HAVE INSIGHT**

All paramedics discussed having unique perspectives and interactions with patients given their role as EMS. As they are the first to be on the scene, MIH paramedics have the advantage of seeing patients in their home setting where most other clinicians do not have insight, which highlights the significance of this fall prevention program. Paramedics spoke highly of their unique position of being able to see patients, noting that

*“it’s one thing to have a patient go into an ER and have a doctor say, ‘alright, take 40 Lasix,’ it’s another thing to make sure that that 40 Lasix got filled... [or] make sure that they have food in their refrigerator.” [UI 4]*

This highlights the importance of home medication safety evaluation, which is the home safety portion of the EDVOU Falls evaluation program.

Paramedics also mentioned being able to

*“tell if their homes are safe for them pre-hospital with the VOU program... assessing the homes and seeing if there’s any trip hazards and fixing them as we can or [linking] the patients with the people that they need to help them make their homes safe.” [UI 5]*

Finally, paramedics mentioned being the “eyes on a situation that can hopefully help... [and] get geriatric patients set up for success and to help prevent falls in the future.” [UI 12]

As the ones directly interacting with patients in their home, paramedics also expressed the importance of being able to hear directly from patients regarding their experiences. According to the paramedics interviewed in the study, the program has been well received by patients who have “really enjoyed having us meet them halfway...were grateful to be home,” [UI 6] “saying they love not hearing call bells and you know everything else,” [UI 7] and “really enjoy it.” [UI 12] Paramedics have also found that older patients

*“managed to learn from the information... stuck a little bit better when they were in their home as opposed to in the hospital... they can kind of focus and they have a more familiar environment.” [UI 6]*

When asked about positive experiences, most paramedics mentioned their appreciation of forming unique relationships and interactions with patients. One paramedic mentioned having “worked pre-hospital for years and very rarely get compliments by patients for what [they] do, but since doing VOU, it’s all from all the patients.” [UI 3] One shared that patients “welcome you into their home, and they want to make you breakfast...and she always sent me with a snack and water, so that’s so nice.” [UI 5] Another shared that after several visits, a patient

*“would open up a little more, a little more, and a little more about his frustration with the health-care system. I shared with him some of my own personal stories. We got to become more or less friends, and he had a little brighter outlook. I genuinely think that we made an impact on each other. Those types of relationships don’t typically get to happen in the same way in hospital medicine... and through home hospital is, there’s just a different feel. So those are the experiences that I think are really, really valuable when we’re talking about patient-centered medicine from the hospital.” [UI 13]*

Many paramedics feel that through this program, they have been able to play a bigger role in the care of their patients. A paramedic recalled recognizing that a particular patient did not have a safe medication system and “recommended to the doctor, ‘could we try to get her a VNA service or something to help her or like a blister pack from her pharmacy?’” [UI 3] One paramedic shared his/her frustrations with the broken system where paramedics

*“show up, and they have to take them to the hospital... why can’t I just give them 100 of Lasix and just sit here with them for a half hour and just see how they go.. and see how things turn out? ... So I think that’s where the VOU’s niche kind of plays a role in it.” [UI 4]*

Another commented that this program allows them “to be able to see them in their home, work with a physician to... get a proper diagnosis and a treatment plan and leave them in their home, to me, is like that is like the best part of my job.” [UI 9]

### **THEME 3: BEING MORE INTEGRATED IN A TEAM TO PLAY A BIGGER ROLE IN THE CARE OF PATIENTS**

With the VOU program, paramedics felt more integrated, respected, and valued by other care team members. One mentioned certain pre-existing challenges, especially that

*“we’re not really regarded as healthcare professionals... The public still sees us as the ambulance driver, so they don’t always take what you know we say to them as you know pertinent. I think with the mobile integrated health role, when you’re affiliated with a hospital and you have team members that are nurses and doctors ... [and] physical therapists and occupational therapists that we have as resources, I think our credibility elevates a little bit and we probably have more pull when we do our home hospital visits.” [UI 9]*

One paramedic mentioned that now, “when I go in and introduce myself as a paramedic, they understand, but then they actually see what we do and they’re impressed by the amount of stuff that MIH brings to the table.” [UI 11] A paramedic concluded that

*“as EMS prehospital medicine continues to evolve where we are now starting to actually be viewed as part of the patient care continuum. I think what we see is prehospital providers is starting to actually be valued where we can sit.” [UI 15]*

## DISCUSSION

We found that MIH paramedics in the EDVOU Falls prevention program had an overwhelmingly positive experience with the program. The paramedics felt they played a pivotal role in fall prevention, as the program allowed them to learn more skills, form and share unique relationships and clinical perspectives given their role, and feel more valued as part of a patient team/care continuum. This study is one of few to look at the perspectives and experiences of MIH paramedics involved in a geriatric fall prevention program. The findings indicate clinically pertinent roles that they provide for older adults to prevent future falls at their homes.

The EDVOU Fall program involved extra training for paramedics on skills and responsibilities not normally included in paramedic training. More programs seem to be utilizing MIH paramedics and thus expanding their skill sets. A program created in rural New York consisted of a unique collaboration between the Department of Health, the Office for the Aging (OFA), Tri-County Family Medicine, and the University of Rochester who recognized a need for additional EMS training and created an EMS training program on various aging programs, such as trauma and falls (Shah et al., 2010). Quatman-Yates et. al also created and looked into a community paramedic program's optimization of Community centered Fall Intervention Team (Community-FIT), a fall prevention delivery system (Quatman-Yates et al., 2022). Another study in the UK also conducted a cluster randomized study comparing intervention paramedics to control paramedics with the former having received training on older adult falls (Snooks et al., 2017). All agreed that paramedics needed additional training to play a key role in preventing falls and complement our study's findings that our MIH paramedics appreciate expanding their skill set.

Our study also highlighted the unique perspective EMS brings to patient care, especially in the MIH programs. Traditionally viewed as first responders to primarily traumatic and medical emergencies, EMS' roles and responsibilities have evolved to include assessment, referral, education, and communication as a result of the aging population (van Vuuren et al., 2021). Community paramedics programs have been found to positively impact the health of older patients as well as the health system. Paramedics have the unique advantage of interacting with patients in their homes, allowing them to be advocates, mediate between the healthcare system and community, as well as "identify people with risk factors, and opportunities to provide information, brief interventions and [direct] people to locally provided services." (Schofield & McClean, 2022) Torres et. al highlight that "despite the wide range of vital and highly skilled services that EMS clinicians provide, their contributions are often unknown to, or misunderstood and not acknowledged by, other health care professionals" ("How to Better Value EMS Clinicians as Key Care Team Members," 2022). Yet, there is a movement towards including EMS in multi-disciplinary efforts in fall prevention programs, which has yielded mostly positive and some mixed results (Agarwal et al., 2016; Camp et al., 2024; Creating New EMS Education Standards, n.d.; Quatman-Yates et al., 2022; Speier et al., 2024).

An overwhelming number of paramedics interviewed in this study expressed excitement and gratitude for the EDVOU program. Many of them mentioned that prior to the program, their responsibilities, role, and expertise had been misunderstood and undervalued, which parallels findings from another study regarding paramedics' perceptions of another VOU program (Jung et al., 2023). Yet, through the program, they felt very

supported by other members of the program administrative team, much more valued amongst other healthcare providers in the care of their patients, and part of a team where their roles and expertise were highlighted and understood. When interviewed, paramedics in community paramedicine programs enjoyed being able to help patients in a way that differed from traditional EMS roles, building rapport with patients, ensuring a sense of community in which there is improvement in patients' health and well-being, and being able to witness positive outcomes first-hand (Paramalingam et al., 2024). In particular, paramedics felt that collaboration with providers and different services led to improved career satisfaction, and they felt respected and part of a valued healthcare team. This collaboration provided better coordinated care and showcased paramedics' clinical skills beyond that of transport and ambulance-driving to other healthcare professions."

EMS have the potential to be utilized in unique ways and provide more services than their traditional roles, especially in the role of preventative services (Agarwal et al., 2016; Creating New EMS Education Standards, n.d.; Jiang et al., 2025). A literature review done by Bonner et. al highlighted multiple studies that demonstrated a positive impact on recurrent falls, independence due to activities of daily living and patients' wellbeing when paramedics were involved in referring older adult falls patients to fall-prevention programs (Bonner et al., 2021). A national retrospective cross-sectional study concluded that there is potential for development of community paramedic services and referrals to community intervention programs to provide EMS clinicians with more tools and information on older adult falls (Joiner et al., 2023). A study found that the implementation of Stopping Elderly Accidents, Deaths, and Injuries (STEADI) fall prevention program through EMS services turned out to be effective and cost-saving for addressing older adults' fall prevention (Camp et al., 2024). These imply that we are currently underutilizing potentially valuable paramedic workforce who can be trained to execute certain clinical tasks well, including those pertaining to older patients at-risk for falls.

Our study seems to imply that programs like our EDVOU are appealing to paramedics as it allows them to expand their skill set, highlights their unique experiences and perspectives in the healthcare continuum, and allows them to feel that they are being better integrated in their patients' care team. This implies that expanding programs such as the EDVOU Fall program and other geriatric-centric programs could improve care of older patients at a higher level. This type of hybrid program that utilizes in person MIH paramedics along with a telemedicine consult could be a way of incorporating the best of both worlds. Our findings are important as paramedics play an integral role in the provision of healthcare and including their perspective on how they can contribute to patient care is important to inform health policy, patient care and/or systems improvement, especially when contemplating innovative, efficient program design.

## LIMITATIONS

One limitation to this study is potential for social desirability bias among interviewed paramedics. All paramedics were invited to be interviewed, and it is quite possible the views of those who consented and participated differed from those who did not. There also could have been bias in the patients who consented to participating in the EDVOU Falls program, which could have influenced paramedics' experiences. Furthermore, we limited our interviews to paramedics already participating in the EDVOU Falls program;

results may not reflect all paramedics. Lastly, due to the small sample size and study conduction through an MIH, findings may not be generalizable to other study settings and locations. We acknowledge that including the perspective of multi-stakeholders could have offered a more comprehensive viewpoint and actionable items; however, we were limited by limited RA time/resources. Nevertheless, this is the first study that described the potential for MIH involvement for fall prevention at home. Future studies should include the viewpoints of other stakeholders.

## CONCLUSION

Paramedics with their unique role of entering the home to provide medical care are an untapped resource and can potentially play a pivotal role in preventative care, particularly in fall prevention in older patients. In this study, paramedics reported a positive experience working in an EDVOU fall program given they learned new skills on fall prevention, developed unique relationships with and perspectives of patients, and felt more part of the patient care continuum. Paramedics have a unique viewpoint of patients' living environments, and future fall prevention programs should consider this as part of their strategy.

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**SUPPLEMENT 1: CONSOLIDATED CRITERIA FOR REPORTING QUALITATIVE STUDIES (COREQ): 32-ITEM CHECKLIST**

Developed from:

Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

No. Item	Guide Questions/Description	Reported on Page #
<b>Domain 1: Research Team and Reflexivity</b>		
Personal Characteristics		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	6. Trained research assistants (AEJ, BS and GW, MS/MPH) conducted and recorded interviews on Zooms or Teams
2. Credentials	What were the researcher’s credentials? E.g. PhD, MD	6. Trained research assistants (AEJ, BS and GW, MS/MPH) conducted and recorded interviews on Zooms or Teams
3. Occupation	What was their occupation at the time of the study?	6. Research Assistant and Medical student
4. Gender	Was the researcher male or female?	6. Both are female
5. Experience and training	What experience or training did the researcher have?	6. Experience with performing and analyzing qualitative interviews
Relationship with participants		
6. Relationship established	Was a relationship established prior to study commencement?	6. No, the interviewers had no prior relationships prior to the study
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	6. Participants did not know about the research other than that we sought their perspective on the program and their experience
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	6. Research interests in EDVOU Fall Prevention Program.
<b>Domain 2: Study Design</b>		
Theoretical framework		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	6. Grounded theory
Participant selection		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	6. We attempted to interview all MIH paramedics.
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	6. We emailed all MIH paramedics.
12. Sample size	How many participants were in the study?	7. Fifteen
13. Non-participation	How many people refused to participate or dropped out? Reasons?	7. 21 did not participate
Setting		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	6. Via Zoom or Teams
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	6. No
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	7. Interviews were held from February to March of 2024
Data collection		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	6. Added as supplement
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	7. None
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	6. Zoom/Teams

No. Item	Guide Questions/Description	Reported on Page #
20. Field notes	Were field notes made during and/or after the interview or focus group?	6. No
21. Duration	What was the duration of the interviews or focus group?	6. Interviews ranged from 26 to 42 minutes.
22. Data saturation	Was data saturation discussed?	6. We conducted interviews until data saturation
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No
<b>Domain 3: Analysis and Findings</b>		
Data analysis		
24. Number of data coders	How many data coders coded the data?	6. Four
25. Description of the coding tree	Did authors provide a description of the coding tree?	6. Yes. Please see Table 1 of quotations by themes.
26. Derivation of themes	Were themes identified in advance or derived from the data?	6. Derived from data
27. Software	What software, if applicable, was used to manage the data?	6. No software used
28. Participant checking	Did participants provide feedback on the findings?	No
Reporting		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	7-11. Yes
30. Data and findings consistent	Was there consistency between the data presented and the findings?	7-11. Yes
31. Clarity of major themes	Were major themes clearly presented in the findings?	7-11. Yes
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	7-11. Yes

**SUPPLEMENT 2: SEMI-STRUCTURED INTERVIEW GUIDE**

1. How has your experience been with geriatric fall patients in general in your career?
2. What role do you think EMS has in assessing fall risk among geriatric patients?
3. What role do you think EMS has in fall prevention among geriatric patients?
4. How many fall patients did you have in the ED Falls VOU Program?
5. How comfortable are you with performing the Timed Up and Go (TUG) test? Explain.
6. How familiar were you with the TUG test before the ED Falls VOU Program? Explain.
7. How was your experience conducting the TUG test with the ED Falls VOU Program patients?
8. How much effort did it take to perform the TUG test? Explain.
9. Moving to the home safety evaluation, how comfortable are/were you with conducting the home safety evaluation?
10. How long did it take to conduct the home safety evaluation?
11. What were some of the common home safety issues you noted?
12. If you did not have a fall patient, how comfortable would you be in conducting the home safety evaluation?
13. Let's chat about the medication safety portion of the ED Falls VOU Program. How did you identify whether the medication system was safe?
14. How comfortable were you with identifying whether the patient had a safe medication system?
15. What issues did you experience when evaluating the patient's medications?
16. How would you improve the ED Falls VOU Program?
17. What the best aspects of the ED Falls VOU Program?
18. What are the challenges/barriers to implementing the ED Falls VOU Program?
19. Did you have any particularly positive experiences while taking part in the ED Falls VOU Program? If so, please describe them:
20. Did you have any particularly negative experiences while taking part in the ED Falls VOU Program? If so, please describe them:
21. How do patients feel about the ED Falls VOU Program?
22. How do you feel about EMS conducting fall prevention work?