Pragmatic Innovations in Post-Acute and Long-Term Care Medicine
Feasible new, practical products or approaches intended to improve outcomes or processes in post-acute or long-term care

The Microtransition Adverse Event Sign-In/Sign-Out (MASS) Form: A Potential Solution to Communication Barriers for Outpatient Medical Appointments and Nonmedical Outings in Post-Acute and Long-Term Care

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A B S T R A C T

Nonurgent outings, such as routine medical appointments or nonmedical (eg, recreational) outings, are common occurrences in skilled nursing facilities (SNFs) and assisted living communities (ALCs). These outings involve changes in location and custodial responsibility of the resident—similar to interfacility transitions of care (eg, admissions, discharges). Thus, these microtransitions in care carry similar risks as larger transitions (eg, falls, medication errors, other adverse events). However, unlike admissions/discharges, outpatient medical appointments and nonmedical outings receive less clinical and administrative attention. Communication about these outings is usually verbal because facilities often lack protocols for microtransition documentation. In this paper, we introduce the Microtransition Adverse event Sign-in/Sign-out (MASS) form, a tool to enhance screening, communication, and quality assurance and process improvement around microtransition-related adverse events. The form has 2 versions, one for lay escorts (eg, family members) and another for nonemergent medical transport personnel, reflecting differences in clinical skill level. The MASS system was piloted for 2 months in a 130-bed SNF. Escorts filled out the form after the outing was complete, with guidance from receptionists who were trained administering the MASS tool. The form may be adapted for SNFs or ALCs. The MASS system engages receptionists, van drivers, family members, and other trip escorts in the care process; by integrating these individuals into the care team in this way, the MASS system strengthens adverse event surveillance and enhances handoffs, while optimizing the limited staffing resources already available in facilities.

Keywords: Transitions of care, care quality, care coordination, transitional care, outpatient, appointments, quality improvement

Problem

During transitions of care, post-acute and long-term care residents are vulnerable to adverse events (AEs), including medication-related errors, falls, and lost health information.[1] Mitigating transition of care-related risks has been a research/practice priority in post-acute and long-term care. Multiple interventions can support discharge communication and education.[2] For instance, the Transitions Care Model/Intervention focuses on mitigating risks through attention to 4 aspects of care transitions: medications, personal health records, follow-up, and red flags.[2] Such models and interventions have historically been reserved for admissions, discharges, and emergency department transfers.

However, nonurgent changes in custodial responsibility unrelated to changes in clinical status, such as outpatient appointments or nonmedical outings (eg, recreation trips) have been overlooked. The term microtransitions was coined in 2022 by members of the Post-Acute and Long-Term Care Medical Association Transitions of Care Subcommittee to encourage clinical attention toward these underrecognized transitions.[3] The term was subsequently formally endorsed by the Post-Acute and Long-Term Care Medical Association through the organization's approval of the first Best Practice Recommendations for Microtransitions in Care in 2025.[4] Microtransitions are nonurgent changes in residents' locations or custodial care. They fall into 3 subgroups: medical outings, nonmedical outings, and room changes.[4,5] Microtransitions differ from interfacility macrotransitions (ie, discharges, admissions), which are triggered by acute changes in medical condition and are lengthier in nature.[4,5] Despite their brevity, microtransitions involve similar challenges and risks to macrotransitions.[6,7] Errors on outings may increase risk of delayed AEs. For instance, consider the following: a resident on a pureed diet may aspirate on solid food during an outing, but pneumonia or respiratory distress may not develop until later. Missed medications, or consumption of nonprescribed substances (eg, alcohol, medications) may also lead to preventable AEs. These examples also demonstrate the importance of communicating consumed foods, beverages, and medications during microtransitions to the clinical team.

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Many facilities lack microtransition documentation protocols and use verbal handoffs. However, without documenting warm handoffs, AEs and clinical needs may go unrecognized, leading to delayed or lack of treatment.[7-9] Furthermore, lay escorts (ie, family/friends) may not have the clinical knowledge to recognize AEs. Thus, novel strategies are needed to facilitate communication of microtransition-related AEs.

Innovation

The purpose of the Microtransition Adverse event Sign-in/Sign-out (MASS) form is to support quality assurance and process improvement (QAPI) and facilitate AE surveillance by standardizing handoff communication. The MASS form expands on existing sign-in/sign-out logs, capturing clinically relevant events occurring on medical/nonmedical outings (Figure 1). The form was developed by an interdisciplinary team (Appendix 1). Based on best practice recommendations, it records information on AE occurrence, trip purpose/destination, equipment utilization, and escort skill level.[4] Information on foods, beverages, and medications consumed is collected, because their consumption increases AE risk (eg, aspiration, falls, medication-related side effects).[4,10,11]

Escorts' skill levels impact their ability to evaluate medical information.[4,11] The form has a version for laypersons (Figure 1A), and another for nonemergent medical transport (non-EMT) (Figure 1B). The lay version uses simplified language, omits clinical fields (eg, medical devices), and focuses on observable issues such as falls, skin tears, incontinence, and delays. Lay forms also do not track staff time (Figure 1B and Appendix 1). Staff may be better able to provide reliable assessments of AEs than laypersons.

A Family/Caregiver MASS Form

Family or Caregiver Transportation Sign Out Log
PLEASE COMPLETE ALL THE COLUMNS

- **Resident Name:** **DOB:** _____ _____
- **Time Out:** **Time In:** _____ _____
- **Escort Name:** **Relationship:** _____ _____
- **Purpose of Trip: (check all that apply)**

____Medical trip (clinic visit)
____Medical trip (lab, imaging, testing)
____Medical trip (procedure)
____Medical trip (chemo or radiation)
____Medical trip (dialysis)
____Non-medical trip (please describe)
_____

Transport Type: (select one)
☐ Personal Vehicle
☐ Wheelchair Van
☐ Stretcher

Was Food, Beverage, or Medicine Consumed?

Medicine(s): (please write medicine, dosage, reason, and time of administration below)
___N/A

Food(s) (please write type, texture, and amount below)
___N/A

Soft Drink (please list type and amount below)
___N/A

Alcohol (please list type and amount below)
___N/A

Were there issues on the trip? (check all that apply)
☐ Fall (please describe)
_____
☐ Incontinence (bowel, bladder, both)
☐ Medical Device Issue (IV, catheter, oxygen, feeding tube, continuous glucose monitor, cast, brace etc). Please describe:
_____
☐ Skin Tear
☐ Nausea/Vomiting
☐ Allergic Reaction
☐ Other _____
☐ No Issues

If issue, was patient taken to urgent care, ER, or hospital? (provide name and location below)

B Non-emergent Medical Transport Form

Non-Emergent Medical Transport or Facility Van Transport Form
PLEASE COMPLETE ALL THE COLUMNS

- **Resident Name:** **DOB:** _____ _____
- **Time Out:** **Time In:** _____ _____
- **Name of Transporter:** _____

Transport Type: (select one)
☐ Wheelchair Van
☐ Stretcher
☐ Other: _____

Purpose of Trip: (check all that apply)
☐ Medical trip (clinic visit)
☐ Medical trip (lab, imaging, testing)
☐ Medical trip (procedure)
☐ Medical trip (chemo or radiation)
☐ Medical trip (dialysis)
☐ Non-medical trip (please describe)
_____

Medical Device Presence: (please check if present)
___Peripheral IV ___Oxygen
___Central Line ___Walker
___Feeding Tube ___Cane
___Wound Vac ___Wheelchair

Any issues (please explain): _____
_____

Logistics:
☐ Pick-up
☐ Drop-off
☐ Round trip
☐ Go Between (from Appt A to Appt B)

Logistical Issues: check all that apply
☐ Patient lost
☐ Unable to be seen (cancellation)
☐ Unable to be seen (appointment information was incorrect)
☐ Unable to be seen (accessibility issue)
☐ Unable to be seen (delayed arrival)
☐ Patient hospitalized
___ Sent to ER and driver not notified
___ Sent to ER and driver notified
___ Direct to ER from Van

Time Lost: _____
(total unnecessary time loss)

Adverse Events: (check and complete all that apply)

____ **Skin tears** (location): _____ **# of skin tears:** _____
☐ Mild (band-aid appropriate, little blood)
☐ Moderate (large bandage/patch needed, significant blood)
☐ Severe (laceration, lot of blood, skilled assistance required (e.g. hospital)

____ **Incontinence Episode:**
☐ Urination
☐ Bowel movement
☐ Type of Incontinence Unclear

____**Fall from standing position:**
☐ Without injury
☐ With injury (please describe): _____

____**Fall from seated position**
☐ Without injury
☐ With injury (please describe): _____

____**Allergic Reaction:** (please describe)
_____

____ **Nausea only:**

____ **Nausea & Vomiting:**

Was Food, Beverage, or Medicine Consumed?

Medicine(s): (please write medicine, dosage, reason, and time of administration below)
____N/A

Food(s) (please write type, texture, and amount below)
____N/A

Soft Drink (please list type and amount below)
____N/A

Alcohol (please list type and amount below)
____N/A

Fig. 1. MASS forms: (A) family/caregiver MASS form, and (B) non-EMT form. DOB, date of birth; ER, emergency room; IV, intravenous; N/A, not applicable.

Implementation

The MASS system was piloted in one 130-bed facility in central Texas, and approved by their clinical/administrative leadership before implementation.

Training

Van drivers and receptionists participated in 30-minute, in-person, in-service trainings on screening for AEs on trips, completing the tool accurately, and prompting/assisting escorts in MASS form completion. The in-services, led by the medical director and QAPI coordinator, used lecture and case study teaching techniques. Nursing staff were also present. For the first 3 weeks, the QAPI coordinator audited select forms (ie, against staff/resident accounts and clinical charts) to ensure staff understanding and refine execution.

Receptionists provided just-in-time training to lay escorts at the time of the microtransition.

Execution

The MASS system was piloted from June 5, 2025, to August 7, 2025. A total of 124 non-EMT and 101 visitor/caregiver forms were completed. Seven AEs were recorded, including 1 emergency department transfer.

Forms were completed on duplicate paper. Escorts delivered 1 copy to the nursing team via warm handoff. The original form entered a QAPI file to track microtransition-associated AEs over time.

The MASS form was designed to integrate seamlessly into staff workflow, and challenges were minimal and easily addressed. Receptionists were already responsible for the sign-in/sign-out process. Van drivers and lay escorts already were relaying information between the facility and community providers. This form simply provided structured documentation to existing workflows, and staff concerns faded once this became apparent. Forms were occasionally skipped/incomplete from June 5 to June 19, but intermittent reminders improved compliance to 98% thereafter. Sometimes different escorts managed departure and return (eg, staff drop-off and layperson pickup); in these cases, each escort completed a form for their portion of the transition.

Evaluation

Six weeks after implementation, staff were gathered for a focus group about the MASS form, where feedback was collected by the QAPI coordinator. Feedback from visitors was gathered informally; receptionists inquired briefly about visitor satisfaction with the process during routine sign out. Staff and visitors found the tool straightforward and easy to complete in <3 minutes. Staff reported the tool matched their skill level and scope of practice. The system easily integrated into their existing workflow, without sacrificing time or care quality. Facility administrative/clinical leaders supported implementation, facilitating success. The MASS QAPI project prompted microtransition-related safety discussions, resulting in changes such as first aid kits being added to the facility's vans.

Comment

The MASS tool pragmatically tracks and mitigates risk of AEs during microtransitions in SNFs and ALCs. The form raised awareness about potential AEs during microtransitions and facilitated documented clinician-escort communication.

The MASS system relies on reception staff to assist with form completion. Third-party non-EMTs could fill out forms with receptionists, like caregiver/visitors would. Facilities without receptionists could adapt implementation to ensure consistent, accurate form completion. Facilities should tailor the form to their community, with translations for individuals with low literacy.

Using duplicate paper for MASS forms serves clinical and QAPI purposes, but is more expensive than printer paper. Facilities may use regular paper to reduce costs while maintaining the warm handoff component. Facilities with low budgets but interested in the MASS tool's dual-functionality could store completed forms electronically. Many facilities also do not have staff with time to audit forms; this was only done because the MASS tool is new. Once a facility adopts this system, it can become a part of the onboarding process. Due to the form's simplicity, in-service trainings are likely sufficient for initial adoption.

Oftentimes, facilities treat receptionists and van drivers as passive observers in the clinical process, solely welcoming visitors and driving patients. However, these staff are the gateway for everyone entering and leaving the building, and can participate more fully in clinical communication. This was evident during the COVID-19 pandemic, when many receptionists played a critical role in ensuring infection control policies were followed; they handed out masks, took temperatures, and were primary enforcers of visitor restriction policies. These policies, combined with receptionist enforcement, resulted in a near 34% reduction in foot traffic into facilities.[12] The MASS system reengages these underused staff in improving care quality, integrating them into the clinical team. This optimizes limited staffing resources and improves communication.

This pilot's single-site implementation was a limitation. The MASS form has yet to be tested in assisted living facilities. To our knowledge, this is the first form to track and document adverse events that occur during microtransitions in post-acute and long-term care. Future research studies can use this feasible, face-valid tool to quantify adverse event rates during microtransitions.

Disclosure

Dr Aval-Na'Ree Green serves as the medical director of the facility the tool was piloted at. The authors declare no other conflicts of interest.

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Supplementary Material

Supplementary data related to this article can be found online at https://doi.org/10.1016/j.jamda.2026.106157.

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The pragmatic innovation described in this article may need to be modified for use by others; in addition, strong evidence does not yet exist regarding efficacy or effectiveness. Therefore, successful implementation and outcomes cannot be assured. When necessary, administrative and legal review conducted with due diligence may be appropriate before implementing a pragmatic innovation.