

GEDA Care Processes Implementation and Tracking



This document provides more detailed guidance on the reporting and monitoring requirements for each protocol. For protocols with options to demonstrate implementation, adherence, or impact (*), sites can select one or more of these options to submit as evidence of process implementation. Other reasonable options can also be submitted. The reported measure should be assessed approximately every 3 months. For care processes with required metrics (**), sites should submit at least 3 months of tracked data using the metrics noted.

	Care process description	Options to demonstrate implementation, adherence or impact*	Required tracked metrics**
Baseline care processes required by all GEDA sites			
A.1	Protocol or care process to standardize and minimize urinary catheter use.	<ul style="list-style-type: none"> • Chart review of 10 catheter placements per month and assessment of validity of indications. • Screenshots of EMR hard-stops to require selection of valid reason for catheter order placement. • Track percentage of older adults with order for urinary catheter placement. Numerator: Number of OA with order for urinary catheter. Denominator: All OA • Plan of QI process to review indications for urinary catheterization placement 	n/a
A.2	Protocol or care process to minimize NPO status and promote access to appropriate food and drink.	<ul style="list-style-type: none"> • Chart review of 10 random NPO orders per month and assessment of validity of indication. • Screenshots of EMR hard-stops to require selection of valid reason for NPO status. • Track percentage of older adults with order for NPO status. Numerator: Number of OA with NPO order. Denominator: All OA • Track time until electronic order placed for diet order. Time of diet order minus time clinician signed up for patient. • Track percentage of older adults with LOS>8 hours without a diet order and/or NPO designation. Numerator: Number of OA without diet/NPO order at 8hrs LOS. Denominator: All OA. 	n/a

A.3	Protocol or policy to minimize use of physical restraints and promote use of trained companions or sitters instead.	<ul style="list-style-type: none"> • Chart review of 10 random restraint orders per month and assessment of validity of indication. Assess for system improvements or alternatives, such as increased sitter availability. • Screenshots of EMR hard-stops to require selection of valid reason for restraint use. • Track percentage of older adults with orders for restraint use. Numerator: Number of OA with physical restraint orders. Denominator: All OA. 	n/a
Medication Safety and Orders			
B.1	Care process for medication reconciliation to be performed by pharmacist or pharmacy technician.	<ul style="list-style-type: none"> • Chart review of 10 random charts per month of OA discharged home to assess for completion of medication reconciliation. • Track percentage of medication reconciliations completed for older adults prior to ED discharge. Numerator: Number of OA with med rec performed. Denominator: All OA. 	n/a
B.2	Guidelines to minimize potentially inappropriate medication use. This could be through an ED-based pharmacist or through a hospital-specific or other list of potentially inappropriate medications (PIMs) or dosing.	<ul style="list-style-type: none"> • Chart review of 10 random charts per month of OA to assess for administration of PIMs, with further review of whether it was an inappropriate medication or dose, and any adverse events. • Review of overrides of EMR alerts regarding PIMs to identify potential systematic changes or QI opportunities. • Run reports on use of specific PIMs (such as benzodiazepines or diphenhydramine) and frequency of use in the ED. Determine the percentage of orders that were potentially inappropriate. 	n/a
B.3	Guidelines for safe pain control including multi-modal options for mild, moderate, or severe pain.	<ul style="list-style-type: none"> • Track frequency of use of geriatric pain treatment order set if available. • Chart review of 10 random charts per month of patients with painful condition or specific chief complaints, reviewing for completion of pain assessment, treatment adherent to guidelines, and/or appropriate analgesia. 	n/a
B.4	Development and implementation of at least three order sets for common geriatric ED presentations developed with particular attention to geriatric-appropriate medications and	<ul style="list-style-type: none"> • Report on frequency of use of order sets, e.g. numerator: older patients with documented order set use, denominator: # older patients with protocol-related complaint or diagnosis. • Report on rates of order set use per month. • Random chart review of 10 patients per month with condition for which order set could be used and assess for use. 	

	dosing and management plans (e.g. delirium, hip fracture, sepsis, stroke, ACS).		
ED Specialty Consultation Resources			
C.1	Care process for accessing palliative care consultation in the ED	<ul style="list-style-type: none"> • Report on rates of palliative care consultations, e.g. # of older adults receiving consultation per month. • Report on time from entering order for palliative care consultation to consult completion. • Perform chart review of 10 charts per month of patients who received consultations to review indications for consultation and impact. 	n/a
C.2	Care process for accessing geriatric psychiatry consultation in the ED.	<ul style="list-style-type: none"> • Report on frequency of geriatric psychiatry consultation, e.g. # of older adults receiving consultation per month. • Report on time from entering order for geriatric psychiatry consultation to consult completion. • Perform chart review of 10 charts per month of patients who received consultations to review indications for consultation and impact. 	n/a
C.3	Care process to guide the use of volunteers in the care of older ED patients.	<ul style="list-style-type: none"> • Maintain roster of volunteers. • Maintain list of activities volunteers can perform to better serve older adults in the ED. • Report on hours of volunteer availability in the ED. • Submit description of geriatric-specific training that volunteers receive, and number of volunteers who have received it. 	n/a
ED Screening			
D.1	Protocol for structured delirium screening with an established tool, with appropriate follow-up actions based on screening results. Example tools include the DTS followed by the bCAM, 4AT, or others.	n/a	<ul style="list-style-type: none"> • Report on screening rates with numerator: # of patients screened and denominator: total eligible patients. Eligible patients are those to whom the screening would generally be applied, such as those 65 years and older. • Report on delirium detection rates with numerator: # of patients with a positive delirium screen and denominator: all patients screened. • QI plan to review appropriate follow-up actions, such as further referrals, additional services, orders, or disposition.

D.2	Protocol for structured cognitive impairment screening with an established tool, with appropriate follow-up actions based on screening results. Example tools include the Ottawa 3DY, mini-cog, SIS, short blessed test, or others.	n/a	<ul style="list-style-type: none"> • Report on screening rates with numerator: # of patients screened and denominator: total eligible patients. Eligible patients are those to whom the screening would generally be applied, such as those 65 years and older. • Report on cognitive impairment detection rates with numerator: # of patients with a positive cognitive impairment screen and denominator: all patients screened. • QI plan to review appropriate follow-up actions, such as further referrals, additional services, orders, or disposition.
D.3	Protocol for structured assessment of function and functional decline with an established tool, with appropriate follow-up actions based on screening results. Example tools include the ISAR, interRAI AUA screener, or others.	n/a	<ul style="list-style-type: none"> • Report on screening rates with numerator: # of patients screened and denominator: total eligible patients. Eligible patients are those to whom the screening would generally be applied, such as those 65 years and older. • Report on function/functional decline detection rates with numerator: # of patients with a positive or high-risk screen and denominator: all patients screened. • QI to review appropriate follow-up actions such as further referrals (care management, home health services, further referral, additional services recommended or provided, orders, or disposition.
D.4	Protocol for structured falls and mobility assessment using an established tool, with appropriate follow-up actions based on screening results. Example tools include the Timed Up and Go (TUGT), or other tools.	n/a	<ul style="list-style-type: none"> • Report on screening rates with numerator: # of patients screened and denominator: total eligible patients. Eligible patients are those to whom the screening would generally be applied, such as those 65 years and older. • QI to review appropriate follow-up actions such as further referrals (care management, home health services, PT/OT), additional services recommended or provided, orders, or disposition.

D.5	Protocol for structured screening or assessment for elder abuse using an established tool, with appropriate follow-up actions in response to screening results. Example tools include EM-SART, ED Senior AID, EASI or H-S/EAST, or others.	n/a	<ul style="list-style-type: none"> • Report on screening rates with numerator: # of patients screened and denominator: total eligible patients. Eligible patients are those to whom the screening would generally be applied, such as those 65 years and older. • Report on elder abuse detection rates with numerator: # of patients positive or high-risk for elder abuse and denominator: all patients screened.
D.6	Protocol for structured depression screening using an established tool, with appropriate follow-up actions in response to screening results. Example tools include DIA-S4, PHQ9, GDS short form, or others.	n/a	<ul style="list-style-type: none"> • Report on screening rates with numerator: # of patients screened and denominator: total eligible patients. Eligible patients are those to whom the screening would generally be applied, such as those 65 years and older. • Report on depression detection rates with numerator: # patients who screen positive and denominator: all patients screened • QI to review appropriate follow-up, such as psychiatry referral, home health services, community resource referrals, etc.
D.7	Protocol for structured screening or assessment for social isolation with appropriate follow-up actions in response to screening results. Example tools include the Duke Social Support Index and the UCLA 3-Item Loneliness Scale.	n/a	<ul style="list-style-type: none"> • Report on percentage of older adults screened for social isolation (# older patients screened/total eligible patients) • Report on social isolation detection (# patients with +isolation screen/all patients screened) • QI to review appropriate follow-up (psychiatry referral, home health services, community resources, technology resources)
D.8	Protocol for screening for alcohol or substance use with appropriate follow-up actions in response to screening results. Example tools include a 2-item quantity/frequency	n/a	<ul style="list-style-type: none"> • Report on percentage of older adults screened for alcohol or substance use (# older patients screened/total eligible patients) • Report on alcohol and substance use detection (# patients with + alcohol or substance use/all patients screened)

	screeener, SMAST-G, AUDIT-C, or others.		<ul style="list-style-type: none"> • QI to review appropriate follow-up (psychiatry referral, home health services, community resources)
D.9	Protocol for screening of nutritional status or food insecurity with appropriate follow-up actions in response to screening results. Example tools include HFIAS, MNA.	n/a	<ul style="list-style-type: none"> • Report on percentage of older adults screened for nutritional status (# older patients screened/total eligible patients) • Report on food insecurity detection (# patients with + food insecurity screen/all patients screened) • QI to review appropriate follow-up (Meals on Wheels, social work, community resources)
Transitions of Care			
E.1	Care process for PCP notification of ED visit.	<ul style="list-style-type: none"> • Review 10 charts per month to ensure PCP notification has taken place 	n/a
E.2	Care process to enable transitions of care from the ED to residential care. This could be for new placements to residential care, and/or a care transition plan on discharge to an existing placement.	<ul style="list-style-type: none"> • Review 10 charts per month to ensure care process to enable transitions of care from the ED to residential care is occurring as designed. 	n/a
E.3	Care process to address age-specific communication needs at discharge (e.g. large font, lay person language, clear follow-up plan, evidence of patient communication).	<ul style="list-style-type: none"> • Review 10 charts per month to ensure care process to address age-specific communication is occurring as designed. 	n/a
E.4	Care process to provide easy access to short- or long-term inpatient or outpatient rehabilitation services, and protocol or guidelines for how to access the pathway.	<ul style="list-style-type: none"> • Report on frequency of rehab or PT orders or referrals. Eg. # orders placed for older adults/total older adults or # orders placed for older adults per month. 	n/a
E.5	Care process for referrals to geriatric-specific follow-up clinics such as: comprehensive	<ul style="list-style-type: none"> • Report on number of referrals placed for follow-up care E.g. # referrals placed in EMR for older adults/total older adults or # orders placed for older adults per month. 	n/a

	geriatric care clinic, falls clinic, memory clinic, or others.		
E.6	Care process for accessing an outreach program that provides home assessments of function and safety such as a visiting nurse association (VNA) or physical therapy (PT) home safety evaluation.	<ul style="list-style-type: none"> Report on number of referrals placed for home evaluation. E.g. # referrals placed in EMR for older adults/total older adults or # orders placed for older adults per month. 	n/a
E.7	Care process for coordinating with a community paramedicine group to perform a home visit after discharge.	<ul style="list-style-type: none"> Report on number of referrals placed for paramedicine visit. E.g. # referrals placed for older adults/total older adults or # orders placed for older adults per month. 	n/a
E.8	An outreach program to residential care homes to enhance the quality of care of ED transfers. This should involve meetings with representatives at residential care homes to improve transfer to or from the ED.	<ul style="list-style-type: none"> Record meetings with skilled nursing home or residential facility representatives, including key agenda items. 	n/a
E.9	Protocol for post-discharge follow-up with the patient or caregiver (e.g., phone call, telemedicine, or other follow-up). This could be to reassess their condition, assess needs, ensure follow-up or access to medications, to review discharge plans, or provide other services.	<ul style="list-style-type: none"> Record post-discharge follow-up calls or contacts Report on rates of eligible patients contacted. E.g. # follow-up calls for older adults/total eligible older adults or # follow-up calls per month. 	n/a
E.10	Patient access to transportation services for return to their residence.	<ul style="list-style-type: none"> Report number of transports requested by older adults per month. Record the time from request- to time to patient leaving the ED. 	n/a

Hospital Operations			
F.1	<p>Care process to minimize ED boarding for geriatric patients or a sub-group of geriatric patients at particularly high risk for harm due with prolonged ED stay (e.g. with delirium).</p>	<p>Recommended metrics are as follows. Please note, comparison data to non-geriatric patients and/or geriatric patients who are not identified as high risk should be provided. In addition to reporting these metrics, we recommend setting a threshold or goal for your metric (e.g. 90% of patients have transitioned out of the main ED within 4 hours after an admission decision).</p> <ul style="list-style-type: none"> ● Median boarding time in ED after admission decision for geriatric patients (or sub-group of geriatric patients identified as at particularly high risk for harm) in comparison to non-geriatric patients and/or geriatric patients who do are not identified as high risk ● % of geriatric patients (or sub-group of geriatric patients identified as at particularly high risk for harm) who board in ED for a prolonged period (≥4 hours) after admission decision in comparison to non-geriatric patients and/or geriatric patients who do are not identified as high risk ● % of geriatric patients (or sub-group of geriatric patients identified as at particularly high risk for harm) who board in ED for a very prolonged period (≥8 hours) after admission decision in comparison to non-geriatric patients and/or geriatric patients who do are not identified as high risk ● % of geriatric patients (or sub-group of geriatric patients identified as at particularly high risk for harm) who board in ED for an extremely prolonged period (≥12 hours) after admission decision in comparison to non-geriatric patients and/or geriatric patients who do are not identified as high risk 	
F.2	<p>Care process to optimize care of geriatric patients or sub-group of geriatric patients at particularly high risk for harm (e.g. those with delirium) who are boarding in ED for extended period after admission decision.</p>	<ul style="list-style-type: none"> ● Track percentage of eligible patients who receive the designated interventions (e.g. private room in ED, hospital bed, prioritization of assignment of admitting team, prioritization of movement to transitional / initiation care area, quality improvement case review for patients with extreme boarding times – i.e. ≥12 hours) 	

Novel Policy	
G.1	<p>Create, implement, and describe a policy, protocol, or care process that does not fall into the above categories. It should be specific to the acute care of older patients. Include a strategy for assessing implementation and metrics to measure successful implementation. As with the above protocols, you will have the opportunity to describe it in the Care Process Executive Summary Template.</p>
	<p>Using the above validation and metrics requirements for inspiration and ideas, create a comparable plan that demonstrates the implementation, scope, and/or impact of your novel protocol. Submit 3 months of data if you are submitting data.</p>

Glossary and References for Screening Tools

The full names of screening tools listed above are provided below. Example references are shown that can help sites and applicants assess the tool and its effectiveness. Other appropriate or validated tools may also be used.

Delirium Screening

DTS: Delirium Triage Screen

Han JH, et al. Diagnosing delirium in older emergency department patients: validity and reliability of the delirium triage screen and the brief confusion assessment method. Ann Emerg Med. 2013 Nov;62(5):457-465. doi: 10.1016/j.annemergmed.2013.05.003. Epub 2013 Jul 31. PMID: 23916018; PMCID: PMC3936572.

bCAM: Brief Confusion Assessment Method

Mariz J, et al. Delirium Diagnostic and Screening Instruments in the Emergency Department: An Up-to-Date Systematic Review. Geriatrics (Basel). 2016 Sep 1;1(3):22. doi: 10.3390/geriatrics1030022. PMID: 31022815; PMCID: PMC6371145.

4AT: Arousal, Attention, Abbreviated Mental Test, Acute Change

Tieges Z, et al. Diagnostic accuracy of the 4AT for delirium detection in older adults: systematic review and meta-analysis. Age Ageing. 2021 May 5;50(3):733-743. doi: 10.1093/ageing/afaa224. PMID: 33951145; PMCID: PMC8099016.

Cognitive Impairment Screening

Ottawa 3DY: What is the Day? What is the Date? Spell the word “world” backwards; and What is the Year?

Eagles D, et al. Evaluation of the Ottawa 3DY as a screening tool for cognitive impairment in older emergency department patients. *Am J Emerg Med.* 2020 Dec;38(12):2545-2551. doi: 10.1016/j.ajem.2019.12.036. Epub 2019 Dec 20. PMID: 31937444.

Mini-Cog: 3-item recall and clock draw

Borson S, et al. The mini-cog: a cognitive 'vital signs' measure for dementia screening in multi-lingual elderly. *Int J Geriatr Psychiatry.* 2000 Nov;15(11):1021-7. doi: 10.1002/1099-1166(200011)15:11<1021::aid-gps234>3.0.co;2-6. PMID: 11113982.

SIS: Six-Item Screener

Carpenter CR, et al. The Six-Item Screener and AD8 for the detection of cognitive impairment in geriatric emergency department patients. *Ann Emerg Med.* 2011 Jun;57(6):653-61. doi: 10.1016/j.annemergmed.2010.06.560. Epub 2010 Sep 19. PMID: 20855129; PMCID: PMC3213856.

SBT: Short Blessed Test

Carpenter CR, et al. Four sensitive screening tools to detect cognitive dysfunction in geriatric emergency department patients: brief Alzheimer's Screen, Short Blessed Test, Ottawa 3DY, and the caregiver-completed AD8. *Acad Emerg Med.* 2011 Apr;18(4):374-84. doi: 10.1111/j.1553-2712.2011.01040.x. PMID: 21496140; PMCID: PMC3080244.

Functional Status or Decline

ISAR: Identification of Seniors At Risk

Slankamenac K, et al. Prediction of Emergency Department Re-Visits in Older Patients by the Identification of Senior at Risk (ISAR) Screening. *Geriatrics (Basel).* 2018 Jun 21;3(3):33. doi: 10.3390/geriatrics3030033. PMID: 31011071; PMCID: PMC6319249.

AUA: Assessment Urgency Algorithm created by interRAI

Mowbray FI, et al. Examining the utility and accuracy of the interRAI Emergency Department Screener in identifying high-risk older emergency department patients: A Canadian multiprovince prospective cohort study. *J Am Coll Emerg Physicians Open.* 2023 Jan 13;4(1):e12876. doi: 10.1002/emp2.12876. PMID: 36660313; PMCID: PMC9838565.

Falls and Mobility Assessments

TUGT: Timed Up and Go Test

Huded JM, et al. Screening for Fall Risks in the Emergency Department: A Novel Nursing-Driven Program. *West J Emerg Med.* 2015 Dec;16(7):1043-6. doi: 10.5811/westjem.2015.10.26097. Epub 2015 Dec 10. PMID: 26759651; PMCID: PMC4703188.

Elder Abuse

EM-SART: Elder Mistreatment Screening and Response Tool

Platts-Mills TF, et al. EM-SART: a scalable elder mistreatment screening and response tool for emergency departments. *Gener J Am Soc Aging.* 2020; 44(1): 51- 58.

Makaroun LK, et al. Leveraging VA geriatric emergency department accreditation to improve elder abuse detection in older Veterans using a standardized tool. *Acad Emerg Med.* 2023 Apr;30(4):428-436. doi: 10.1111/acem.14646. Epub 2023 Jan 17. PMID: 36575600; PMCID: PMC10192131.

ED Senior AID: ED Senior Abuse Identification Tool

Platts-Mills TF, et al. Development of the Emergency Department Senior Abuse Identification (ED Senior AID) tool. *J Elder Abuse Negl.* 2018 Aug-Oct;30(4):247-270. doi: 10.1080/08946566.2018.1460285. Epub 2018 Apr 13. PMID: 29652592; PMCID: PMC6774613.

EASI: Elder Abuse Suspicion Index

Yaffe MJ, et al. Development and validation of a tool to improve physician identification of elder abuse: the Elder Abuse Suspicion Index (EASI). *J Elder Abuse Negl.* 2008;20(3):276-300. doi: 10.1080/08946560801973168. PMID: 18928055.

H-S/EAST: Hwalek-Sengstock Elder Abuse Screening Test

Neale, AV, M Hwalek, MC Sengstock, RO Scott, & C Stahl. "Validation of the Hwalek-Sengstock Elder Abuse Screening Test." *Journal of Applied Gerontology*, 10 (4): 417-429 (1991)

Depression screening

DIA-S4: Depression in old Age Scale with 4 items

Heidenblut S, Zank S. Screening for Depression in Old Age With Very Short Instruments: The DIA-S4 Compared to the GDS5 and GDS4. *Gerontol Geriatr Med.* 2020 Dec 10;6:2333721420981328. doi: 10.1177/2333721420981328. PMID: 33354593; PMCID: PMC7734509.

PHQ9: Patient Health Questionnaire 9-question tool

Kroenke K, et al. The PHQ-9: Validity of a brief depression severity measure. *J Gen Intern Med* 2001;16(9):606–13

GDS short form: Geriatric Depression Scale short form

Hustey FM, Smith MD. A depression screen and intervention for older ED patients. *Am J Emerg Med.* 2007 Feb;25(2):133-7. doi: 10.1016/j.ajem.2006.05.016. PMID: 17276800.

Social Isolation

DSSI: Duke Social Support Index

Koenig HG, et al. Abbreviating the Duke Social Support Index for use in chronically ill elderly individuals. *Psychosomatics.* 1993 Jan-Feb;34(1):61-9. doi: 10.1016/S0033-3182(93)71928-3. PMID: 8426892.

UCLA 3-Item Loneliness Scale: relational connectedness, social connectedness and self-perceived isolation

Russell D (1996) *UCLA Loneliness scale (Version 3): reliability, validity, and factor structure.* *J Pers Assess* 66:20–40.

Alcohol and Substance use

Quantity/Frequency questions: A 2-question screener to identify high-risk alcohol use

Shenvi CL, et al. Identification and characterization of older emergency department patients with high-risk alcohol use. *J Am Coll Emerg Physicians Open.* 2020 Jul 17;1(5):804-811. doi: 10.1002/emp2.12196. PMID: 33145524; PMCID: PMC7593462.

Han BH, Moore AA. Prevention and Screening of Unhealthy Substance Use by Older Adults. *Clin Geriatr Med.* 2018 Feb;34(1):117-129. doi: 10.1016/j.cger.2017.08.005. Epub 2017 Oct 7. PMID: 29129212; PMCID: PMC5718360.

AUDIT-C: Alcohol Use Disorders Identification Test Abbreviated Form

van Gils Y, et al. Validation of the AUDIT and AUDIT-C for Hazardous Drinking in Community-Dwelling Older Adults. *Int J Environ Res Public Health.* 2021 Sep 2;18(17):9266. doi: 10.3390/ijerph18179266. PMID: 34501856; PMCID: PMC8431181.

SMAST-G: Short Michigan Alcoholism Screening Test – Geriatric Version

Blow FC, et al. Brief screening for alcohol problems in elderly populations using the Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G) *Alcohol Clin Exp Res.* 1998;22(Suppl):131

Nutritional Status or Food Insecurity

MNA: Mini Nutritional Assessment

Vellas B, et al. *The Mini Nutritional Assessment (MNA) and its use in grading the nutritional state of elderly patients. Nutrition.* 1999 Feb;15(2):116-22. doi: 10.1016/s0899-9007(98)00171-3. PMID: 9990575.

HFIAS: Household Food Insecurity Access Scale

Coates J, et al. *Household food insecurity access scale (HFIAS) for measurement of food access: Indicator guide.* Washington, DC: Food and Nutrition Technical Assistance Project, Academy for Educational Development. 2007
Burks CE, et al. *Risk Factors for Malnutrition among Older Adults in the Emergency Department: A Multicenter Study. J Am Geriatr Soc.* 2017 Aug;65(8):1741-1747. doi: 10.1111/jgs.14862. Epub 2017 Mar 21. PMID: 28322438; PMCID: PMC5555801.