

# AI FOR RESEARCHERS IN AGING

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# Agenda

TABLES & TIMELINES

LETTERS OF SUPPORT

COMMUNICATION & OUTREACH

LABMANAGEMENT

SURVEYINSTRUMENTS

# Tables

Create a nice table showing name of site, trauma designation, and ED geriatric patient counts

Table. Geriatric Fall Visits by UCHealth Emergency Department (May 2024 – Apr 2025)

Emergency Department Site	Trauma Level	Total Geriatric Fall Visits
MHC Emergency (Memorial Hospital Central)	Level I	4,504
AMC Emergency (Anschutz Medical Campus)	Level I	3,740
MCR Emergency (Medical Center of the Rockies)	Level II	2,909
PVH Emergency (Poudre Valley Hospital)	Level III	2,789
MHN Emergency (Memorial Hospital North)	Level III	2,352
LPH Emergency (Longs Peak Hospital)	Non-designated	1,849
HRH Emergency (Highlands Ranch Hospital)	Non-designated	1,726
GH Emergency (Greeley Hospital)	Non-designated	1,613
Total	—	21,482


# More details

Now add a separate column with % rural in that area and another column with region within Colorado

ED Site	Trauma Level	Total Geriatric Fall Visits	Approx. % Rural (County)	Region within Colorado
MHC Emergency (Memorial Hospital Central, Colorado Springs – El Paso Co.)	Level I	4589	7%	Southern Front Range
AMC Emergency (Anschutz Medical Campus, Aurora – Adams/Arapahoe Co.)	Level I	3935	1–2%	Denver Metro
MCR Emergency (Medical Center of the Rockies, Loveland – Larimer Co.)	Level I	3085	10%	Northern Front Range
PVH Emergency (Poudre Valley Hospital, Fort Collins – Larimer Co.)	Level III	2857	10%	Northern Front Range
PMC Emergency (Parkview Medical Center, Pueblo – Pueblo Co.)	Level III	2656	20%	Southern Colorado
MHN Emergency (Memorial Hospital North, Colorado Springs – El Paso Co.)	Level III	2366	7%	Southern Front Range
LPH Emergency (Longs Peak Hospital, Longmont – Boulder/Weld Co.)	Non-designated	1916	5%	Northern Front Range
HRH Emergency (Highlands Ranch Hospital – Douglas Co.)	Non-designated	1770	1%	Denver South Metro
GH Emergency (Greeley Hospital – Weld Co.)	Non-designated	1648	35–40%	Northern Front Range

# Site-specific enrollment projections

ok now use the numbers for amc, mcr, lph, greeley hospital, pvh, mhn, mhc, hrh to complete a site-specific enrollment project

Item	Description / Number	
1. Estimated number of potentially eligible study participants	<p>Based on EHR data from the UHealth enterprise data warehouse (May 2024–April 2025), there were ~21,482 geriatric ED visits for falls across all UHealth sites. The 8 proposed sites account for ~21,220 visits (99%), distributed as follows:</p> <ul style="list-style-type: none"><li>• AMC – 3,740</li><li>• MCR – 3,085</li><li>• LPH – 1,916</li><li>• GH – 1,648</li><li>• PVH – 2,857</li><li>• MHN – 2,366</li><li>• MHC – 4,589</li><li>• HRH – 1,770</li></ul> <p>We estimate that ~60% of these visits (~12,700) will meet initial eligibility (age ≥65, community-dwelling, discharged home).</p>	
2. Total number of potentially eligible participants expected to be screened	12,700 total (electronic EHR screening at all 8 EDs using Epic fall-risk trigger).	
3. Total number of screened participants expected to be found eligible	≈6,350 (50%) expected to meet all inclusion/exclusion criteria after screening.	

# Site-specific enrollment projections- part 2

ok now use the numbers for amc, mcr, lph, greeley hospital, pvh, mhn, mhc, hrh to complete a site-specific enrollment project

5. Total number of participating centers	8 UHealth emergency departments: AMC, MCR, LPH, GH, PVH, MHN, MHC, HRH.
6. Projected month first participant enrolled (after project start)	Month 10 (after 9-month start-up phase).
7. Projected month last participant enrolled (after project start)	Month 33 (end of 24-month recruitment).
8. Projected enrollment rate	<p>~150 participants per month (3,600 ÷ 24 months). Based on ED volume distribution, projected site-level enrollment per year is:</p> <ul style="list-style-type: none"><li>• AMC – 320</li><li>• MCR – 265</li><li>• LPH – 165</li><li>• GH – 140</li><li>• PVH – 245</li><li>• MHN – 200</li><li>• MHC – 385</li><li>• HRH – 180</li></ul> <p>(Total ≈ 1,900 per year for 2 years = 3,600 total)</p>
9. Estimated percentage of participant dropout	≤10% anticipated loss to follow-up, minimized through EHR-based outcome ascertainment (no participant contact required).

# Study Timeline

Create a table for excel that shows "Describe the planned periods of participant recruitment and follow -up in the study, as applicable" with 9 month run up, 24 month recruitment, 12 month followup with key outcomes as below, and analysis after that for a full five year grant. Here are the outcomes [...]

Table 1. Study Timeline for Recruitment, Follow-up, and Analysis (Criterion 3: Scientific Merit)

Year	Study Phase	Major Activities	Outcomes Measured
Year 1	⚙️ Start-Up (9 months)	<ul style="list-style-type: none"> <li>Finalize protocol, obtain IRB approval</li> <li>EHR integration and staff training at 8 ED sites</li> <li>Establish data infrastructure and agreements</li> </ul>	None (pre-intervention setup)
Years 2 – 3	● Recruitment (24 months)	<ul style="list-style-type: none"> <li>Participant enrollment and intervention delivery across 8 UCHHealth EDs</li> <li>Ongoing data capture for index visit variables</li> </ul>	<b>Index visit outcomes:</b> <ul style="list-style-type: none"> <li>ED length of stay</li> <li>Health-care worker engagement with consults</li> </ul>
Years 3 – 4	● Follow-Up (12 months)**	<ul style="list-style-type: none"> <li>12-month follow-up for each participant after enrollment</li> <li>Ongoing data quality checks and site monitoring</li> </ul>	<b>Follow-up outcomes:</b> <ul style="list-style-type: none"> <li>Repeat ED visit for a fall (12 mo)</li> <li>Injury-related ED visits (1, 6, 12 mo)</li> <li>All-cause ED visits (12 mo)</li> <li>Death (12 mo)</li> <li>Nursing home placement &gt; 30 days (12 mo)</li> </ul>
Year 5	◆ Analysis & Dissemination	<ul style="list-style-type: none"> <li>Finalize data lock and statistical analyses</li> <li>Prepare manuscripts, reports to PCORI, and stakeholder presentations</li> </ul>	Analysis of all primary and secondary outcomes + subgroup analyses by trauma level, region, and rurality

Legend:

⚙️ Start-Up ● Recruitment ● Follow-Up ◆ Analysis & Dissemination

# Before ChatGPT

now create a 250 word layperson summary from this: "Older adults with Alzheimer's disease and related dementias fall two to three times more often than those without dementia, and 40% experience adverse outcomes after emergency department (ED) visits. Yet, research is lacking on interventions to reduce recurrent falls in ED persons living with dementia (PLWD). Building on our effective fall prevention intervention, GAPcare, the Geriatric Acute & Post-acute Care Coordination Program for Fall Prevention in the Emergency Department, we conducted a qualitative study to inform GAPcareAD, an adapted intervention tailored for PLWD and their caregivers. Through semi-structured interviews with 7 PLWD, 2 caregivers, and 15 national experts, we identified key domains for adaptation. Following peer review of our manuscript, we recognized three critical areas for refinement: (1) Deeper representation of PLWD and caregiver perspectives to include voices of those from different racial, ethnic, linguistic, and caregiving backgrounds; (2) Stronger theoretical grounding, including a clearer justification of adaptations using Castro's Framework and elaboration on dementia-specific risk factors that complicate ED discharge planning; and (3) Improved methodological transparency, including detailed rationale for sampling, consent capacity protocols, and reporting aligned with qualitative reporting guidelines. We will address these areas by conducting additional caregiver interviews, revisiting and amplifying PLWD voices, and analyzing themes through attention to variation in care needs and access. These efforts will help us achieve our stated goal to make GAPcareAD optimally responsive to community needs and scalable. Support from this funding will strengthen our manuscript revision and lay the foundation for a multisite R01 funded trial testing GAPcareAD."

# After ChatGPT

## Lay Summary

Older adults living with Alzheimer's disease and related dementias are two to three times more likely to experience falls than those without memory loss. These falls often result in emergency department (ED) visits, and nearly 40% of these individuals return to the ED or are hospitalized again soon after.

Unfortunately, most fall prevention research has excluded people living with dementia and their caregivers, leaving a critical gap in care.

To help address this need, we adapted our successful fall prevention program—called GAPcare—for use with people living with dementia and their care partners. We interviewed people with dementia, their caregivers, and national experts to understand how to better support families during and after ED visits for falls. This adapted version of the program is called GAPcareAD.

After submitting our findings for publication, reviewers provided helpful feedback. They emphasized three key areas we should improve:

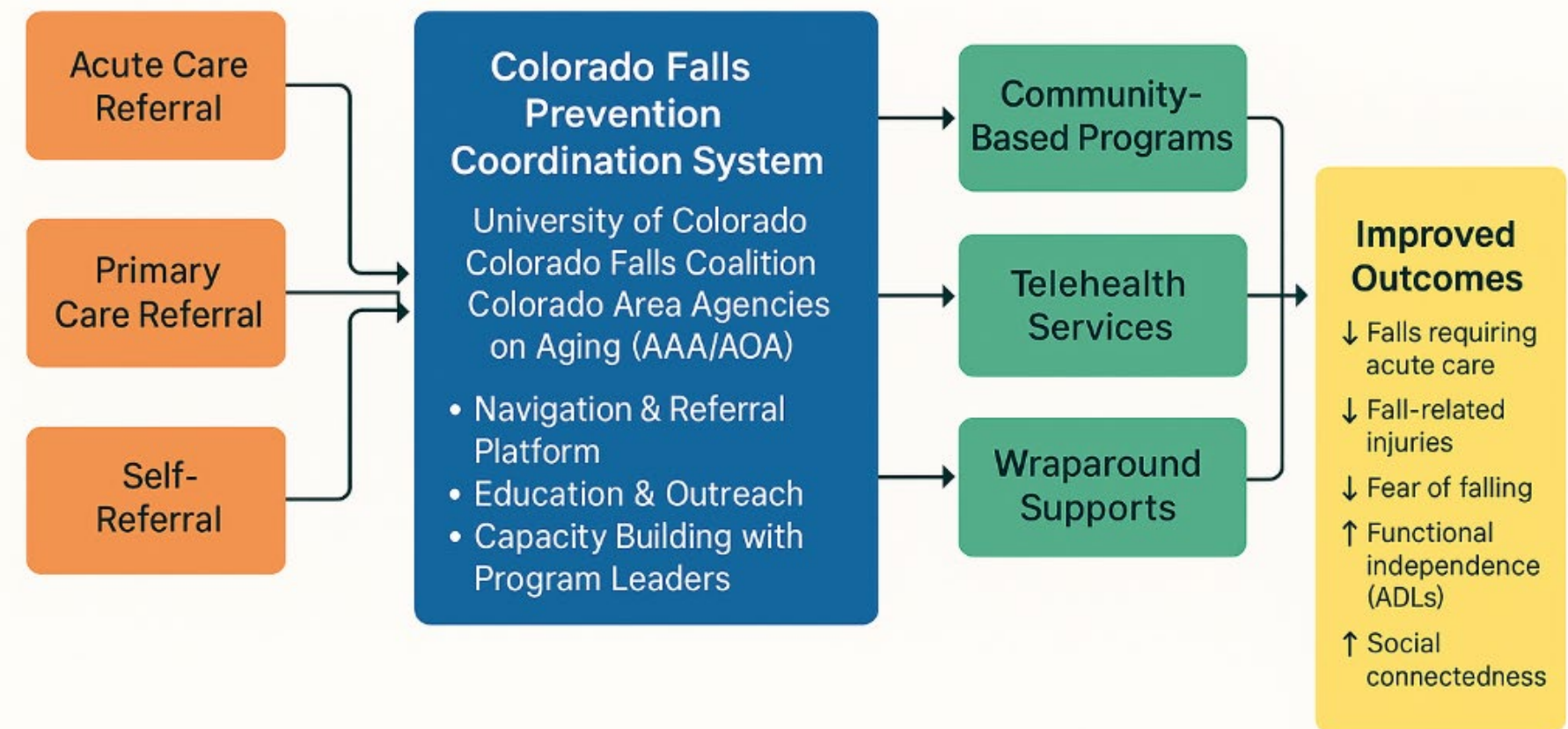
- 1. Better representation** of voices from diverse racial, ethnic, and caregiving backgrounds;
- 2. Clearer explanation** of why the program was adapted for people with dementia and what makes their care needs different; and
- 3. More transparency** about how the study was conducted and how participants were selected.

With this support, we plan to conduct additional interviews with caregivers from underrepresented groups, highlight the voices of people with dementia more clearly, and improve how we share our research process. These efforts will strengthen our study and prepare us for a larger clinical trial to test GAPcareAD in emergency departments nationwide.

# Schematics

I need a figure that demonstrates this "The University of Colorado, in partnership with the Colorado Falls Coalition including the Colorado Area on Aging (AOA) will..."

Coordinated Statewide Fall Prevention System:  
Infrastructure, Referral, Access, and Impact



# Job Posing

## Can you create a LinkedIn job posting based on information from this university job ad

📌 Join Our Team: Clinical Science Professional (Entry–Intermediate Level)

University of Colorado Anschutz Medical Campus | Department of Emergency Medicine

Are you passionate about improving health outcomes through research? We're hiring a **Clinical Science Professional (Entry–Intermediate)** to support transformative work in **geriatric emergency medicine, fall prevention, and digital health**. This is a fantastic opportunity to build your research career while making a real impact in the lives of older adults across Colorado.

### 🌟 Why This Role Is Exciting

👉 **Do Meaningful Work** – Support an HHS-funded statewide fall-prevention initiative that will help keep older adults safe and independent.

👉 **Collaborate and Grow** – Work with clinicians, community partners, and state agencies on NIH- and HHS-funded projects.

👉 **Build Your Research Skills** – Gain hands-on experience in clinical trials, data collection, participant engagement, and public health programming.

👉 **Train at a Top-Tier Campus** – Work onsite at a world-class academic medical center in Aurora, Colorado, with access to exceptional resources and mentorship.

👉 **Excellent Benefits** – Health insurance, retirement plans, paid time off, tuition benefits, and opportunities for professional development.

### ✅ We're Looking For

- ✓ Bachelor's degree (science, public health, or health-related field preferred)
- ✓ Experience or strong interest in clinical or epidemiologic research
- ✓ Strong communication, organization, and data-management skills
- ✓ Interest in aging, injury prevention, or digital health

# Thank You

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