

COMMUNITY-GUIDED DESIGN OF A MOBILE AI COACH FOR OLDER ADULTS

A White Paper from the EdgeCare Community Advisory Meetings

Meetings held April 1 and April 24, 2026

Purpose

Summarize community guidance on the feasibility, design, implementation, safety, equity, and service integration of an early-stage mobile AI coach intended to support older adults in managing health information and maintaining social connection.

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Executive Summary

The EdgeCare team convened two community advisory meetings with health and social-service leaders to pressure-test an early-stage concept for a smartphone-based AI coach. The proposed coach would use information from apps, phone use, sensing, and interaction to provide personalized support for health management and social connection while protecting privacy. The meetings were framed as candid advisory discussions rather than technology demonstrations, with questions focused on where existing systems fail, how to balance human care with technology, how stakeholders might respond, and what responsible implementation would require.

Advisors saw meaningful potential for an AI coach to extend support between human contacts, reduce routine burdens, provide reminders and prompts, surface relevant resources, and help bridge gaps among older adults, families, healthcare providers, and social-service organizations. At the same time, advisors consistently cautioned that technology must enhance rather than replace human relationships. Prior technology programs succeeded when they were simple, personalized, supported by trusted people, and connected to clear user goals; engagement declined when onboarding and follow-up support disappeared.

Five design imperatives emerged: preserve human connection; personalize to individual needs and contexts; provide onboarding and ongoing technical support; build safety, privacy, and governance into the system from the outset; and design for equitable access across differences in cognition, language, culture, connectivity, and technology experience. These findings support a community-participatory development model in which older adults, care partners, frontline staff, service leaders, and technical teams continue to shape the coach across design, evaluation, deployment, and maintenance.

Central finding

The AI coach should function as a responsive bridge to people and services, not as a substitute for human care. Its value depends as much on trusted relationships, implementation support, and governance as on technical capability.

1. Background and Meeting Purpose

EdgeCare is exploring how technology can facilitate social health among older adults, with particular attention to adults living alone, early cognitive decline, and social-connection concerns. The advisory invitation described a mobile AI coach that would live on a smartphone and integrate information from apps and phone use to support health information management and reduce social isolation. Advisors were asked to draw on real-world experience serving older adults in the Phoenix community and to identify both opportunities and failure modes.

The invitation and discussion guides emphasized five broad questions:

- Where do health-management and social-support systems break down?
- What works or fails when high-touch human care is combined with high-tech solutions?
- How might older adults, families, and frontline staff respond to an AI-based coach?
- What ethical, trust, equity, privacy, and cultural considerations should guide development?
- What would responsible implementation within health and social-service organizations require?

The first meeting was held on April 1, 2026, and the second on April 24, 2026. Both sessions used a semi-structured format that prioritized open discussion over completing every prepared question. Meeting notes captured advisor examples, implementation lessons, design concerns, and recommendations for future development.

2. Advisory Approach

The advisory process combined advance framing, structured prompts, and open discussion. Advisors were introduced to the project's background, including earlier work with older veterans, care partners, and providers; technology-use paradoxes involving privacy, autonomy, need, and trust; and the proposed focus on older adults living alone with early cognitive decline and social-connection concerns. The team then presented the AI coach as an early-stage concept to be pressure-tested rather than promoted.

Discussion topics included high-touch versus high-tech support, reactions to the coach concept, implementation and workflow integration, equity and access, indicators of value, co-design priorities, and long-term expectations. The notes from the two meetings were reviewed for recurring ideas and organized into cross-cutting themes. Because the meetings were advisory rather than formal qualitative research interviews, the synthesis emphasizes design implications and does not claim thematic saturation or population-level generalizability.

3. Findings from the Community Advisory Meetings

3.1 Technology Works Best When It Extends Human Support

Advisors repeatedly emphasized that technology can increase access, support safety, and sustain connection when people cannot be physically present. Examples included medication reminders, cameras and door locks used by families supporting a person with dementia, telehealth, FaceTime check-ins, virtual family gatherings, online hobbies, memory cafes, brain-health groups, and electronic companion animals. Advisors also described technology as a way to support regular social contact, not simply to deliver health information.

At the same time, advisors rejected a replacement model. Technology was viewed as most useful when it augmented a trusted relationship, helped a provider or caregiver follow up, or enabled an older adult to connect with other people. The desired role for EdgeCare is therefore relational and connective: helping users prepare for, initiate, sustain, and follow through on human interactions.

3.2 Engagement Depends on Trusted Onboarding and Continued Support

A tablet program offered a particularly instructive example. Initial engagement was supported by a dedicated staff member who delivered devices, customized content, and checked in with participants. Usage declined after that role was no longer staffed, despite the technology remaining available. Advisors attributed much of the program's early success to the trusted person who helped users adopt and personalize the device, not to the device alone.

This experience suggests that EdgeCare will need differentiated pathways into use. Some older adults may independently install and use the coach, while others may benefit from a group orientation, one-on-one onboarding, repeated demonstrations, troubleshooting videos, or access to a familiar organizational contact. Implementation must plan for both initial adoption and long-term engagement.

3.3 Personalization Should Be Goal-Directed and User-Controlled

Advisors expected substantial variation in comfort with AI and technology. They recommended allowing users to personalize interaction frequency, reminders, tone, cadence, voice, language, and the degree of prompting. Personalization was considered most acceptable when tied to a concrete goal, such as remembering an activity, following through on a provider recommendation, connecting with family, or finding a community resource.

Advisors also warned against equating comfort with effectiveness. An overly agreeable coach could become paternalistic, sycophantic, or insufficiently challenging. The system should preserve dignity, avoid childlike or scolding language, and allow preferences to change over time. Choice and flexibility should support autonomy, while the coach should still be able to ask reflective questions and provide constructive encouragement.

3.4 The Coach Could Bridge Gaps Between Encounters and Organizations

Advisors identified a gap between episodic provider or case-management contacts and the daily realities of older adults living at home. A coach could provide reminders, support completion of activities assigned by a provider, log progress, offer brief exercises, and surface educational or community resources between appointments. This could help users maintain momentum and give providers better context at the next interaction, subject to consent and appropriate information-sharing rules.

The coach could also help navigate fragmented services by presenting relevant resources in one place, supporting referrals, and facilitating warm handoffs. Advisors viewed this as especially valuable for people who are homebound, socially isolated, or unsure where to turn. However, any connection to providers or services would require clear responsibility, verification of information, and limits on what the coach can share or decide.

3.5 Responsible Implementation Requires Governance and Safety

Advisors raised practical questions about confidentiality, storage, access, consent, verification of AI-generated information, mandated reporting, and responsibility when a user discloses potential harm. Organizations differ in their current AI policies and readiness, so implementation cannot assume a uniform governance environment. Partners will need clear explanations of the problem being addressed, the coach's role, where data go, who may access them, and how the system is monitored.

Advisors also stressed online safety and the risk of exploitation for vulnerable users. The coach must have explicit procedures for recognizing situations that exceed its capabilities, abstaining from unsupported guidance, and escalating to trained human support under defined protocols. These procedures should be understandable to users and compatible with organizational responsibilities.

3.6 Equity Requires More Than Smartphone Availability

Although many older adults have smartphones or tablets, access alone does not ensure meaningful use. Advisors identified differences in cognition, technology experience, language, literacy, connectivity, culture, family support, and access to technical assistance. Examples from community outreach showed that successful delivery may require culturally tailored materials and noninternet alternatives in settings with limited connectivity.

The system should therefore offer multiple modes of engagement, simple explanations, accessible interfaces, multilingual support where feasible, and choices that do not require users to disclose or accept a simulated cultural identity. Continued input from people with lived experience is essential to determine which forms of personalization provide comfort, dignity, and usefulness without manipulation or stereotyping.

3.7 Staff Adoption Depends on Framing and Workflow Fit

Advisors expected many staff members to welcome tools that reduce routine workload, but noted that adoption would depend on how the coach is framed. Positioning AI as an adjunct that handles reminders, information organization, or between-visit support may reduce fears of job replacement. Staff also need training, clear escalation pathways, and confidence that the system will not create unmanageable monitoring or documentation burdens.

4. Design and Implementation Priorities

Priority	Community guidance	Implication for EdgeCare
Human connection	Technology should enhance, not replace, human relationships.	Design the coach as a bridge to family, providers, peers, and community services.
Onboarding and support	Adoption and sustained use require trusted setup, follow-up, and troubleshooting.	Offer multiple onboarding pathways, reusable help materials, and human backup.
Personalization and autonomy	There is no single right interaction style; users need meaningful choices.	Allow adjustable prompting, modality, tone, timing, and support level, with revisable preferences.
Safety and governance	Organizations need clear boundaries, data practices, verification, and escalation protocols.	Define scope, consent, monitoring, abstention, incident review, and human escalation before deployment.
Equity and accessibility	Technology experience, cognition, culture, language, connectivity, and support vary.	Use accessible design, alternative modes, culturally informed testing, and community-specific implementation.
Workflow integration	Staff adoption depends on value, fit, manageable burden, and nonreplacement framing.	Co-design roles, referrals, handoffs, information exchange, and maintenance with partner organizations.
Sustained engagement	Novelty fades; perceived usefulness and relationship continuity determine whether use persists.	Track engagement, solicit feedback, refresh content and choices, and intervene when use declines.

5. Recommendations for the EdgeCare Development Roadmap

- 1. Make the coach explicitly relational.** Prioritize functions that help users connect with people, prepare for interactions, follow through on shared plans, and access verified services.
- 2. Build a layered implementation model.** Support independent onboarding, guided group onboarding, one-on-one assistance, reusable tutorials, and identifiable human backup.
- 3. Treat personalization as user-governed.** Allow older adults to choose and revise interaction frequency, tone, modality, reminders, data use, and third-party involvement.
- 4. Design safety and governance before deployment.** Specify scope, consent, data access, storage, verification, incident response, abstention, escalation, and organizational ownership.
- 5. Test for long-term engagement, not only initial acceptance.** Measure sustained use, reasons for disengagement, response to changing content, and the value of human follow-up.
- 6. Integrate with services through consent-based workflows.** Co-design referrals, warm handoffs, provider review, and minimum-necessary information exchange with partner organizations.
- 7. Design for heterogeneity and equity.** Test across differences in cognition, technology experience, language, culture, connectivity, family support, and service access.
- 8. Continue community participation across the lifecycle.** Use advisory input not only during concept development, but also during testing, deployment, incident review, maintenance, and updates.

6. Suggested Measures of Success

The meeting questions explicitly asked advisors how success should be defined. Building on their guidance, evaluation should span user, relational, service, and implementation outcomes rather than relying only on app usage.

- User outcomes: social engagement, social connectedness, self-efficacy, autonomy, confidence using the coach, and perceived usefulness.
- Relational outcomes: whether the coach supports rather than displaces human connection; whether users feel understood without being patronized or overvalidated.
- Behavioral outcomes: completion of meaningful activities, follow-through on reminders or provider assignments, successful initiation of contact, and sustained use.
- Service outcomes: referral completion, successful warm handoffs, timely human review, and useful information exchange across approved organizations.
- Safety and governance outcomes: adherence to consent, privacy, abstention, and escalation rules; incident traceability; and stakeholder confidence in oversight.
- Equity outcomes: differential access, usability, engagement, and benefit across technology experience, cognition, language, culture, connectivity, and available support.

7. Interpretation and Next Steps

The advisory meetings support proceeding with the EdgeCare concept, but only as a community-guided system embedded in a broader ecosystem of human relationships and services. Advisors did not view AI capability alone as sufficient. Durable value will depend on trusted onboarding, responsive personalization, technical support, explicit governance, safety protocols, and organizational integration.

The findings also reinforce several productive tensions for future research: support versus independence, personalization versus privacy, comfort versus constructive challenge, broad reach versus digital exclusion, and automation versus human accountability. Rather than eliminating these tensions through one fixed design, EdgeCare should make them visible, measurable, and negotiable through user choice and continuing community oversight.

Recommended next steps are to refine use cases with older adults living alone, prototype multiple onboarding and interaction pathways, define consent and escalation workflows with partner organizations, and test whether the coach strengthens meaningful social routines and connections over time. Community advisors should remain involved in evaluating scenarios, reviewing incidents and updates, and determining whether the system continues to meet community needs.

8. Scope and Limitations

This white paper synthesizes two advisory meetings and related planning materials. The discussions were designed to elicit implementation guidance, not to estimate prevalence or represent all older adults, families, providers, or communities. Meeting notes contain varying levels of detail and include both attributed comments and observer summaries. Accordingly, the findings should guide design and hypothesis development and should be validated through continued engagement with older adults living alone, care partners, frontline staff, and organizations serving diverse communities.