Bridging the Gaps: A Scoping Review of Clinical, Ethical, and Family-Systems Challenges in Rural Long-Term Care and Implications for Medical Education

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1 MOTIVATION & BACKGROUND

WHY THIS MATTERS

During a rural family medicine preceptorship in Columbus, TX, I observed a single physician managing everything from newborn evaluations to nursing home end-of-life conversations in one day — revealing that geriatric complexity in rural settings isn't a specialty problem, it's a systemic one.

My own grandparents in India were both diagnosed with Parkinson's disease with no neurologist for hours in any direction; their primary care physician and family carried decisions that most urban systems would distribute across specialists — directly informing the review's focus on family-systems and cultural caregiving dynamics.

- **Demographic Shift:** Rural U.S. communities are aging faster than urban areas as younger residents leave for economic opportunity, concentrating older adults where physician workforces are shrinking.
- **Expanded Scope Without Backup:** Rural physicians routinely provide services split across geriatricians, psychiatrists, social workers, and ethics consultants in urban systems — without specialist backup (Myhre et al., rural Idaho family physicians).

8 **Global Care Models:** Only 8 implemented rural/remote geriatric care models meeting rigorous criteria exist globally; local provider education in geriatrics is the most consistently missing component (Krause et al.).

- **Referral Deserts:** Family caregivers in rural Indiana reported a near-total absence of geriatric/mental health referral options for depression, dementia, and anxiety (Lalani et al.).

27% **Curricular Omission:** Up to 27% of medical schools worldwide teach no geriatric medicine at all (Pauwels; Pearson et al.), confirming a structural, not regional, failure across North American, Latin American, and European contexts (Meza et al.; Ohta & Sano; Clarke et al.).

2 OBJECTIVE

PRIMARY RESEARCH OBJECTIVE STATEMENT

"To map the clinical, ethical, and family-systems challenges physicians face in rural long-term care for older adults (55+), and identify the resulting gaps in medical education needed to train rural-ready physicians."

PRIMARY OBJECTIVE
Map physician roles, scope of practice, and structural constraints in rural long-term care.

SECONDARY OBJECTIVES
Synthesize evidence on geriatric mental health, guardianship/capacity assessment, and cultural caregiving dynamics (with attention to immigrant and minority populations in Texas); identify resulting medical education gaps.

CENTRAL HYPOTHESIS
Rural eldercare educational gaps are structural rather than incidental, and systematically mapped evidence will directly inform rural-ready physician competency frameworks.

3 METHODS & RATIONALE

Why these choices fit a broad, interdisciplinary rural long-term-care evidence map

Design & Rationale: PRISMA-ScR scoping review methodology — chosen because it is the accepted standard for systematically mapping broad, heterogeneous literature without requiring primary data collection or IRB approval.

Search Strategy & Rationale: Scopus plus planned PubMed, CINAHL, PsycINFO, ERIC, and Web of Science.

Eligibility & Rationale: Adults 55+, long-term care/nursing home setting, U.S. or comparable high-income country, addressing ≥1 concept cluster — chosen to keep focus on directly comparable healthcare systems.

Screening & Extraction & Rationale: Two-stage (title/abstract → full-text), two independent reviewers on a 20% sample, Cohen's kappa for reliability; standardized form adapted from Arksey & O'Malley / JBI manual — chosen to reduce selection bias and ensure rigorous, field-standard scoping frameworks.

Synthesis & Rationale: Thematic analysis across five domains using a socio-ecological framework, mapped to ACGME/COCA competencies — chosen to build a direct, actionable curriculum gap framework.

4 FIVE CONCEPT CLUSTERS

Core Interdisciplinary Dimensions Guiding the Scoping Review Search



Search Flow: Search Prep → Multi-Database Expansion → Screening & Reliability → Socio-Ecological Synthesis

5 PROJECT TIMELINE

Phase Roadmap (Current Date: Sept 2026)

✓	**June 2026**	Protocol finalization, CITI training
✓	**June–July 2026**	Database searches, title/abstract screening
●	**Aug–Sept / Oct 2026**	**CURRENT: FULL-TEXT SCREENING & SYNTHESIS**
○	**Sept–Oct 2026**	Curriculum gap analysis, abstract submissions
○	**Nov 2026–Mar 2027**	Manuscript drafting, presentations, revision
○	**Through May 2027**	Curriculum grant, Graduate Showcase, final reports

6 PROGRESS TO DATE

Process-level output — no final findings yet

Screening and extraction have not yet started; reporting protocol development and search preparation.

1. Finalized PRISMA-ScR protocol and five-domain concept structure.
2. Developed and iteratively refined search strings across all five clusters.
3. Completed initial search testing in Scopus with a health sciences librarian.
4. Expanding search to PubMed, CINAHL, PsycINFO, ERIC, and Web of Science.

SCOPING REVIEW ARCHITECTURE

Conceptual framework connecting domains to rural training outcomes.

1. Five Concept Domains (Rural LTC, Scope, Mental Health, Guardianship, Caregiving)

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2. Socio-Ecological Thematic Synthesis

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3. ACGME / COCA Competency Mapping

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4. Curriculum Gap Framework → Rural-Ready Physician Training

7 DISCUSSION & CONCLUSION

- Rural Texas counties rank in bottom quartile for clinical care; aging immigrant populations are served by an undertrained physician workforce.
- PROGRAMMING COST Action builds European non-specialist geriatric training abroad; U.S. rural equivalent remains unmapped.
- Rural Kansas data: 62% of geriatric providers could not meet practice values in urban settings, reinforcing retention stakes.

CONCLUSION

This work establishes the foundation for mapping whether rural eldercare training gaps are structural rather than incidental.

8 FUTURE WORK

- Complete multi-database search & deduplication across all targeted databases.
- Conduct rigorous two-stage title/abstract and full-text screening with independent dual review.
- Perform socio-ecological thematic synthesis across all five concept domains.
- Build the curriculum gap framework against ACGME / COCA competencies.
- Submit manuscript to *Journal of Rural Health* or *BMC Geriatrics*; present at conferences.

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Take-Home Message: Protocol and search preparation are complete enough to launch evidence-mapping; next output is a structured curriculum gap framework.

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