Universal Care Continuum Model:

A Framework for Economic and Social Transformation

Research-Based White Paper | Caregiver Advocacy Support Initiative (CASI)

Mark Fukae, Founder | Revised Edition: July 2026

Executive Summary

Care is not a niche issue—it is the universal human experience that connects every life, every family, and every economy. This white paper presents the Universal Care Continuum (UCC) Model, a comprehensive theoretical framework developed by the Caregiver Advocacy Support Initiative (CASI) that reconceptualizes care as a predictable, universal life cycle affecting all individuals across five constructs: Complete Dependency (ages 0–5), Primary Caregiving (ages 25–45), Sandwich Generation (ages 45–65), Increasing Care Needs (ages 65+), and Dual Role Simultaneity.

As of 2025, 63 million Americans—one in four adults—serve as unpaid family caregivers, a nearly 50 percent increase since 2015 (AARP & NAC, 2026). The AARP Public Policy Institute (2026) estimates the annual replacement value of this labor at over $1 trillion, representing 49.5 billion hours of care provided by the equivalent of 23.8 million full-time workers. The Columbia University/Otsuka (2024) valuation of $873.5 billion—equivalent to 3.2 percent of U.S. GDP—confirms that informal caregiving is among the largest unrecognized economic sectors in the nation. This revised edition incorporates research findings from nine structured empirical synthesis sessions and updates all statistical figures, policy references, and theoretical grounding to reflect the 2025–2026 legislative and research landscape.

I. Introduction: The Care Crisis as Economic Imperative

A. The Hidden Economy of Care

As of 2025, there are 63 million family caregivers in the U.S.—a figure that has grown nearly 50 percent since 2015 (AARP & NAC, 2026). Women perform approximately 65 percent of this unpaid care work. The International Labour Organization (2018) estimates that global unpaid care labor amounts to $11 trillion annually—9 to 15 percent of global GDP. In the United States, the Bureau of Economic Analysis Household Production Satellite Account (BEA, 2026) estimates that household production represents approximately 20 percent of U.S. economic activity under extended economic indicators. The Invisibility-Penalty Mechanism of the UCC Model identifies this non-recognition as the root structural driver of caregiver economic penalty.

B. The Demographic Imperative

By 2030, all baby boomers will be older than 65, expanding the older adult population so that one in five Americans will be of retirement age (U.S. Census Bureau, 2020). By 2034—for the first time in recorded U.S. history—older adults will outnumber children under 18. By 2060, the older adult population is projected to reach approximately 95 million (25 percent of the total U.S. population), while the old-age support ratio declines from 3.5:1 in 2020 to 2.5:1 by 2060 (U.S. Census Bureau, 2020). ASPE (2020)

confirms that 70 percent of adults who survive to age 65 will develop severe long-term services and supports (LTSS) needs before death.

II. The Universal Care Continuum Model

A. Theoretical Framework

The UCC Model synthesizes five foundational theoretical traditions. Glen Elder's life course theory establishes care transitions as predictable, socially structured events embedded in historical context—the principle of linked lives explains how obligations cascade across generations. Eva Feder Kittay's dependency critique (2011) establishes that designing political systems around voluntary associations between autonomous equals masks the structural reality of human vulnerability; care must be classified as a primary social good. Joan Tronto's care ethics (1993) provides the political argument: care must be positioned at the center of democratic life. Nancy Folbre's care economy frameworks and Arlie Hochschild's second shift thesis quantify the economic and labor dimensions of structural subordination of care work. Behavioral decision science (Hershfield et al., 2011; Oyserman et al., 2015) grounds the Universality-Coalition mechanism in the neuroscience of future-self representation.

B. The Five Constructs

Construct 1: Complete Dependency (Birth to Age 5)

Every human begins life in a state of total dependency. High-quality early childhood programs generate a 13 percent annual rate of return and $7.3 per dollar invested (García, Heckman et al., 2020). Inadequate childcare infrastructure costs $172 billion annually in lost earnings, productivity, and tax revenue (ReadyNation, 2026). ROI claims are conditioned on program quality: Tennessee VPK randomized controlled trial evidence demonstrates that scaled programs without adequate staffing and curriculum fidelity have produced null or negative outcomes (Durkin et al., 2022; Burchinal et al., 2024).

Construct 2: Primary Caregiving (Ages 25–45)

The average lifetime employment-related cost of caregiving for mothers is $295,000—comprising $237,000 in lost earnings (a 15 percent lifetime earnings penalty) and $58,000 in lost retirement wealth (Johnson, Smith & Butrica, 2023). The penalty is regressive: less-educated mothers lose 26 percent of potential lifetime earnings; Latina mothers lose 19 percent. 67 percent of working caregivers report difficulty balancing work and care duties; 27 percent reduced hours; 16 percent stopped working entirely (AARP & S&P Global, 2024). Remote workers report discrimination at nearly double the rate of in-office workers (49% vs. 29%)—establishing that corporate flexibility alone is insufficient.

Construct 3: Sandwich Generation (Ages 45–65)

54 percent of U.S. adults in their 40s are sandwiched between a parent aged 65 or older and a dependent child (Pew Research Center, 2022c). 30 to 33 percent of active family caregivers are simultaneously sandwiched—rising to 47 percent among caregivers under age 50 (AARP & NAC, 2026). During the COVID-19 pandemic, 51.5 percent of sandwiched caregivers endorsed past-month suicidal ideation—8x higher odds than non-caregiving peers (Lei et al., 2023). European longitudinal data confirm the structural root beyond the pandemic context (Zwar et al., 2023). Retirement savings deficits of 40 to 90 percent by age 65 face caregivers who begin intensive intergenerational caregiving at mid-life (Columbia/Otsuka, 2024).

Construct 4: Increasing Care Needs (Ages 65+)

70 percent of adults surviving to age 65 will develop severe LTSS needs before death; 8 percent of adults 65–74 have severe needs, rising to 40 percent of adults 85 and older (ASPE, 2020). 63 million Americans provide unpaid care across all ages (AARP & NAC, 2026). Replacement value: $1 trillion+ annually (AARP, 2026). A central predictive claim of the UCC Model is that underinvestment in caregiver support during Stages 2–3 directly undermines quality and availability of care in Stage 4—creating an intergenerational feedback loop from career disruption to retirement deficit to impoverished Stage 4 entry to Medicaid dependency.

Construct 5: Dual Role Simultaneity

Approximately 7 percent of U.S. parents (4.4 million individuals) have a disability while actively raising minor children. 36 percent of adult family caregivers have a disability themselves. Institutional failures compound dual-role burden: Medicaid PCA restrictions prohibit parenting-related assistance; 35 states allow parental rights termination based on disability alone; administrative silos prevent integrated care planning. The historical tension between disability studies and care ethics is resolved through relational ontology of interdependence—care as universal, reciprocal human experience.

III. The Three Causal Mechanisms

A. Universality-Coalition Mechanism

Framing care through the Universal Care Arc generates broader and more durable political coalitions than targeted caregiver framing. Political science grounding: Skocpol's targeting within universalism (1991); Pierson's policy feedback theory. Behavioral science grounding: Hershfield et al. (2011) confirm neural indistinguishability of future self from strangers; Bryan & Hershfield (2012) confirm third-person moral duty framing increases long-term resource allocation; Oyserman et al. (2015) establish that life-course developmental framing—not catastrophe framing—maintains motivational engagement across contexts. Polling evidence: 80% voter support for federal childcare funding, including 75% of Republicans (FFYF/UpOne Insight, January 2026).

> **Empirical Limitation:** Behavioral science literature evaluates individual intertemporal decisions, not macro-level political coalition formation. Application to broad care policy coalitions is a theoretical extrapolation awaiting direct political experimental validation.

B. Infrastructure-Economy Mechanism

Care infrastructure investment generates 2.4–3.1x more FTE jobs than construction, with 72–76% of investment recouped through tax revenue (De Henau & Himmelweit, 2021). Medicaid HCBS costs $17,298/year per beneficiary vs. $54,462/year for institutional care—a 3.15x cost ratio (Carpenter et al., 2025). MFP transitions yield $22,080 in annualized per-participant savings (Mathematica for CMS, 2020). California PFL reduced elderly nursing home utilization by 11% (Arora & Wolf, 2018). By 2023, HCBS represented 87.1% of Medicaid LTSS beneficiaries at 63.8% of LTSS spending.

C. Invisibility-Penalty Mechanism

BEA (2026) estimates household production at approximately 20% of U.S. economic activity under extended indicators. ILO (2018) values global unpaid care at $11 trillion annually (9–15% of global GDP). AARP (2026) values U.S. adult caregiving at $1 trillion+. The Social Security AIME structure institutionalizes the penalty: every zero-earnings caregiving year permanently depresses the 35-year average benefit base. The Social Security Caregiver Credit Act (H.R. 8490/S. 4396, April 2026) proposes up to 5 years of deemed wages (~$35,000/year) for eligible caregivers.

IV. Current System Failures

A. Economic Costs

Family caregivers lose $522 billion in wages annually from informal eldercare alone (Chari et al., 2015—elder-care only). The childcare crisis costs $172 billion annually (ReadyNation, 2026—childcare only). These are distinct figures with different scopes. Average lifetime cost per caregiving mother: $295,000 (Johnson et al., 2023). Caregiving-induced health declines add $28.3 billion annually in healthcare costs (Columbia/Otsuka, 2024).

B. Gender and Intersectional Inequality

Less-educated mothers lose 26% of potential lifetime earnings; Latina mothers lose 19% (Johnson et al., 2023). Immigrant women face credential devaluation, occupational segregation, and exclusion from assistance programs upon re-entry. The U.S. Care Policy Scorecard (Oxfam, 2023) awarded federal care policies 43%—concluding that U.S. care policy disproportionately harms women of color and immigrant women.

C. Policy Fragmentation — 2026 Context

As of mid-2026, 18 states and DC have comprehensive paid family leave; 32 states have none. The United States remains the only OECD nation without mandatory paid leave for new mothers in the private sector. The One Big Beautiful Bill Act (2025–2026) enacted substantial Medicaid cuts and accelerated programmatic federalism, increasing state-level advocacy urgency.

V. Economic Benefits of Care Infrastructure Investment

Care investment generates 2.4–3.1x more jobs per dollar than construction (De Henau & Himmelweit, 2021), with 72–76% fiscal recoupment. California PFL produced an 11% relative reduction in elderly nursing home utilization (Arora & Wolf, 2018). Medicaid HCBS saves $37,164 per beneficiary annually vs. institutional care (Carpenter et al., 2025). High-quality ECE generates 13% annual social ROI, rising to $14+/dollar when intergenerational spillovers are tracked (García et al., 2020; Bennhoff et al., 2023/2024).

VI. Policy Framework: 2026 Legislative Landscape

A. Federal Legislative Landscape

Active Legislation Supporting Care:

- Social Security Caregiver Credit Act (H.R. 8490 / S. 4396, April 2026): Up to 5 years of deemed Social Security wages (~$35,000/year) for 80+ hours/month of qualifying care. Pair with progressive financing (raise taxable earnings cap) to address solvency concerns.

- Catching Up Family Caregivers Act / Improving Retirement Security for Family Caregivers Act (Sen. Collins, April 2026): Increased retirement catch-up contributions for caregivers providing 500+ care hours but under 500 paid work hours annually.
- EMPOWER Care Act: Funds MFP-model institutional-to-community transitions. Federal data confirms $22,080 in annualized per-participant Medicaid savings.
- Childcare funding: 80% voter support including 75% of Republicans and 85% of Independents (January 2026 national polling) establishes bipartisan viability.

Federal Defense Priorities:

- Oppose Medicaid HCBS cuts: $37,164 per-person annual savings from community vs. institutional care is the primary fiscal argument. Every HCBS cut expands institutional costs.
- Defend FMLA while pursuing paid upgrade: 54% of eligible workers cannot currently afford to take unpaid FMLA leave.

B. State Innovation — The Colorado CARE Act Model

Colorado's CARE Act provides: protected class status for family caregiver status; mandatory interactive process for accommodations; rebuttable presumption for remote work; small employer mediation. This is the national template for state-level advocacy. Priority replication states: Texas, Florida, Georgia, North Carolina, Arizona, Michigan, Pennsylvania. The Washington State WA Cares Fund (mandatory LTCI via 0.58% payroll contribution) is the first U.S. public LTCI program and a proof-of-concept for universal LTCI feasibility.

C. International Models

Germany's SPV (1994): universal mandatory LTCI via payroll; cash allowances plus in-kind services. Japan's Kaigo Hoken (2000): mandatory care insurance for all adults 40+; 90% coverage for formal care costs; socialized care prevents unpaid family care entrapment. Nordic countries: 3.2–3.3% of GDP on LTSS; universal public entitlement. U.S. Medicaid requires $2,000 asset depletion for eligibility—structural inferiority that universal LTCI resolves.

D. Priority Actions

- Pass Social Security Caregiver Credit Act with paired progressive financing.
- Protect and expand Medicaid HCBS; oppose and reverse the One Big Beautiful Bill Act cuts.
- Enact national paid family and medical leave (minimum 12 weeks, 67–90% wage replacement).
- Expand the federal Caregiver Credit on a sliding scale by care intensity, duration, and caregiver income.
- Fund direct care workforce living wages as prerequisite for HCBS expansion stability.
- Replicate Colorado CARE Act in all 49 states without equivalent protection.
- Pursue WA Cares Fund-model state LTCI in high-aging-population states: Florida, Arizona, Texas.

VII. Conclusion

The Universal Care Continuum Model reframes care from a private burden borne disproportionately by women to recognized infrastructure essential for economic function and social wellbeing. With 63 million

Americans serving as unpaid caregivers, $1 trillion in unrecognized annual labor, and a 2030 demographic inflection point that renders delay exponentially more expensive, the window for proactive, cost-effective action is 2026–2028. The Colorado CARE Act has proven the political viability of comprehensive caregiver protections. The behavioral science of the Universality-Coalition mechanism provides the messaging strategy. The Infrastructure-Economy mechanism provides the fiscal argument. Care is not separate from economic infrastructure—it is economic infrastructure.

References

AARP & NAC. (2026). Caregiving in the U.S. 2025 series. https://doi.org/10.26419/ppi.00412.001

AARP Public Policy Institute. (2026). Valuing the invaluable 2026.

AARP & S&P Global. (2024). Working while caregiving: It's complicated.

Arora, K., & Wolf, D.A. (2018). Journal of Policy Analysis and Management, 37(1), 38–53.

ASPE. (2020). Most older adults are likely to need LTSS. U.S. DHHS.

BEA. (2026). Household production economic statistics. Working Paper WP2026-15.

Burchinal, M., et al. (2024). Science, 384(6695), 506–508.

Bryan, C.J., & Hershfield, H.E. (2012). Journal of Experimental Social Psychology, 48(6), 1369–1372.

Carpenter, A., et al. (2025). HCBS/Medicaid LTSS trends, 2023. Mathematica/CMS.

Chari, A.V., et al. (2015). Health Services Research, 50(3), 871–882. [ELDER-CARE ONLY]

Columbia University Mailman / Otsuka. (2024). America's Unseen Workforce.

De Henau, J., & Himmelweit, S. (2021). Feminist Economics, 27(1–2), 453–469.

Durkin, K., et al. (2022). Developmental Psychology, 58(3), 470–484.

García, J.L., Heckman, J.J., et al. (2020). Journal of Political Economy, 128(7), 2502–2541.

Hershfield, H.E., et al. (2011). Journal of Marketing Research, 48(S1), S23–S37.

ILO. (2018). Care work and care jobs. Geneva: ILO.

Johnson, R.W., Smith, K.E., & Butrica, B. (2023). Urban Institute / DOL Women's Bureau.

Kaye, H.S., LaPlante, M.P., & Harrington, C. (2009). Health Affairs, 28(1), 262–272.

Kittay, E.F. (2011). Ratio Juris, 24(1), 49–58.

Lei, L., Maust, D.T., & Leggett, A.N. (2023). JAGS, 71(9). [pandemic qualifier required]

Maestas, N., Messel, M., & Truskinovsky, Y. (2024). Journal of Labor Economics, 42(S1).

Mathematica Policy Research for CMS. (2020). MFP Rebalancing Demonstration 2018.

McKinsey Global Institute. (2015). The power of parity. [consulting report — disclose in academic use]

Oyserman, D., Destin, M., & Novin, S. (2015). Self and Identity, 14(1), 37–49.

Pew Research Center. (2022a). Demographics of multigenerational households. Pew Social Trends.

Pew Research Center. (2022b). Young adults and multigenerational households. Pew Short Reads.

Pew Research Center. (2022c). Americans in their 40s are sandwiched. Pew Short Reads.

ReadyNation. (2026). Child care crisis costs $172 billion annually. Strong Nation. [CHILDCARE ONLY]

Sear, R. (2021). Philosophical Transactions of the Royal Society B, 376(1827).

Tronto, J.C. (1993). Moral boundaries. Routledge.

U.S. Census Bureau. (2020). Demographic turning points. P25-1144.

Zwar, L., König, H.H., & Hajek, A. (2023). International Psychogeriatrics, 35(9), 481–492.