The Actuarial Imperative

Predictive Intelligence for the Neurodegenerative Age

Transforming Managed Medicare Volatility into Sustainable Value for Medicare Advantage, ACOs, C-SNPs, and the Broader Ecosystem

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1. Executive Summary: The Systemic Risk

The Problem: A Systemic Risk to the Medicare Ecosystem

The Medicare ecosystem faces an unprecedented financial and operational crisis driven by the convergence of new high-cost therapies, diagnostic infrastructure transformation, and regulatory constraints. This is not a distant concern—it is a present emergency requiring immediate strategic action.

The New Cost Reality

The introduction of Disease-Modifying Therapies (DMTs) such as **Leqembi** and **Kisunla** has created massive, unbudgeted financial risks across the healthcare ecosystem. Current actuarial models lack the visibility necessary to predict the scaling of diagnostic infrastructure, particularly the imminent shift to blood-based biomarkers such as p-tau217. This blindness to utilization velocity leaves payers dangerously exposed. The volatility concentrates most heavily in payer growth areas—**Chronic Special Needs Plans (C-SNPs)** and **Dual Eligible Special Needs Plans (D-SNPs)**—while PPO plans de-emphasize these populations.

The "Infrastructure Gap" Multiplier

The diagnostic landscape is undergoing a fundamental transformation. Testing is shifting from complex PET scans to simple blood tests, driving exponential growth in diagnosed member populations and overwhelming legacy utilization management controls. Beyond the direct drug costs, the **Total Cost of Care (TCOC)** explodes when accounting for associated MRIs, infusion fees, monitoring requirements, and the substantial burden placed on caregivers.

The Regulatory & Financial Cliff

The "Part D" Blind Spot

Medicare Advantage Part D plans face a critical negotiation lock-out: they are barred from negotiating new formulations (such as subcutaneous Leqembi) until 2034. Statutory exemptions for new biologics and orphan designations further delay Inflation Reduction Act (IRA) intervention. Compounding this challenge, the shift from IV infusion to self-administered pills and injections moves spend to the pharmacy benefit (Part D), which is significantly harder to track and curb via traditional medical benefit tools.

The $2,000 Maximum Out-of-Pocket Impact

The Inflation Reduction Act's $2,000 Out-of-Pocket Cap creates accelerated liability exposure. Members reach their full cost-share threshold by February or March, transferring 100% of remaining year liability to health plans far earlier than historical norms. This creates an unprecedented cash-flow shock that current financial models fail to anticipate.

Ecosystem Pressure Points

Accountable Care Organizations (ACOs) face exponential TCOC increases that threaten to wipe out Shared Savings entirely. These organizations need CMS GUIDE Model support for care coordination subsidies but lack the execution infrastructure to participate effectively.

Health Systems face intense payer pressure to restrict prescribing while simultaneously struggling with operational bottlenecks from thousands of newly diagnosed patients seeking neurology consults.

> ***The Strategic Imperative:*** *The industry cannot afford a "wait and see" approach. Organizations must build spend management infrastructure now or risk devastating MLR deterioration in the 2026-2027 bid cycles.*

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2. Value-Based Care Platform: Strategic Framework

Executive Summary

Our platform addresses the fundamental value-based care challenge: taking material financial risk while managing volatility intelligently. We are a **VBC risk-deal engineering firm** using differentiated prediction to make risk contracts viable—not merely a clinical workflow tool with data capabilities.

The Three-Layer Approach

Our approach integrates three complementary layers that together create a defensible market position:

Layer	Function	Strategic Value
VBC Deal Engineering	Structures optimal risk models, spreads, corridors, and stop-loss mechanisms	Enables downside risk assumption with appropriate guardrails

Layer	Function	Strategic Value
Data & AI Differentiation	Deploys high-value predictors from EMR, biomarkers, and SDOH	Outperforms traditional actuarial models in accuracy and timeliness
GUIDE/Dementia Flagship	Serves as proof point at the intersection of expensive drugs, caregiver dynamics, hospice timing, and new CMS models	Demonstrates measurable impact with highest volatility/ROI potential

Market Opportunity

The scale of opportunity is substantial and growing rapidly. **34.1 million Medicare Advantage enrollees** participated in 2025, representing 54% of eligible beneficiaries. This population is projected to reach **46-58 million by 2030**. Dementia costs totaled **$781 billion in 2025** ($232 billion in medical and long-term care), fueled by a gap of **7.4 million undiagnosed MCI cases**. Nearly **12 million unpaid caregivers** for Alzheimer's and other dementias face physical, emotional, and financial strain, worsening health equity disparities across the system.

Strategic Alignment

Medicare Advantage payers face uncontrolled Part D spend with IRA negotiation delayed to 2028 and beyond for biologics. Comorbidity patterns (diabetes, cardiovascular disease, depression) correlate strongly with cognitive decline, creating multiplicative cost exposure. The platform aligns with CMS priorities including the GUIDE Model for dementia care coordination, Star Ratings optimization, and health equity initiatives.

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3. VBC Deal Engineering: Taking the Right Risk

Choosing the Right Risk Model and Contract Type

Effective value-based care requires matching the risk model to organizational capabilities and market conditions. The platform supports multiple contract structures:

Contract Type	Risk Level	Best Fit	Key Considerations
Shared Savings Only	Low	New ACOs, cautious health systems	Limited upside, minimal downside exposure
Shared Savings + Downside	Moderate	Established ACOs, regional MA plans	Balanced incentives, requires predictive capability
Full Capitation	High	Sophisticated health systems, integrated delivery networks	Maximum upside, requires robust risk management
Bundled Payments	Variable	Specialty-focused organizations	Episode-specific, requires care pathway control

Engineering Spread, Corridors, and Stop-Loss

Target Spread Management

Organizations must set target spread between expected MLR (or total cost of care) and contractual risk share that enables realistic earnings under normal volatility conditions:

- **MA plans** typically target 85-88% MLR with 3-5% management margin
- **ACOs** aim for 2-4% total cost savings with 1-2% retained margin after sharing
- Models must baseline, stress-test, and run adverse scenarios to validate spread adequacy

Risk Corridor Architecture

Multi-layered protection balances incentives with solvency:

- **Inner band (±2-3%):** Held entirely by provider/ACO for strong cost management incentives
- **Middle band (3-8%):** Shared 50/50 or 75/25 with payer to limit catastrophic losses while maintaining skin in the game
- **Outer band (>8%):** Reinsured or returned to payer to prevent insolvency

Stop-Loss Tailored to VBC

Traditional commercial stop-loss is inappropriate for Medicare VBC. Proper structure includes:

- **Specific stop-loss:** Per-member/episode caps (e.g., $250K-$500K annually) protecting against outliers like gene therapies

- **Aggregate stop-loss:** Covers losses above 105-110% expected costs, with attachment based on panel size and volatility
- **Advance premium funding:** Stop-loss carriers pay claims real-time versus retrospective reimbursement
- **Carved-in versus carved-out considerations** for high-cost drugs, especially Part D in MA-PD arrangements

Ongoing Monitoring and Course Correction

Quarterly Risk Posture Reviews

Effective risk management requires continuous monitoring and adjustment:

- Track performance relative to risk corridors, stop-loss attachment points, and earnings targets
- Identify drivers: utilization changes, unit cost inflation, coding/risk score shifts, SDOH deterioration
- Implement concrete interventions—UM adjustments, benefit redesign, network steering, care model pivots—before variance hits reported MLR
- Stress-test upcoming quarters using leading indicators (authorization patterns, high-risk member rosters, seasonal ED trends)

The platform positions organizations as VBC risk-deal specialists: helping decide how much risk to take, on what terms, and with what protection mechanisms.

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4. Data & AI Layer: High-Value Predictors

Beyond Traditional Actuarial Approaches

Traditional actuarial models rely on lagged claims and broad risk scores. Our platform integrates **longitudinal EMR data, biomarkers, SDOH indicators, and real-time signals** for differentiated predictions tailored to each stakeholder's needs.

Stakeholder-Specific Predictive Applications

For CMS / CMMI: Predicting GUIDE Model Impact

Algorithmic Inputs:

- Retrospective claims (MCI/dementia codes, memory complaints, cognitive assessments)

- Medication fills (cholinesterase inhibitors, memantine, anti-amyloid agents)
- Neurology/geriatric referral patterns
- SDOH factors (ADI, dual-eligible status, living arrangement, caregiver availability)

Use Cases:

- Predict GUIDE qualification and timing
- Forecast bundle costs by intensity, specialty, and caregiver needs
- Model acute/hospice offsets for net financial impact

For MCOs / MA-PD Plans: Stop-Loss Triggering and Catastrophic Liability

Algorithmic Inputs:

- EMR-derived MCI progression (cognitive scores, neuropsych trends, functional decline)
- Part D trajectory (DMT initiation, escalations, adherence)
- Imaging utilization patterns
- Comorbidity/dual/LIS status predicting OOP cap breaches

Use Cases:

- Identify $2,000 Part D OOP cap hitters before catastrophic phase
- Prioritize MTM/generic substitution/care coordination pre-catastrophic phase
- Size aggregate stop-loss accurately by cluster versus typical years

For ACOs / Health Systems: Total Cost of Care Leakage

Algorithmic Inputs:

- Patient-ping out-of-network referrals
- Neurology patterns toward high-cost infusions
- Prior auth submissions/approvals for expensive drugs
- ED patterns indicating ambulatory gaps

Use Cases:

- Detect early $26K+ anti-amyloid movement
- Intervene pre-prescribing (redirect in-network, alternatives, palliative)
- Reduce TCOC leakage keeping high-risk members in ACO purview

For Pharma: Diagnostic Deserts and Market Access

Algorithmic Inputs:

- Claims for memory loss/MCI/dementia medications by geography
- EMR connectivity/neurology/biomarker access
- Diagnostic pathway gaps (primary care without specialty/advanced diagnostics)

Use Cases:

- Identify demand deserts with lacking infrastructure
- Guide co-branded programs/teleneurology/mobile clinics for faster diagnosis
- Support market access by demonstrating unmet need in priority regions

Why Our Models Outperform Traditional Actuarial Approaches

Dimension	Traditional Models	Our Platform
Data Sources	Lagged claims, broad risk scores	Longitudinal EMR, biomarkers, real-time signals
Prediction Timing	90-180 days after events	12-24 months before diagnosis
Accuracy Focus	Historical utilization patterns	Diagnosis velocity, caregiver burnout, hospice timing, catastrophic phase entry
Intervention Window	Reactive (post-diagnosis)	Proactive (pre-diagnostic)

5. The Solution: AI-Driven Predictive Intelligence

Core Capability: 80/20 Predictive Modeling

The platform combines **80% Retrospective Claims Data (CMS LDS)** with **20% Prospective Signals (EHR/Patient Ping)** for high-confidence risk forecasting that neither data source could achieve alone.

What the Platform Delivers

Regional Utilization Forecasting: Predicts diagnostic velocity spikes by provider density and testing availability, enabling proactive resource allocation and rate planning.

Caregiver & SDOH Quantification: Calculates "Hidden Costs" including caregiver hours and burnout risk, supporting member retention through targeted support programs.

Benefit Richness & MLR Stability: Enables accurate cost factoring into MA bids, preventing benefit cuts and stabilizing MLRs across the book of business.

Mitigation of Multi-Morbid Therapies: Identifies conflicting high-cost regimens to prevent dangerous and expensive polypharmacy.

Quantifying Earlier Hospice Entry in Cost Models

The platform employs a structured approach to hospice timing optimization:

1. **Define Timing and LOS Segments:** Categorize members by disease stage and care trajectory
2. **Build "With vs Without Earlier Hospice" Cohort Framework:** Compare outcomes across intervention scenarios
3. **Parameterize Cost Differentials by Timing:** Quantify savings from appropriate hospice transitions
4. **Translate Caregiver Burnout and SDOH Into Probabilities:** Model intervention success likelihood
5. **Embed in MA and ACO Financial Models:** Integrate predictions into actuarial workflows

How This Improves GUIDE Program Execution

The platform enhances GUIDE Model participation through:

- **Precision Targeting:** Identify members who will benefit most from care coordination
- **Triage and Routing:** Match members to appropriate intensity of support
- **Pre-Populated Assessments:** Reduce administrative burden on care teams
- **Panel-Level Dashboards:** Enable population health management at scale

> ***Core Value Proposition for GUIDE:*** *Enhances care coordination and respite services (up to $2,500/year cap in 2025), boosting member satisfaction and Star Ratings while generating $450K+ in annual participation payments.*

6. Total Addressable Market: Multi-Drug Class Volatility

The AD/MCI Mega-Trend (Primary Focus)

Therapeutic Pipeline

The Alzheimer's and MCI therapeutic landscape is evolving rapidly:

Leqembi (lecanemab): 130,000 patients projected by 2025, representing 6x growth from 2024. The 5-year trajectory could reach 400,000+ patients as diagnostic infrastructure scales.

Kisunla (donanemab): Approved July 2024 with a unique "stop-dosing" protocol that creates a binary spend profile—extreme upfront costs followed by tail-off. This makes forecasting even more complex than chronic medications.

Combination Therapies (2027-2028): Amyloid + Tau targeting expected to double per-patient costs to $50,000-$65,000 annually.

Addressable Patient Population by 2029

Category	Population	Status
Diagnosed & Treated	350,000 - 500,000	Currently receiving therapy
Diagnosed Awaiting Treatment	200,000 - 300,000	Biomarker confirmed, not yet initiated
Undiagnosed High-Risk	6,500,000 - 7,000,000	Clinical symptoms but no formal diagnosis
Total Medicare Spend Exposure	$10-15B annually (drug only)	$18-28B including bundled monitoring/care costs

Parallel High-Risk Drug Classes

Drug Class	2025 Utilization Growth	Spend Correlation	Total Medicare Exposure	Predictive Complexity
AD/MCI Monoclonals	Exponential	Very High	$3.5B → $10-15B (2025-2029)	EXTREME - Diagnostic velocity unknown

Drug Class	2025 Utilization Growth	Spend Correlation	Total Medicare Exposure	Predictive Complexity
GLP-1s (CVD/Sleep Apnea)	Critical	Moderate-High	$40-60B by 2026	HIGH - Indication creep bypassing weight loss ban
Oncology (Keytruda/Opdivo)	Sustained	High	$7.6B baseline, growing 8-12% annually	MODERATE - Subcutaneous formulations extending exclusivity
Cell/Gene Therapy	Low Volume	Extreme Per-Case	$2-4M per patient	HIGH - Stop-loss trigger events
Orphan Drugs	Accelerating	High	Protected from IRA until 2027+	MODERATE - Multiple indication protections

> ***Critical Insight:*** *AD/MCI represents the only drug class where* ***volume uncertainty exceeds price uncertainty****. While GLP-1s face formulary management and oncology has biosimilar pipelines, the AD/MCI diagnostic acceleration rate is completely unpredictable—creating existential planning risk.*

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7. Stakeholder Financial Risk Assessment & Strategic Upside

Medicare Advantage Plans: Catastrophic MLR Exposure

Risk Profile (per 100,000 members)

2025-2026 Baseline Scenario:

- Current diagnostic rate: 8% of eligible population (320 members)
- Blood biomarker adoption accelerates to 25% diagnosis rate by Q4 2026 (1,000 members)

- Each member: $52,000 annual bundled cost (drug + monitoring + care coordination)
- **Unforecasted Cost Surge: $35.4M in Year 1 alone**

Compounding Part D Crisis:

- AD/MCI patients average 8.3 chronic conditions (vs 3.2 age-matched controls)
- Each cognitive patient: $4,200 additional Part D spend on comorbidities
- In-home care utilization correlates with 2.3x medication adherence
- **Hidden Catastrophic Phase Load: Additional $4.2M annually** (1,000 patients × $4,200)

D-SNP Amplification (40% higher utilization):

- D-SNP members: 5.6% diagnostic rate vs 8.5% Medicare-only
- Once diagnosed, D-SNP AD patients: $72,800 annual TCOC (vs $52,000 MA-only)
- Typical MA plan: 15-20% D-SNP penetration
- **D-SNP Hidden Liability: Additional $3.1M per 100K members**

Total Unmanaged Risk: $42.7M over 18 months, representing 2.8-3.5 point MLR deterioration

Strategic Upside with Predictive Platform

Value Driver	Impact
Cost Avoidance	$8.5M (20% reduction through proactive care pathways)
MLR Stabilization	1.5 point improvement = $22M prevented overage
Member Retention	120 additional member-years retained × $8,500 LTV = $1.02M
Star Ratings Protection	Medication adherence improvement worth 0.15-0.25 stars = $1,800-$3,000 per member in bonus payments
Net Value Creation	**$32.5M over 3 years vs $12M platform investment = 2.7:1 ROI**

Competitive Laggard Penalty

Plans delaying predictive analytics deployment face severe consequences:

- 18-month lag in rate adjustment approvals (stuck with 2025 assumptions through 2027)
- Forced benefit reductions triggering 8-12% member attrition

- Star Ratings decline from medication management failures
- Estimated market share loss: 3-5% annually in competitive markets

ACOs (MSSP & ACO REACH): Total Cost of Care Hemorrhaging

Risk Profile (per 15,000 attributed lives)

Baseline Scenario:

- 45 members escalate to high-cost AD therapy unexpectedly (0.3% of population)
- Part B drug + monitoring: $2.34M annually
- Preventable hospitalizations (falls, medication errors, caregiver burnout): $1.85M
- **TCOC Overage: $4.19M eliminates shared savings, triggers penalties**

GUIDE Model Non-Compliance Risk:

- CMS dementia care model requires infrastructure 80% of ACOs lack
- Failure to participate: Loss of 15-20% of high-risk attributed lives to competing ACOs
- **Attribution Volatility: $8-12M annual revenue at risk**

Strategic Upside with Predictive Platform

Value Driver	Impact
Early Identification	60% of at-risk members flagged 12-18 months pre-diagnosis
Preventable Hospitalization Reduction	$1.11M avoided (60% success rate)
Pharmaceutical Timing Optimization	Delaying therapy start by 6-9 months where appropriate saves $875K
GUIDE Model Revenue	$450K annually in care coordination payments
Shared Savings Preservation	$2.8M protected
Net Value Creation	**$5.24M vs $450K platform investment = 11.6:1 ROI**

C-SNP Programs: Exponential Growth Collision

Market Context

The C-SNP market is experiencing rapid expansion with concentrated risk:

- Humana, CVS Health, UnitedHealth expanding C-SNP offerings 35% YoY
- C-SNP members: 4M in 2025 → projected 7-9M by 2030
- Cognitive decline comorbidity rate: 42% of C-SNP diabetic/CHF populations

Risk Profile (per 50,000 C-SNP members)

Baseline Scenario:

- 21,000 members with diabetes/CHF (42% of population)
- MCI comorbidity onset: 8,400 members over 3 years (40% of chronic cohort)
- Without prediction: Reactive diagnosis at advanced stage requiring immediate therapy
- **Cost Shock: $436M over 3 years** ($52K per member × 8,400)

Strategic Upside with Predictive Platform

Value Driver	Impact
Pre-Emptive Risk Stratification	Identify cognitive decline trajectory 24-36 months early
Integrated Care Pathways	Bundle dementia prevention with diabetes/CHF management
Delayed Therapy Initiation	30% of high-risk members avoid biologics through lifestyle intervention
Cost Savings	$131M over 3 years
Competitive Differentiation	Dementia-specific benefits attract 12-15% higher enrollment
Net Value Creation	**$143M vs $8M platform investment = 17.9:1 ROI**

Competitive Laggard Impact

C-SNPs without predictive models face existential threats:

- Member selection against them (sophisticated brokers steer high-risk dementia patients to laggard plans)
- MLR deterioration forcing exit from markets (12 regional C-SNP closures in 2024-2025)

At-Risk Health Systems: Global Budget Catastrophe

Risk Profile (per 250,000 covered lives in value-based contracts)

Baseline Scenario:

- 750 members escalate to AD therapy (0.3% of population)
- Per-member bundled cost: $110K annually (drug + monitoring + complications + care coordination)
- **Budget Breach: $82.5M exceeding global budget caps**

Stop-Loss Trigger Analysis:

- Typical health system stop-loss threshold: $250K per member annually
- AD patients reaching threshold: 180 members (24% of AD cohort)
- **Reinsurance Activation: $13.5M in stop-loss claims** (reputation damage with carriers)

Cell/Gene Therapy Collision:

- CAR-T and gene therapies: $2-4M per patient
- Cognitive patients often ineligible for complex therapies, but comorbid cancer patients face dual catastrophic costs
- Estimated overlap: 15-20 patients annually
- **Compounded Catastrophic Exposure: $40-80M**

Strategic Upside with Predictive Platform

Value Driver	Impact
Population Risk Scoring	Identify which members likely to breach thresholds
Care Pathway Optimization	Route 40% of members to lower-cost settings (home infusion vs hospital)
Preventable Complication Reduction	$18M avoided (ARIA management, fall prevention)
Actuarial Confidence	Negotiate better reinsurance rates with predictive data
Net Value Creation	**$35M vs $5M platform investment = 7:1 ROI**

CMS & CMMI: Program Sustainability & Model Innovation

Value Proposition for Federal Payers

GUIDE Model Acceleration:

- Dementia care coordination model requires predictive tools for care team deployment
- Target: 100,000 beneficiaries by 2027; current enrollment <12,000
- **Platform Enablement:** Provide ACOs/health systems the infrastructure to participate at scale

GENEROUS Model (GLP-1 Pilot) Data Intelligence:

- 2026 pilot covering obesity treatment requires utilization forecasting
- Predictive platform identifies which beneficiaries will have cardiovascular/diabetes progression requiring GLP-1s
- **Budget Control:** Prevent pilot from exceeding $15B allocation over 5 years

IRA Negotiation Strategy:

- 2028 Part B drug negotiations require 2026-2027 utilization data for MFP (Maximum Fair Price) calculations
- Platform provides CMS real-time visibility into Leqembi/Kisunla uptake velocity
- **Negotiation Leverage:** Accurate demand forecasting strengthens government position

Medicare Trust Fund Solvency:

- Unmanaged AD/MCI spend threatens Part A/B solvency projections
- Platform-enabled care coordination could reduce 10-year AD spending by $25-40B
- **Strategic Value:** Demonstration project for predictive infrastructure across all high-cost conditions

Pharmaceutical Manufacturers: Market Access & Real-World Evidence

Value Proposition for Eisai (Leqembi) and Eli Lilly (Kisunla)

Commercial Intelligence:

- Diagnostic Desert Mapping: Identify geographic markets with high prevalence but low neurology infrastructure
- Launch Sequencing: Optimize specialty pharmacy partnerships and infusion center build-out based on predicted demand
- Payer Negotiations: Demonstrate real-world TCOC reduction through coordinated care pathways

Regulatory Strategy:

- Post-Marketing Surveillance: Track ARIA (brain swelling) rates and outcomes in diverse populations
- Health Equity Documentation: Prove therapy reaches underserved Black/Hispanic populations (current 69.6% and 75.8% diagnosis rates)

- CMS Coverage Expansion: Build evidence for broader label indications

IRA Defense Positioning:

- Value Demonstration: Show total cost savings when bundled with care coordination
- Biosimilar Preparation: Model utilization erosion timing for patent cliff planning (2032-2035)

Financial Impact:

- Market Expansion: 15-20% faster diagnostic infrastructure development through targeted investment
- Premium Pricing Sustainability: Demonstrate value-based care models supporting $26K+ pricing through 2028
- Competitive Intelligence: Real-time Kisunla vs Leqembi market share tracking and switch patterns

Pharmacy Benefit Managers: Specialty Pharmacy & Formulary Optimization

Value Proposition for CVS Caremark, Express Scripts, Optum Rx

Part D Catastrophic Phase Management:

- Predictive Member Identification: Flag members 6-9 months before hitting $2,000 OOP cap
- Formulary Steering: Move comorbid medications to preferred alternatives before catastrophic phase (when plan bears 60% costs)
- Generic Substitution Timing: Optimize switch timing to maximize savings while maintaining adherence

Specialty Pharmacy Channel Strategy:

- AD/MCI patients require specialty pharmacy: Platform identifies members needing white-glove care coordination
- Infusion Site Network Optimization: Route members to lowest-cost sites with proven quality outcomes
- Biosimilar Readiness: Pre-identify which members are biosimilar candidates when patent cliffs hit (2032+)

Manufacturer Rebate Negotiations:

- Utilization Management Value: Demonstrate PBM's ability to control Leqembi/Kisunla volume through intelligent prior authorization
- Real-World Outcomes Data: Share de-identified platform data proving adherence programs work
- Competitive Leverage: Show manufacturer which PBM has superior care coordination infrastructure

GLP-1 Cross-Indication Intelligence:

- Platform predicts which AD patients will develop/have comorbid diabetes, obesity, cardiovascular disease
- Bundled Therapy Pricing: Negotiate GLP-1 + AD therapy package deals with manufacturers

Financial Impact:

- Rebate Optimization: 8-12% improvement in specialty drug rebate capture
- Catastrophic Phase Loss Reduction: $4-6 per member per month savings across book of business
- Specialty Pharmacy Margin: 15% higher attachment rate for high-touch coordination services

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8. Minimum Viable Product: Value-Add Architecture

Phase 1 Core Engine (Q1-Q2 2026)

Data Integration Layer

1. CMS Limited Data Set (LDS) Ingestion

- Part A (inpatient): Hospital admissions with memory loss, fall, confusion ICD codes
- Part B (physician): Neurology visits, PET scan claims, MRI with contrast
- Part D (pharmacy): Acetylcholinesterase inhibitor prescriptions (Aricept, Exelon, Namenda)

2. EMR Patient Ping / ADT Feeds

- Real-time neurologist referrals
- Cognitive assessment scores from Annual Wellness Visits
- Emergency department visits for falls, medication errors

3. Social Determinants of Health (SDOH)

- Area Deprivation Index (ADI) scores
- Transportation access (proxy for PET scan/infusion center utilization)
- Caregiver availability indicators (household composition data)

4. Health Risk Assessment (HRA) Data

- Self-reported memory concerns
- Family history of dementia
- Depression screening scores (PHQ-9)

Predictive Analytics Core (Proprietary Algorithms)

Model 1: Diagnostic Velocity Forecaster

- **Input:** Retro claims for "memory loss" ICD codes + Annual Wellness Visit cognitive screening gaps
- **Output:** Probability score (0-100%) that member will receive formal AD/MCI diagnosis in next 12/24/36 months
- **Value Add:** Enables proactive care coordination deployment BEFORE expensive therapy initiation

Model 2: Bundled Cost Projector

- **Input:** Diagnosis codes + SDOH + comorbidity burden + caregiver availability
- **Output:** Total episode cost prediction (drug + monitoring + complications + care needs)
- **Value Add:** Moves beyond drug-only forecasting to true TCOC for actuarial accuracy

Model 3: Therapy Escalation Predictor

- **Input:** Current disease stage + rate of cognitive decline + comorbidity trajectory
- **Output:** Probability member will escalate to combination therapy (Amyloid + Tau) in 2027-2028
- **Value Add:** Identifies future "super-utilizers" requiring intensive case management

Model 4: Care Setting Optimizer

- **Input:** Member characteristics + geographic access + clinical appropriateness criteria
- **Output:** Recommended care pathway (home infusion vs hospital-based, frequency of monitoring)
- **Value Add:** Reduces per-episode costs by 18-25% through optimal site-of-care routing

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9. Stakeholder-Specific Value Modules

Medicare Advantage Plans

Value Lever 1: MLR Stabilization Dashboard

- Real-time view of diagnostic velocity by market
- Projected vs actual AD/MCI spend variance tracking
- Alert system for when utilization exceeds rate assumptions by >15%
- **Outcome:** Enables mid-year benefit adjustments or reinsurance purchasing

Value Lever 2: D-SNP Risk Stratification Engine

- Separate models for dual-eligible population (40% higher utilization pattern)
- Medicaid service utilization correlation with cognitive decline
- **Outcome:** Accurate bid submissions for D-SNP contracts (current models under-price by 22-35%)

Value Lever 3: Member Retention Suite

- Caregiver burden scoring to predict disenrollment risk
- Proactive care plan triggers (home health, respite care, nutrition support)
- **Outcome:** 18-24 month longer enrollment duration = $10,500-$15,000 LTV preservation per member

Value Lever 4: Star Ratings Protection

- Medication adherence improvement protocols for AD patients with comorbidities
- Care gap closure automation (annual wellness visits, depression screening)
- **Outcome:** 0.15-0.25 star improvement = $1,800-$3,000 per member bonus payment eligibility

Value Lever 5: Competitive Intelligence

- Market-level benchmarking: Your diagnostic rate vs competitor plans
- Benefit design comparison: Which in-home services competitors offer
- **Outcome:** Differentiation strategy for broker/agent positioning

ACOs (MSSP & ACO REACH)

Value Lever 1: GUIDE Model Compliance Suite

- Care coordinator workload optimization (which members need intensive vs light-touch support)
- CMS reporting automation for dementia care coordination quality metrics
- **Outcome:** $450K+ annual GUIDE Model participation payments; 15-20% attribution protection

Value Lever 2: Part B Specialty Drug Early Warning System

- Alert when attributed member sees neurologist or orders PET scan (12-18 months before drug starts)
- Care team workflow integration: Trigger interdisciplinary team meeting
- **Outcome:** 60% of high-cost members identified early; $1.11M preventable hospitalization reduction

Value Lever 3: Shared Savings Calculator

- Real-time TCOC tracking including specialty drugs (not just traditional pharmacy)

- Scenario modeling: Impact of delaying therapy 6-9 months through lifestyle intervention
- **Outcome:** $2.8M shared savings preservation per 15,000 lives

Value Lever 4: Attribution Stability Protector

- Predict which members will have cost spikes potentially triggering reassignment
- Preemptive care intensification to keep members below volatility thresholds
- **Outcome:** 8-12% reduction in high-cost member "churn"

C-SNP Programs (Humana, CVS, UnitedHealth)

Value Lever 1: Dual-Diagnosis Pathway Builder

- Integrated care plans for diabetes + MCI, CHF + dementia, COPD + cognitive decline
- Clinical protocol libraries for managing medication interactions
- **Outcome:** 30% of members avoid AD biologics through optimized chronic disease management

Value Lever 2: Benefit Design Optimizer

- Model which supplemental benefits (meal delivery, transportation, home modifications) have highest ROI for preventing cognitive decline
- Cost-effectiveness analysis: $3K in home services vs $52K in drug therapy
- **Outcome:** $131M savings over 3 years through preventive benefit allocation

Value Lever 3: Enrollment Growth Engine

- Market analytics: Geographic areas with high C-SNP need but low competition
- Broker education materials showcasing cognitive-specific benefits
- **Outcome:** 12-15% higher enrollment growth vs competitors

Value Lever 4: Risk Adjustment Documentation

- Automated HCC (Hierarchical Condition Category) capture for cognitive conditions
- Ensures proper risk score coding for accurate CMS payments
- **Outcome:** 8-12% improvement in risk-adjusted revenue per member

At-Risk Health Systems

Value Lever 1: Global Budget Defender

- Population-level risk scoring across all value-based contracts

- Budget variance alerting when specialty drug utilization threatens caps
- **Outcome:** $35M protected from budget breaches per 250,000 covered lives

Value Lever 2: Stop-Loss Threshold Manager

- Member-level tracking toward catastrophic thresholds ($250K typical)
- Care pathway optimization to avoid triggering reinsurance (reputation protection)
- **Outcome:** $13.5M fewer stop-loss claims; better reinsurance rate negotiations

Value Lever 3: Site-of-Care Revenue Optimizer

- Route 40% of members to hospital-owned infusion centers vs third-party
- Clinical appropriateness + financial margin analysis
- **Outcome:** $8-12M additional margin capture on AD therapy delivery

Value Lever 4: Cell/Gene Therapy Collision Detector

- Identify members facing dual catastrophic exposure (AD + CAR-T, AD + gene therapy)
- Sequencing protocols: Which therapy first, how to stage treatments
- **Outcome:** Avoid $40-80M in compounded catastrophic costs

CMS & CMMI

Value Lever 1: GUIDE Model Scaling Infrastructure

- White-label platform for ACOs/health systems lacking internal capabilities
- CMS receives aggregated (de-identified) utilization intelligence
- **Outcome:** Grow GUIDE enrollment from 12,000 to 100,000 beneficiaries by 2027

Value Lever 2: IRA Negotiation Intelligence

- Real-time Leqembi/Kisunla utilization tracking (volume, geographic distribution, demographics)
- Scenario modeling for Maximum Fair Price (MFP) impact on access
- **Outcome:** Evidence-based negotiation strategy for 2028 Part B drug list

Value Lever 3: GENEROUS Model Budget Control

- GLP-1 pilot utilization forecasting (prevent $15B budget overrun)
- Identify which beneficiaries have legitimate CVD/diabetes indication vs purely weight loss
- **Outcome:** Politically sustainable pilot avoiding Congressional scrutiny

Value Lever 4: Health Equity Dashboard

- Track diagnostic rates by race/ethnicity (current: Black 69.6%, Hispanic 75.8% of expected)
- Measure whether policy interventions close gaps
- **Outcome:** Demonstrate CMS commitment to equitable access for underserved populations

Value Lever 5: Medicare Trust Fund Modeling

- 10-year solvency projections incorporating AD/MCI spend scenarios
- Demonstrate value of coordinated care infrastructure investment
- **Outcome:** Policy justification for $500M-$1B federal platform investment

Pharmaceutical Manufacturers (Eisai, Eli Lilly)

Value Lever 1: Diagnostic Infrastructure Heat Map

- Identify "diagnostic deserts": High AD prevalence + low PET/neurology capacity
- Investment prioritization for specialty pharmacy partnerships
- **Outcome:** 15-20% faster market penetration in underpenetrated regions

Value Lever 2: Real-World Evidence (RWE) Engine

- Aggregate outcomes data: ARIA rates, hospitalization reduction, caregiver satisfaction
- Payer-credible evidence beyond clinical trials
- **Outcome:** Support $26K+ pricing through demonstrated TCOC value

Value Lever 3: Health Equity Access Tracking

- Prove therapy reaches Black/Hispanic populations proportionally
- Mitigate CMS coverage restriction risk
- **Outcome:** Maintain "reasonable and necessary" determination without additional barriers

Value Lever 4: Competitive Intelligence

- Real-time Kisunla vs Leqembi market share, switch patterns, discontinuation rates
- "Stop-dosing" protocol adherence data (Kisunla's unique profile)
- **Outcome:** Optimize sales force deployment and formulary positioning

Value Lever 5: Biosimilar Runway Visibility

- Model utilization erosion 2032-2035 as patents expire
- Identify loyal patient cohorts likely to resist switching

- **Outcome:** Strategic planning for revenue cliff (5-7 year advance notice)

Value Lever 6: Payer Contract Optimization

- Demonstrate value-based arrangements: Lower TCOC when drug paired with care coordination
- Shift payer conversation from "cost containment" to "outcome investment"
- **Outcome:** Protect against formulary exclusion or heavy prior authorization

Pharmacy Benefit Managers (CVS Caremark, Express Scripts, Optum Rx)

Value Lever 1: Catastrophic Phase Loss Minimizer

- Identify members 6-9 months before hitting $2,000 OOP cap
- Formulary steering for comorbid medications while member still in deductible phase
- **Outcome:** $4-6 PMPM savings across entire book of business (plan pays 60% post-cap)

Value Lever 2: Specialty Pharmacy Attachment Engine

- Predict which AD members need white-glove coordination (high complexity cases)
- Route to owned specialty pharmacy vs third-party
- **Outcome:** 15% higher specialty pharmacy attachment rate; improved margin

Value Lever 3: Prior Authorization Intelligence

- Automated clinical appropriateness checking (CMS Registry compliance)
- Reduce prior auth approval time from 7 days to <24 hours for appropriate cases
- **Outcome:** Demonstrate UM value in manufacturer rebate negotiations (8-12% improvement)

Value Lever 4: Biosimilar Readiness Pipeline

- Pre-identify which members are biosimilar candidates when patent cliffs hit (2032+)
- Physician education targeting for smooth transition
- **Outcome:** Capture 40-50% biosimilar share in Year 1 (vs industry average 15-20%)

Value Lever 5: GLP-1 Cross-Indication Bundling

- Predict which AD patients will develop diabetes/obesity/CVD requiring GLP-1s
- Negotiate package pricing with manufacturers (Leqembi + Ozempic combined rebate)
- **Outcome:** 10-15% deeper rebates on bundled therapy protocols

Value Lever 6: Adherence Program Targeting

- Identify which AD patients are at highest risk of non-adherence (SDOH factors)
- Deploy intensive support programs only where ROI is positive
- **Outcome:** 22% improvement in specialty medication possession ratio (MPR); fewer therapy failures

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10. Competitive Landscape: The Laggard Penalty

Current Market Gap Analysis

Existing "Solutions" and Their Limitations

Competitor Category	Fatal Flaw	Laggard Penalty
Traditional Actuarial Models (Milliman, Oliver Wyman)	Based on historical utilization; cannot predict diagnostic velocity acceleration	18-24 month forecasting lag; payers stuck with 2025 assumptions through 2027 rate cycle
Pharmacy Benefit Managers (PBMs)	Part D visibility only; blind to Part B AD/MCI drugs (Leqembi/Kisunla)	Miss 75% of total bundled costs (monitoring, infusions, complications)
Care Management Platforms (Signify Health, NaviHealth)	Reactive post-diagnosis; no predictive pre-diagnostic identification	Intervene 12-18 months too late; members already on expensive therapy
Claims Analytics Vendors (Change Healthcare, Cotiviti)	Retrospective fraud/waste/abuse detection; no forward-looking forecasting	Identify cost overruns 6-9 months after they occur; no prevention capability
Health Plans' Internal Actuarial Teams	Lack real-time EMR data; rely solely on lagged claims (90-180 days old)	Cannot detect neurologist visit or PET scan order until claim is adjudicated

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11. The Proprietary Moat: Pre-Pharmaceutical Prevention Intelligence

What Makes Us Different

Unlike every competitor focused on managing drug utilization AFTER diagnosis, we uniquely combine:

1. **Nutrition & dietary support intervention infrastructure** (existing business foundation)
2. **Predictive pre-diagnostic identification** (12-24 months before formal MCI/AD diagnosis)
3. **Evidence-based delay protocols** (postponing expensive biologic therapy through lifestyle modification)

The Five-Layer Advantage

Layer 1: Upstream Intervention Window (Competitors Miss This Entirely)

Our Advantage:

We identify at-risk members 18-24 months BEFORE neurologist referral through:

- Nutrition assessment data showing cognitive-protective dietary patterns (Mediterranean diet adherence, omega-3 intake, antioxidant consumption)
- Caregiver-reported meal preparation difficulties (early executive function decline signal)
- Social isolation indicators from meal delivery engagement patterns
- Comorbidity nutritional markers (diabetes control, cardiovascular risk factors that accelerate dementia)

Why This Matters:

- **Clinical Evidence:** Mediterranean diet + DASH dietary pattern reduces AD risk by 35-53% (Rush University MIND diet study)
- **Economic Impact:** Every 6-month delay in therapy initiation = $13,000-$16,000 savings per member
- **Competitive Moat:** No pharmacy-centric vendor has access to pre-diagnostic nutrition/lifestyle data revealing cognitive decline trajectory

What Competitors Do:

- Wait for ICD-10 diagnosis codes or PET scan claims (reactive, not predictive)
- Attempt "prior authorization" barriers AFTER physician prescribes therapy (adversarial relationship, poor outcomes)
- Lack any legitimate alternative intervention to offer members

What We Do:

- Deploy nutrition counseling, meal planning, and dietary support 12-18 months PRE-diagnosis
- Create legitimate clinical pathway: "Let's optimize your brain health through nutrition while we monitor cognition"
- Build member/caregiver trust BEFORE high-stakes drug decisions
- Document outcomes: X% of members maintain cognitive stability without biologics for 12-24 additional months

Layer 2: Dual-Track Predictive Intelligence (Market Practices Only One)

Market Standard (Pharmacy/Actuarial Models):

- Predict who will RECEIVE a drug based on: claims history, age, comorbidities, previous dementia medication (Aricept, etc.)
- **Limitation:** This is "demand forecasting" not utilization management

Our Dual-Track Approach:

Track 1 - Pharmaceutical Trajectory Prediction (Same as Market):

- Standard forecasting: Who will get diagnosed, when will they start therapy, what will it cost

Track 2 - Intervention Susceptibility Scoring (NO ONE ELSE HAS THIS):

- **Proprietary Algorithm:** Among at-risk members, who has modifiable lifestyle factors that could delay pharmaceutical intervention?
- **Scoring Inputs:**
- Current dietary quality (via our nutrition platform data)
- Caregiver engagement capacity (via home support utilization patterns)
- Comorbidity control status (diabetes A1C, blood pressure, cholesterol)
- Social determinants (access to fresh food, transportation for medical visits, health literacy)
- Genetic risk factors (APOE4 status if available)

The Economic Arbitrage:

Scenario	Pathway	Cost
Scenario A (Market Standard)	Identify 1,000 at-risk members → 800 progress to biologics	$41.6M

Scenario	Pathway	Cost
Scenario B (Our Model)	Identify 1,000 at-risk members → Intervene on 600 "high-susceptibility" candidates → 240 delay therapy 12+ months	$12.5M savings ($52K × 240 members)
Incremental Intervention Cost	$1,200 per member annually (nutrition counseling, meal delivery, health coaching)	$720K
Net Savings		**$11.8M (16:1 ROI on intervention alone)**

Layer 3: The "Trust & Engagement" Data Advantage (Unrecognized by Market)

Why Traditional UM Fails:

- Prior authorization denials create adversarial relationships
- Members/physicians view payers as obstacles to care
- Result: Workarounds, appeals, complaints, poor Star Ratings

Our Member Engagement Foundation:

- **42 million unpaid caregivers** already seeking support for loved ones with cognitive concerns
- Our nutrition/dietary platform serves this population BEFORE crisis (proactive, welcomed intervention)
- We capture proprietary signals that predict therapy utilization but also intervention compliance:
- Meal delivery acceptance rates (caregiver burden indicator)
- Nutrition counseling session attendance (family engagement level)
- Dietary adherence patterns (member's capacity for lifestyle modification)
- Caregiver satisfaction scores (burnout risk → accelerated institutionalization)

The Data Moat - Comparative Member Journeys:

Step	Traditional UM Model (Reactive)	Our UM Model (Preventive)
1	Member sees neurologist (Day 0 - payer learns from claim 90 days later)	Member's caregiver enrolls in our nutrition support program (18 months before diagnosis)

Step	Traditional UM Model (Reactive)	Our UM Model (Preventive)
2	PET scan ordered (Day 30 - payer learns at Day 120)	We detect early signals: caregiver reports "Mom is having trouble following recipes" + dietary quality declining
3	Leqembi prescribed (Day 120 - payer implements prior auth at Day 150)	Our predictive model flags: 72% probability of MCI diagnosis within 18-24 months
4	Appeal process (Day 150-210)	Intervention deployed: Mediterranean diet meal delivery + cognitive-supportive nutrients + caregiver education
5	Therapy starts (Day 210)	Care coordinator engages: "Let's optimize brain health while monitoring cognition with your doctor"
6	**Total cost: $52K annually for 15+ years**	Member maintains stability: 14 additional months without biological therapy
7		**Cost avoided: $60,666** (14 months × $52K annual ÷ 12 months)
8		**Intervention cost: $1,400** (14 months × $100/month)
9		**Net savings: $59,266 per member (43:1 ROI)**

The Trust Advantage:

- When therapy IS clinically necessary, member/caregiver already has relationship with us
- No adversarial prior auth fight—we transition: "We've tried lifestyle optimization together; now let's coordinate your biologic therapy for best outcomes"
- Result: Faster therapy initiation when appropriate, higher adherence, better outcomes, improved Star Ratings

Layer 4: The ACO/GUIDE Model "Secret Weapon"

Market Problem:

- CMS's GUIDE Model (dementia care coordination) requires infrastructure 80% of ACOs lack

- ACOs need: care coordinators, interdisciplinary teams, caregiver support programs
- Building this from scratch: 18-24 months + $2-5M investment per ACO

Our Advantage:

- **We ARE the infrastructure** ACOs need for GUIDE Model compliance
- Our nutrition/dietary platform already provides:
- Caregiver support hotline (required GUIDE component)
- Care coordination workflows (meal planning IS care coordination)
- Interdisciplinary team integration (dietitians, social workers, nurses)
- Member/caregiver satisfaction tracking (required GUIDE reporting)

The Economic Unlock:

- ACOs pay us for UM intelligence + predictive analytics
- We provide GUIDE Model infrastructure as platform feature (not extra charge)
- ACO receives $450K+ annual GUIDE payments from CMS
- We become the "enabling technology" for dementia ACOs—market position no competitor can replicate

Why This Creates Winner-Take-Most Dynamics:

- First ACOs to join GUIDE Model (2026-2027) capture most attractive patient populations
- Our platform is the fastest path to GUIDE participation (competitors have no equivalent infrastructure)
- ACOs that delay face adverse selection (left with patients other ACOs didn't want)

Layer 5: Pharma Partnership Model (Monetization Competitors Cannot Access)

Market Standard:

- Pharma views payers/UM vendors as adversaries (trying to block prescriptions)
- Limited collaboration beyond rebate negotiations

Our Differentiated Positioning:

For Eisai (Leqembi) and Eli Lilly (Kisunla):

Problem They Face:

- CMS/payers terrified of uncontrolled utilization
- Restrictive coverage policies being implemented (registries, step therapy, frequent monitoring requirements)

- Risk: Coverage restrictions limit market to 20-30% of eligible patients

What We Offer Pharma:

1. **Appropriate Use Intelligence:** We identify which members SHOULD get therapy (documented disease progression despite lifestyle intervention)
2. **Payer Confidence:** We give payers comfort that utilization is clinically appropriate, not just diagnostic code-driven
3. **Expanded Access:** By proving some patients can delay therapy through nutrition/lifestyle, we create actuarial room for payers to cover appropriate candidates without prior auth barriers

The Revenue Model:

- **Payers pay us:** For UM intelligence and cost containment ($8-15 PMPM for at-risk populations)
- **Pharma pays us:** For appropriate patient identification and market access expansion (service fees + outcomes-based bonuses)
- **ACOs pay us:** For GUIDE Model infrastructure and predictive analytics (annual licensing)
- **CMS could pay us:** For GENEROUS Model (GLP-1) and GUIDE Model scaling support (federal contracts)

Why This Works:

- We're the ONLY entity that reduces TOTAL costs (not just shifts them) while maintaining/improving access
- **Pharma wins:** More appropriate utilization without restrictive prior auth
- **Payers win:** Lower overall spend through legitimate prevention
- **Members win:** Lifestyle intervention support + faster therapy access when needed
- **Providers win:** Less administrative burden, better patient outcomes

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12. The Timing Advantage: Why 2026 Is Our Window

Market Reality Check

Competitors' Path to Our Capability

Capability	Time Required	Investment
Build nutrition/dietary intervention business	18-24 months	$50-75M
Establish caregiver trust/engagement	12-18 months	—
Develop proprietary lifestyle intervention protocols	12-24 months	+ clinical validation
Integrate with ACO care coordination workflows	12-18 months	—
Total time to replicate our position	**36-48 months minimum**	**$50-75M+**

Blood Biomarker Inflection Point

- **FDA approval expected:** Q2 2026 (6 months from now)
- **Diagnostic acceleration begins:** Q3-Q4 2026
- **Payer actuarial crisis manifests:** Q1-Q2 2027 (when claims data reveals extent of under-forecasting)

Our Window

- We launch NOW (Q1 2026), capture anchor clients before crisis hits
- We have 12-18 month head start before competitors even recognize the opportunity
- By the time market understands our model, we have:
- 15-25% of MA industry under contract
- Exclusive ACO partnerships locked in
- Clinical validation data published
- CMS/CMMI endorsement

First-Mover Advantages That Compound

1. **Data Network Effects:** More members → better predictive models → higher ROI demonstration → easier sales
2. **ACO Lock-In:** GUIDE Model participants sign 2-3 year contracts; switching costs enormous
3. **Pharma Partnerships:** Exclusive arrangements with Eisai/Lilly create barriers for late entrants

4. **Star Ratings Differentiation:** Plans using our platform gain measurable advantage, creating "must have" perception

The Evidence Gap Competitors Cannot Close

What Payers Demand Before Buying UM Solutions:

- Peer-reviewed clinical validation
- 12-18 months of real-world outcomes data
- Actuarial certification of cost savings
- CMS regulatory alignment confirmation

Our Advantage:

- We can demonstrate lifestyle intervention efficacy through EXISTING nutrition program data (not theoretical)
- Published literature already supports Mediterranean diet for cognitive protection (we're implementing known science, not experimental protocols)
- Actuarial models validate that 12-month therapy delay = $52K savings (simple math, not complex ROI proof)
- GUIDE Model explicitly calls for caregiver support and care coordination (we're checking CMS boxes, not seeking waivers)

Competitors Starting From Zero:

- Need to conduct clinical studies (3-5 years)
- Build credibility with payers (2-3 years of pilot results)
- Navigate CMS regulatory uncertainty (18-24 months)
- **Result:** Launch in 2029-2030 timeframe (after the crisis has already reshaped the market)

The Unfair Advantage Summary

Traditional UM Vendors	Our Platform
Predict drug utilization	Predict pharmaceutical trajectory AND intervention susceptibility
Implement prior authorization barriers	Deploy legitimate lifestyle alternative 18-24 months early

Traditional UM Vendors	Our Platform
Negotiate rebates	Create trust-based relationships with members/caregivers
Outcome: Cost shifting, not cost reduction; adversarial relationships	Provide ACO infrastructure (GUIDE Model enabler)
	Partner with pharma to expand appropriate access while reducing total costs
	Outcome: 43:1 ROI on prevention, 16:1 ROI on intervention, winner-take-most market position

Why No One Can Catch Us

1. **36-48 month replication timeline** for competitors to build equivalent nutrition/intervention infrastructure
2. **Blood biomarker crisis hits in 12-18 months** (Q3 2026-Q1 2027)
3. **ACO contracts lock in 2-3 year commitments** (switching costs prohibitive)
4. **Network effects compound** as we accumulate more data and validation
5. **Regulatory tailwinds favor us** (GUIDE Model, CMMI focus on caregiver support, CMS interest in legitimate cost containment)

> *The market thinks the Alzheimer's/MCI opportunity is about "predicting drug spend." We understand it's about **preventing unnecessary drug spend while optimizing access for appropriate candidates**. That's the difference between a commodity analytics vendor and a defensible, high-margin platform business.*

The "Wait and See" Death Spiral

Plans delaying predictive analytics adoption face compounding penalties:

Year 1 (2026):

- Diagnostic rate accelerates 15-20% faster than actuarial assumptions
- MLR deteriorates 1.8-2.5 points

- Unable to adjust rates (already submitted for 2026)

Year 2 (2027):

- 2026 losses force benefit reductions (higher copays, narrower networks)
- Member attrition: 8-12% in competitive markets
- Star Ratings decline (medication management, care gaps)
- Lose $1,800-$3,000 per member in bonus payments

Year 3 (2028):

- Reputation damage: Brokers/agents steer high-risk members to laggard plans (adverse selection)
- Forced market exit in 3-5 counties
- Acquisition by competitor at distressed valuation

> ***Real-World Example:*** *12 regional C-SNP plans closed 2024-2025 due to inability to manage cognitive comorbidity costs. Average time from MLR deterioration to market exit: 22 months.*

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13. Financial Impact Summary: 5-Year Value Creation

Medicare Advantage (National Scale: 31M → 46M members by 2030)

Unmanaged Scenario

- 2025-2030 cumulative AD/MCI cost: **$75-110 billion**
- MLR deterioration: 3.2 point average across industry
- Member attrition: 2.8M members lost to competitors
- Star Ratings impact: $18-24 billion in lost bonus payments

Platform-Enabled Scenario

- Cost avoidance: **$15-22 billion** (20% reduction through care optimization)
- MLR stabilization: 1.5 point improvement = **$28 billion** prevented overage
- Retention value: 1.4M members retained × $9K LTV = **$12.6 billion**

- Star Ratings protection: **$12-16 billion** bonus payment preservation
- **Total Value Creation: $67-78 billion** vs $2-3 billion platform investment across industry
- **ROI: 25:1 to 30:1**

ACOs (Combined MSSP & ACO REACH: 13M → 22M lives by 2030)

Unmanaged Scenario

- TCOC overages eliminate shared savings: **$8-12 billion** lost
- Attribution volatility: 18% of high-risk members churned
- GUIDE Model non-participation: $2-3 billion in unclaimed payments

Platform-Enabled Scenario

- Shared savings preserved: **$6-9 billion**
- GUIDE Model revenue captured: **$1.8-2.5 billion**
- Attribution stability: **$1.2-1.8 billion** protected revenue
- **Total Value Creation: $9-13 billion** vs $600-900M platform investment
- **ROI: 14:1 to 16:1**

C-SNPs (4M → 7-9M members by 2030)

Unmanaged Scenario

- Cognitive comorbidity cost shock: **$3.5-5 billion** (unexpected dual-diagnosis expenses)
- Market exits: 15-20 plans forced to close
- Lost enrollment opportunity: 800K-1.2M members captured by prepared competitors

Platform-Enabled Scenario

- Preventive care savings: **$1.05-1.5 billion** (30% avoid biologics)
- Enrollment advantage: **$2.4-3.6 billion** (capturing laggard plans' orphaned members)
- Risk adjustment optimization: **$800M-1.2B** (proper HCC coding)
- **Total Value Creation: $4.25-6.3 billion** vs $250-400M platform investment
- **ROI: 16:1 to 18:1**

Per-Member Economic Transformation

Transforming Standard C-SNP Member into High-Value Asset:

Value Category	Year 1 (Pilot & Setup)	Year 2 (Calibration)	Year 3 (Scale)	Year 4 (Optimization)	Year 5 (Market Dominance)
A. Preventive Care Savings	$450	$800	$1,100	$1,250	$1,350
Unit Driver	Early ID	Diversion from ER	30% Biologic Avoidance	Comorbidity Mgmt	Full TCOC Control
B. Risk Adj. Optimization	$600	$850	$1,000	$1,100	$1,200
Unit Driver	Retro-claims scanning	Prospective EMR Gap	Real-time Lab	Automated HCC	Precision V28 Scoring
C. Enrollment /LTV Lift	$500	$1,200	$2,200	$2,800	$3,200
Unit Driver	Reduced Churn	Marketing Advantage	Orphaned Lives	Superior Star Ratings	Market Leader Brand
GROSS VALUE CREATED (A+B+C)	**$1,550**	**$2,850**	**$4,300**	**$5,150**	**$5,750**
(-) Platform Investment	($400)	($350)	($250)	($200)	($150)
Unit Cost	High Setup	Pilot inefficiencies	Economies of Scale	SaaS Efficiency	Volume Pricing
NET MEMBER VALUE (PMPY)	**$1,150**	**$2,500**	**$4,050**	**$4,950**	**$5,600**
ROI Multiplier	**2.8x**	**7.1x**	**16.2x**	**24.7x**	**37.3x**

Key Takeaways:

- **Year 1 "Cleaning":** Fix data, stop bleeding
- **Year 3 "Biologic Cliff":** Savings spike preventing $26k/year infusions
- **Year 5 "LTV Dominance":** Retaining members as competitors exit

14. Implementation Roadmap: Speed to Value

Q1 2026: Pilot Launch (3 Anchor Clients)

Target Profile

- **Mid-sized MA plan:** 500K-2M members, 15-20% D-SNP penetration
- **Regional ACO:** 15K-50K attributed lives, interested in GUIDE Model participation
- **Health system:** 200K+ covered lives in value-based contracts

90-Day Deliverables

- Data integration (CMS LDS, EMR feeds, SDOH)
- Baseline diagnostic velocity model calibration
- Identify 200-300 high-risk members for care coordination pilot
- Measure TCOC variance vs internal actuarial forecasts

Success Metrics

- 80%+ accuracy in 12-month diagnostic predictions
- 15%+ cost variance reduction vs internal models
- 25+ point improvement in caregiver Net Promoter Score (NPS)

Q2-Q3 2026: Scale & Validate

Expansion

- 8-12 additional plans/ACOs (targeting 3-5M covered lives)
- Launch PBM module for catastrophic phase management
- Activate pharma manufacturer intelligence (Eisai/Lilly partnerships)

Product Enhancement

- Real-time alerting (neurologist visits, PET scan orders)
- GUIDE Model reporting automation
- Star Ratings optimization workflows

Validation Milestones

- Blood biomarker FDA approval (expected Q2 2026)
- Measure actual vs predicted diagnostic acceleration
- Publish white paper with pilot results (peer-reviewed journal submission)

Q4 2026-Q4 2027: Market Dominance

Market Capture

- 25-35% of MA industry (target: 11-16M members under platform)
- 40-50% of GUIDE Model participants (ACOs/health systems)
- 3-4 PBM partnerships covering 60M+ lives

Platform Evolution

- Expand to GLP-1 forecasting (GENEROUS Model support)
- Cell/gene therapy stop-loss predictor
- Oncology + AD comorbidity module (Keytruda + Leqembi patients)

Regulatory Milestones

- CMS adopts platform intelligence for IRA negotiation planning (2028 drug list)
- CMMI announces platform as approved GUIDE Model vendor
- State Medicaid programs adopt for managed long-term care

2028+: Ecosystem Platform

Beyond AD/MCI

- Multi-drug class volatility forecasting (obesity, rare disease, gene therapy)
- International expansion (European payers facing similar challenges)
- Risk-sharing contracts with manufacturers (outcomes-based pricing)

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15. Conclusion: The Actuarial Imperative

The Alzheimer's and MCI therapeutic revolution is not a "future concern"—it is a **present emergency**. Blood biomarkers will receive FDA approval in Q2 2026, triggering diagnostic acceleration that will expose catastrophic underpricing in every 2026-2027 rate filing across Medicare.

The Choice Is Binary

Option 1: Predictive Intelligence (Platform Adopters)

- See the diagnostic wave 12-18 months early
- Deploy care coordination before costs cascade
- Stabilize MLR while improving member outcomes
- Retain market share and Star Ratings
- **Generate 14:1 to 30:1 ROI over 5 years**

Option 2: Reactive Scrambling (Competitive Laggards)

- Absorb cost shock in real-time
- Watch MLR deteriorate 2.5-3.5 points
- Cut benefits to stop bleeding (triggering member exodus)
- Lose Star Ratings bonuses ($18-24B industry-wide)
- **Face market exit or distressed sale within 22-36 months**

Stakeholder Implications

For CMS: Platform intelligence is the difference between Medicare Trust Fund solvency and crisis.

For Members: Platform-enabled care coordination is the difference between 18-24 additional months at home vs premature institutionalization.

For Caregivers: Proactive support is the difference between sustainable family caregiving vs burnout-driven health crises.

> *The predictive intelligence platform doesn't just forecast costs—it **transforms volatility into value, chaos into coordination, and actuarial instability into strategic advantage**.*

The dementia/MCI bubble will reshape Medicare. The only question is whether you'll be positioned to benefit or buried by it.

16. Next Steps: Secure Strategic Positioning

Immediate Actions (Next 30 Days)

1. **Executive Briefing:** 90-minute deep dive with CFO, Chief Actuary, Chief Medical Officer
2. **Data Assessment:** Evaluate current CMS LDS access, EMR connectivity, SDOH data sources
3. **Pilot Scoping:** Identify 50,000-100,000 member cohort for Q1 2026 proof-of-concept
4. **Competitive Analysis:** Benchmark your diagnostic rates vs market (identify if you're already behind)

Pilot Program Investment

Component	Investment
Initial data integration + model calibration	$800K-$1.2M
6-month pilot operation (50-100K members)	$400-600K
Care coordination intervention (200-300 high-risk members)	$250-400K
Total Pilot Investment	**$1.45-2.2M**

Expected Pilot ROI

Value Driver	Impact
Cost variance reduction worth	$3-5M (vs internal actuarial miss)
Identify preventable costs over 18 months	$8-12M
De-risk 2027 rate filing (preventing 1.5+ point MLR deterioration)	$15-20M
Pilot Net Value	**$26-37M return on $1.45-2.2M investment**

This prospectus presents a strategic framework for navigating the impending dementia care crisis. The platform described herein represents a unique convergence of predictive analytics, lifestyle intervention infrastructure, and regulatory alignment that positions early adopters for market leadership in the neurodegenerative age.