

IHEP Investor Due Diligence Package

Finalized consolidated packet (excluding NIST mapping document and the interactive investor dashboard)

| | |
|--------------------------|--|
| Classification | Investor Due Diligence - Confidential |
| Package Status | Complete (consolidated) |
| Source Index Date | November 26, 2025 |
| Compilation Date | 2026-01-30 |
| Prepared By | Jason Jarmacz, Founder & CEO (content owner); compiled into single packet for distribution |

Distribution: This packet is intended for authorized investors and diligence reviewers. Do not redistribute.

Exclusions: The Security & Compliance Framework - NIST Mapping document and the Interactive Investor Dashboard web app are intentionally excluded per request. This packet still summarizes security/compliance posture at a high level.

Contents

1. Executive Summary
 2. Company Overview and Problem Statement
 3. Implementation Overview (Platform, Operations, and Delivery Plan)
 4. Market Research and Competitive Analysis
 5. Go-To-Market Plan
 6. Financial Model Summary (10-year projections)
 7. System Architecture Overview
 8. Phase I Detailed Project Plan (18-month roadmap)
 9. Clinical Study Protocol and IRB Materials (summary)
 10. Intellectual Property Strategy
 11. Risks, Mitigations, and Milestones
- Appendix A. Key Metrics Snapshot
- Appendix B. Document Control and Contact

1. Executive Summary

IHEP is a population-health and health-equity platform combining digital health technology, peer navigation, financial empowerment, and AI-driven prediction to improve treatment adherence and outcomes for underserved patients. The initial clinical focus is HIV care, with an 18-month prospective study design and three pilot sites.

- **Market:** \$28.7B total addressable opportunity in population health management; \$2.8B serviceable market by Year 5.
- **Clinical objective:** Improve medication adherence (MPR \geq 80%) vs. matched historical controls; 750 participants across three sites.
- **Business model:** Multi-stream revenue (grants, pilots, payer/insurance, EHR licensing, pharma/data partnerships).
- **Regulatory posture:** HIPAA-aligned security practices and a roadmap toward HITRUST i1 and SOC 2 Type II.
- **Return profile (modeled):** Seed investor outcomes modeled at 3.6x to 12.9x MOIC across scenarios; base case 7.5x MOIC and 22.4% IRR.

| Metric | Value (from source index) |
|-------------------------------|----------------------------|
| TAM | \$28.7B |
| SAM (Year 5) | \$2.8B |
| Revenue (Year 5) | \$3.6M |
| Revenue (Year 10) | \$35M |
| Break-even | Year 8 |
| Capital needed (10-year plan) | \$102.1M total |
| Seed raise (planned) | \$3.5M |
| Seed valuation (illustrative) | \$12M pre-money |
| Pilot sites / participants | 3 sites / 750 participants |
| Clinical phase duration | 18 months |
| Patents pending (planned) | 3 provisional filings |

2. Company Overview and Problem Statement

IHEP targets a familiar failure mode in chronic care: clinical plans exist, but adherence and follow-through are fragile when patients are navigating instability, stigma, and fragmented support. The program pairs a software platform with peer navigation and financial empowerment to reduce missed appointments, improve medication adherence, and generate measurable health and cost outcomes.

Core concept

- A digital twin per participant spanning patient, behavioral, clinical, financial, and social dimensions.
- Operational workflows for appointments, reminders, outreach, care-team coordination, and peer navigator actions.
- AI-driven risk prediction to prioritize interventions and identify likely non-adherence before it happens.

Who benefits

- Patients: improved engagement, adherence support, and reduced friction with care.
- Providers and clinics: fewer no-shows, better retention in care, better outcomes tracking.
- Payers/employers: reduced avoidable costs through improved adherence and retention.

Initial clinical focus

The initial study population described in the index is HIV patients (750 participants) across three sites, with adherence as the primary outcome at 12 months.

3. Implementation Overview

This section consolidates the implementation and delivery details referenced across the system architecture document and the Phase I execution plan in the source index. It is written as a build-and-operate plan that a technical diligence team can sanity-check quickly.

Delivery model

- Cloud-native platform delivered as a set of microservices (initially on Google Cloud Platform).
- 18-month Phase I roadmap (Mar 2026 to Aug 2027) organized into 36 two-week sprints.
- Parallel workstreams: (A) platform development, (B) clinical pilots, (C) regulatory and operations.

Milestones (Phase I)

- Month 6: MVP launch to pilot sites.
- Month 12: first pilot outcomes measurement; target deltas include adherence +15% and engagement 70% (from index).
- Month 15: Series A diligence materials complete.
- Month 18: Series A close target.

Operating assumptions

- Pilot configuration: three sites, 750 participants total (clinical protocol).
- Security posture: encryption, key management, audit logging, and incident response procedures; HIPAA alignment is assumed.
- Resilience goals: Recovery Time Objective (RTO) under 1 hour and Recovery Point Objective (RPO) under 15 minutes (from index).

Build principles

- Start narrow, prove outcomes, then scale: prioritize adherence workflows, navigator tooling, and outcomes measurement.
- Integrate where clinicians already live: EHR integration is treated as an adoption requirement, not a nice-to-have.
- Design for audits from day one: consistent logging, access controls, and documented procedures.

4. Market Research and Competitive Analysis

The source index positions IHEP in the population health management market, with a cited \$28.7B TAM and a \$2.8B SAM by Year 5. The thesis is that health systems and payers will pay for measurable adherence and retention improvements when the solution integrates with clinical workflows and produces audit-ready outcome evidence.

Market sizing (as referenced)

- TAM: \$28.7B (population health management).
- SAM: \$2.8B by Year 5 (serviceable segment).
- Sizing method: bottom-up segmentation plus customer discovery validation (as stated in the index).

Customer discovery signals (as referenced)

- Interviewed health systems and payers acknowledged the market opportunity and the need for an IHEP-like solution (index claims 100%).
- Adoption cycle estimate: ~3-year market adoption cycles, favorable for early entrants.

Competitive landscape (examples)

| Company | Category | Typical positioning |
|-----------------|-------------------------------|--|
| Omada | Digital chronic care programs | Condition-focused, employer/payer channels |
| Virta | Metabolic care / diabetes | Deep condition programs; outcomes-driven |
| Innovaccer | Data activation platform | Analytics and interoperability focus |
| Health Catalyst | Healthcare analytics | Enterprise data warehousing and analytics |
| Teladoc | Virtual care platform | Broad telehealth + chronic offerings |

Differentiation thesis (from index narrative)

- Broader-than-single-condition coverage combined with deep integration into care workflows.
- Patient-centric design with peer navigation and financial empowerment as first-class components.
- Defensibility through data assets, network effects, and regulatory readiness.

5. Go-To-Market Plan

The go-to-market plan described in the index is structured as a phased enterprise healthcare motion: prove value via pilots, convert to commercial contracts, then scale through payer and platform partnerships.

Three-phase approach

- **Phase 1 - Proof of concept:** health system pilots (target 3 pilot sites; \$75K-\$150K pilot contracts).
- **Phase 2 - Commercialization:** expand within pilot systems; begin payer deals (Medicare Advantage, regional PPOs, Medicaid).
- **Phase 3 - Leadership:** national scaling with partnerships, EHR marketplace listings, and standardized playbooks.

Primary channels (as referenced)

- Health systems and clinics (pilot-to-enterprise conversion).
- Insurance payers (particularly Medicare Advantage and Medicaid-adjacent programs).
- Employers and CDFIs as adjacent channels for financial empowerment components.
- Partner ecosystems: EHR vendor marketplaces and cloud marketplaces.

Enterprise sales characteristics

- Enterprise cycles modeled at ~6 months in the plan (note: industry can run longer; see risk section).
- Target contract economics: \$100K to \$2M annual contracts by Year 5 (index).

Sales targets (as referenced)

| Year | Target | Notes |
|------|------------|-----------------------------------|
| 2 | \$400K ARR | 2 mid-market deals |
| 5 | \$14M ARR | 6 large + 12 mid + 30 small deals |
| 10 | \$35M ARR | National leadership position |

6. Financial Model Summary (10-year projections)

This section summarizes the 10-year financial model items listed in the source index. It is not a substitute for a spreadsheet model, but it captures the key assumptions, outputs, and scenario ranges for diligence discussions.

Revenue streams (modeled)

- Non-dilutive: grants and research funding.
- Commercial: paid pilots, payer/insurance contracts, EHR licensing, pharma/data partnerships, and other services.

Scale assumptions (from index)

- Headcount trajectory: Year 1 ~23 FTEs scaling to ~420 FTEs by Year 10.
- Unit economics trend: LTV improves from ~2.0x to ~8.1x; CAC declines from ~\$687 to ~\$432 over the plan horizon.
- Break-even at Year 8 (approx. 18,000 patients and \$48.7M revenue, per index).
- Cash-flow positive Year 9 (index).

Capital plan (from index)

| Category | Amount | Notes |
|---------------------------------------|-----------|---|
| Total capital required (10-year plan) | \$102.1M | \$88.5M equity + \$13.6M non-dilutive |
| Seed round (planned) | \$3.5M | Initial build + pilots + regulatory readiness |
| Illustrative seed valuation | \$12M pre | Used for scenario discussion in the index |

Investor outcome scenarios (from index)

| Scenario | MOIC (seed) | IRR (seed) | Comment |
|--------------|-------------|---------------|-------------------------------|
| Conservative | 3.6x | Not specified | Lower adoption / slower sales |
| Base | 7.5x | 22.4% | Index base case |
| Aggressive | 12.9x | 29.1% | Faster adoption / scaling |

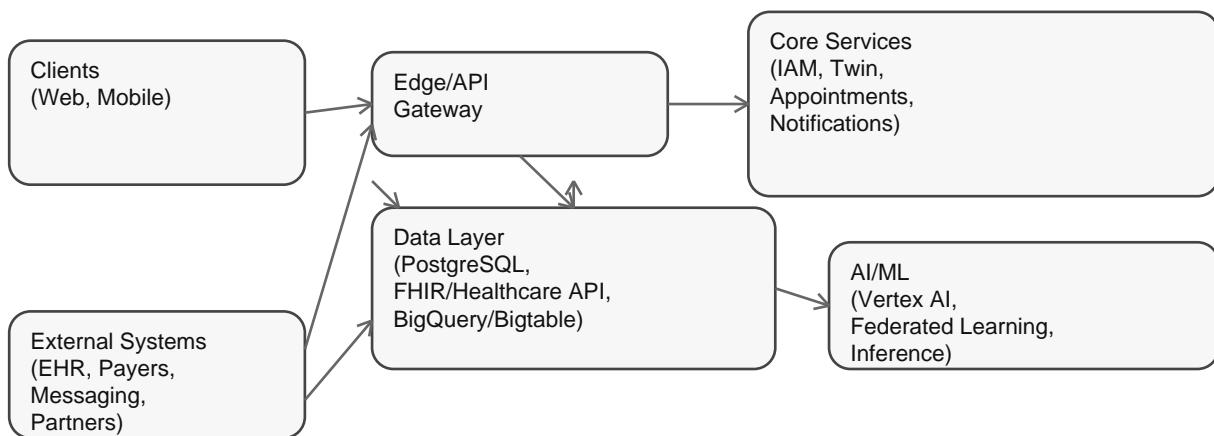
Modeling methods referenced

- Monthly cash flow projection (120 months).
- Sensitivity analysis with conservative/base/aggressive cases.
- Monte Carlo simulation (10,000 iterations) producing P10/P50/P90 outcome bands.
- Valuation scenarios using revenue multiples (4x-8x) and exit timing (strategic buyer Year 7; financial buyer Year 10).

7. System Architecture Overview

The source index describes a cloud-native microservices architecture with a digital twin core, operational workflow services, and an AI/ML pipeline for prediction and inference. This section summarizes the components and the quality attributes claimed in the index (scalability, resilience, and security).

High-level architecture



Core services (examples mentioned)

| Service | Purpose | Notes |
|----------------------|--|---|
| IAM / Identity | Authentication, authorization, roles | Supports audit trails and least privilege |
| Digital Twin Service | Twin state, models, signals, history | Patient + behavioral + clinical + financial + social layers |
| Appointment Service | Scheduling, reminders, attendance tracking | Feeds adherence and engagement metrics |
| Notification Service | SMS/email/push notification orchestration | Template management and delivery tracking |
| Inference Service | Risk scoring and prediction | Model serving, monitoring, versioning |

Data and analytics

- Transactional store: PostgreSQL (index).
- Clinical data: Healthcare API / FHIR-oriented storage and schemas (index).
- Analytics and feature storage: BigQuery and Bigtable (index).

AI/ML pipeline (as referenced)

- Training and orchestration: Vertex AI (index).
- Federated learning capability mentioned; supports privacy-preserving multi-site learning.
- Inference endpoints integrated with operational workflows (risk scoring drives outreach).

Quality attributes (as referenced)

- Scalability: stress tested up to 10,000 concurrent users (index).
- Disaster recovery targets: RTO under 1 hour; RPO under 15 minutes (index).
- Security posture: Zero Trust principles, encryption, key management, and audit logging (index).

8. Phase I Detailed Project Plan (18-month roadmap)

Baseline schedule: Phase I kickoff in early March 2026; re-baseline dates after Sprint 2.

Phase I is described in the index as an 18-month execution roadmap (Mar 2026 to Aug 2027) with three parallel workstreams: platform development, clinical pilots, and regulatory/operations. The plan includes go/no-go gates at 6, 12, and 15 months.

Workstreams

- Workstream A - Platform development:** 36 two-week sprints covering core services, integrations, and analytics.
- Workstream B - Clinical pilots:** three sites and 750 participants with outcome measurement.
- Workstream C - Regulatory and operations:** compliance roadmap, IRB approval, hiring, vendor contracts.

Budget and sources (from index)

| Item | Amount |
|----------------------------|----------|
| Phase I investment (total) | \$5.604M |
| Seed equity | \$3.5M |
| SBIR (planned) | \$0.300M |
| Grants (planned) | \$1.5M |
| Pilot revenue (planned) | \$0.304M |

Milestone timeline (simplified)

| Month | Platform | Clinical | Reg/Ops |
|-------|---|--------------------------------------|---|
| 1-2 | Foundation: IAM, audit logging, core services | Site onboarding planning | Vendor selection; policies; hiring plan |
| 3-4 | Twin core + appointment + notification MVP | IRB package finalization | HIPAA controls validation; BAAs |
| 5-6 | MVP hardening; pilot deployment | Pilot launch | IRB submission; training program |
| 7-9 | EHR integration iteration; analytics baseline | Enrollment ramp; monitoring | HITRUST i1 prep; SOC2 planning |
| 10-12 | Inference service; model iteration | Interim outcomes collection | Security testing; tabletop IR drills |
| 13-15 | Scale and reliability; DR drills | 12-month outcome analysis | Series A materials; compliance audits |
| 16-18 | Production optimization; partner packaging | Study continuation; publication prep | Series A close target |

Success criteria and gates (from index)

- 6-month gate: MVP deployed to pilot sites; baseline telemetry and workflows functional.

- 12-month gate: initial pilot outcomes reported (targets include adherence +15% and engagement ~70%).
- 15-month gate: Series A diligence package complete; operational readiness demonstrated.

9. Clinical Study Protocol and IRB Materials (summary)

The index describes a prospective cohort study with matched historical controls designed for IRB submission. This section captures the key elements needed for medical/regulatory diligence discussions.

Study overview (from index)

- Design: prospective cohort with matched historical controls.
- Population: 750 participants (HIV patients) across three pilot sites.
- Primary outcome: medication adherence (Medication Possession Ratio, MPR $\geq 80\%$) at 12 months.
- Secondary outcomes: viral suppression, appointment attendance, quality of life, and cost savings.
- Duration: 18 months with assessments at baseline, Months 3, 6, 12, and 18.

Procedures and assessments (simplified)

| Timepoint | Key activities | Data captured |
|-----------|--|---|
| Baseline | Consent, enrollment, baseline evaluation | EHR data, PROs, initial twin state |
| Month 3 | Engagement check, early adherence monitoring | Appointments, MPR trend, outreach actions |
| Month 6 | Midpoint evaluation | Interim outcomes, model recalibration signals |
| Month 12 | Primary endpoint assessment | MPR, viral suppression, attendance, QoL |
| Month 18 | Extended follow-up | Sustainability metrics, cost deltas, qualitative feedback |

Safety and governance (from index)

- Data safety and monitoring procedures and adverse event reporting included in the protocol.
- Ethical considerations and community engagement referenced.
- IRB approval expected Spring 2026 (index).

Illustrative hypothesis targets (from index)

- Primary: 80% MPR in IHEP participants vs. 60% in controls (33% relative improvement).
- Secondary: 80% viral suppression vs. 55% controls; 85% appointment attendance vs. 70% controls; 30%+ cost savings.

10. Intellectual Property Strategy

The index outlines a combined patent and trade-secret approach, with regulatory readiness also treated as a defensible moat. The goal is to protect the digital twin representation, self-healing system logic, and federated learning workflow.

Patent strategy (from index)

| Target patent | Theme | Timing (index) |
|---------------|--|--|
| Patent 1 | Digital Twin Health State Representation | Filing Nov 2025; issue target Nov 2028 |
| Patent 2 | Morphogenetic Self-Healing Framework | Filing Nov 2025; issue target Dec 2028 |
| Patent 3 | Federated Learning for Healthcare | Filing Dec 2025; issue target Jan 2029 |

Trade secrets (from index)

- Engagement algorithm and outreach logic.
- Datasets and feature engineering recipes.
- Peer navigator methodology and training playbooks.
- Model architecture and serving configuration.
- Contracting and commercialization playbook.

Defensibility levers (from index)

- Regulatory pathway readiness (e.g., HITRUST certification roadmap; FDA digital therapeutic pathway planning).
- Network effects and data asset compounding (proprietary datasets valued \$3M-\$5M in the index narrative).
- Licensing opportunities via EHR vendors and pharma data partnerships.

IP budget (from index)

Multi-year IP budget is referenced as ~\$230K over Years 1-10.

11. Risks, Mitigations, and Milestones

Early-stage healthtech carries predictable risks. The index lists a set of 'yellow light' risks and paired mitigations. This section consolidates them into a diligence-friendly register.

Risk register (top items from index)

| Risk | Why it matters | Mitigation (as referenced) |
|-------------------------|--|---|
| Early clinical stage | Limited published outcomes can slow Pilot validation , IRB protocol, outcomes tracking | Pilot validation , IRB protocol, outcomes tracking |
| Reimbursement pathway | Payer standards may depend on reimbursement strategy; FDA DTx planning | Payer standards ; FDA DTx planning |
| Enterprise sales cycles | Revenue timeline and runway risk | Pilot-to-commercial playbooks; partner marketplaces |
| Competitive response | Large incumbents could replicate features; patent filings, trade secrets, regulatory barriers, data assets | Patent filings, trade secrets, regulatory barriers, data assets |

Milestones (time horizon)

- Immediate (Dec 2025): seed close (index timeline).
- Near-term (Q1 2026): MVP launch and IRB approval target.
- Medium-term (Q4 2026): Series A readiness.
- Long-term (2027+): path to profitability and multiple exit options.

Appendix A. Key Metrics Snapshot

| Metric | Value |
|---------------------------|----------------------|
| TAM | \$28.7B |
| SAM (Year 5) | \$2.8B |
| Revenue Year 5 | \$3.6M |
| Revenue Year 10 | \$35M |
| Break-even | Year 8 |
| Capital needed (10-year) | \$102.1M |
| Seed investment | \$3.5M |
| Seed return (base) | 7.5x MOIC, 22.4% IRR |
| Patients (Year 5) | 25,000 |
| Patients (Year 10) | 75,000 |
| Pilot sites | 3 |
| Pilot participants | 750 |
| Clinical duration | 18 months |
| Patents pending (planned) | 3 |

Appendix B. Document Control and Contact

Classification: Investor Due Diligence - Confidential

Source index date: November 26, 2025

Compilation date: 2026-01-30

Contact

| | |
|---------------------------|--|
| Name | Jason Jarmacz |
| Role | Founder & CEO |
| Email | jason@ihep.app |
| Investor relations | Available post-seed close (or via founder) |

Note: This consolidated packet was produced from the Due Diligence Contents index. If you have the underlying standalone PDFs for each section, they can be embedded or appended verbatim in a revision.