

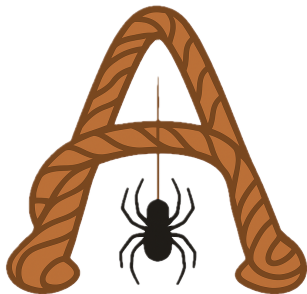
Ariadne: Improving Retention in Opioid Use Disorder Treatment

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& Medical Toxicology

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Weill Cornell
Medicine



In One Slide

Ariadne is a digital health company that **increases long-term adherence to buprenorphine**, a first line treatment for opioid use disorder.

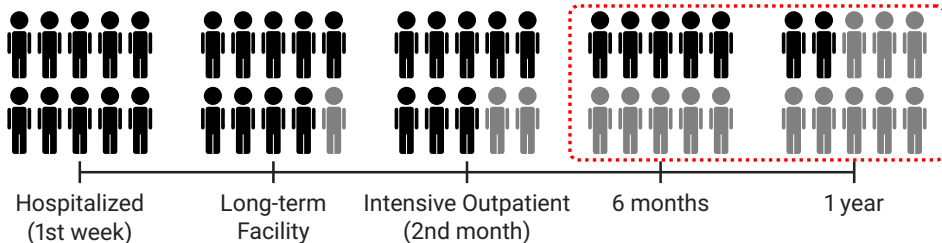
- **Problem:** 60% of patients discontinue buprenorphine within 6 months because of intolerable symptoms, increasing relapses, ER visits, and fatal overdoses.
- **Solution** Ariadne provides strategies to mitigate symptoms that limit adherence.
- **Traction** Prototype; Positive reaction from focus groups.

Ask:

- **Support** to move from prototype to an MVP, that we pilot in NYC to get our first paying customers. (Break-even 834 users.)
- **Mentorship** to build team and network



3 out of 5 people stop buprenorphine after 6 months



- People stop because of symptoms, like insomnia or burning pain
- Clinicians lack tools to assess, manage, and treat these symptoms
- Patients lack the words to describe these symptoms, creating an isolating cycle of confusion

Buprenorphine is the active ingredient in Suboxone



We need to treat symptoms preventing adherence

But, how?

Gap in knowledge:

- Symptoms at 6 months understudied.
- No standard of care.

Patients discover remedies through self-experimentation, but without clinical structure or validation

Data that are useful but need filtering

Opportunity

- Vast amount of real-world patient experience exists, valuable but difficult to operationalize

Ariadne turns this data into actionable guidance



Ariadne, the Technology

From Unstructured Narratives to Reproducible, Symptom-Specific Guidance

Online Narratives

- Real-World Data
- Unstructured, Noisy, Voluminous

fatigue nausea
 magnesium
 insomnia leg zaps
anxiety silver
 bupe

Natural Language Processing

- Standardize text
- Extract relationships



buprenorphine → paresthesias → magnesium
buprenorphine → paresthesias → silver
buprenorphine → paresthesias → heavy blanket
 magnesium → nausea



Our Differentiator

Keep only consistent relationships
not contradicted by research

buprenorphine → paresthesias → magnesium
~~buprenorphine → paresthesias → silver~~
buprenorphine → paresthesias → heavy blanket
 magnesium → nausea

IP: Copyright, Trade Secrets, Unique Dataset



Ariadne, the Product

Public Interface to the Inference Engine

Physician Portal



Ariadne

Extract

Regimens

Atlas

Remedies

Physician

Login

Sign Up

Personalized Guidance to Help You Keep Taking Buprenorphine

Ariadne analyzes real-world experience patterns to identify remedies for symptoms that lead to people stopping buprenorphine.

Why Ariadne?

- 3 out of 5 people who start buprenorphine treatment stop within 6 months, in part due to unmanaged symptoms.
- Ariadne, the guiding spider, analyzes patient narratives to identify what symptoms lead to discontinuation, and what strategies helped people stay on treatment. Ariadne keeps people taking buprenorphine longer by distilling collective wisdom into healing suggestions.
- We suggest how to address *your* symptoms and how to describe them to clinicians.

Try our Symptom Solver (Demo)

Create Free Account

Public Demo



Ariadne, the Product

Type in Symptoms
With Clinical or Everyday Language

Symptom Solver

Atlas

What symptom are you having?

leg zaps

Canonical: paresthesia

numbness

nausea

queasy

body aches

depression

tingling

sweats

myalgias

leg zaps

cramps

pins and needles

Remedies (Crowd-Sourced Perspectives)

People report trying these approaches for chronic symptoms during buprenorphine treatment. Synthetic, aggregated data for demonstration. This is not medical advice.

Symptom

paresthesia

magnesium

limited evidence

45% reported benefit

Nausea also reported

Weeks: 1-4

heavy blanket

anecdotal

30% reported benefit

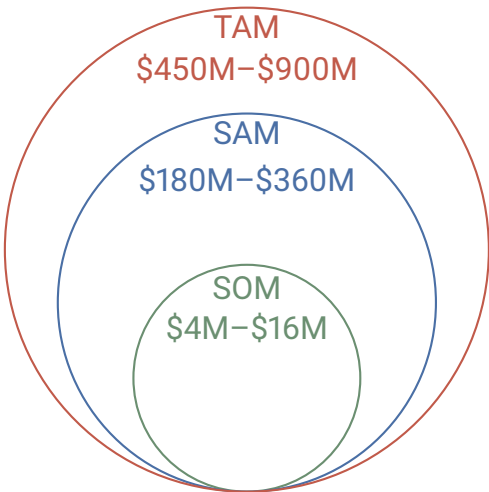
Provides calming pressure

Weeks: 2-6

- Name of Remedy
- Strength of Recommendation
- Notes on Usage
- Time When Most Effective



Market



1.5 million ppl prescribed buprenorphine for OUD¹ × \$30-60/month²

50% still on buprenorphine at 6 months³, 80% of whom willing to use tech⁴

Lowest adherence in NYC

Bronx	≈ 10,000
Manhattan	≈ 7,000

¹SAMSHA, DEA; ²CMS, CCHP, State Medicaid Schedules ³Lin et al. (2020); Krawczyk et al. (2021); ⁴Pew Research Center (2023), Tofighi et al. (2019), Sarker et al. (2020); Phase 1: NYS Opioid Data Dashboard.



Customers are physician groups and individual users

Physician Groups Treating OUD Outpatient

Reduce costs by \$2,700–\$3,800 per person per year
Fewer inpatient stays, readmissions, ER visits

Establish Credibility Through Publications Conferences	→	Engage with Free Trial 6 months for 50% of patients 1 year if enroll in clinical trial
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Individuals Prescribed Buprenorphine

Leverage community knowledge to support adherence

Establish Awareness Through Social Media	→	Engage with Free Trial 6 months, or duration of clinical trial
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Traction: Patients and clinicians are willing to adopt

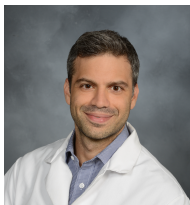
Focus groups with **patients and clinicians** demonstrate strong interest and willingness to adopt

Clinicians value transparency and educational utility

Public users value non-prescription, correcting “myths”, and identifying non-prescription treatments.



The Team



Michael Chary, MD PhD

Toxicologist, ER Physician

Assistant Professor, Weill Cornell

30+ publications in toxicology,
real-world data

Funded by foundations, NIH, FDA

Recruit NYC-based Co-founders

- Marketing/Operations
- Technical (or Medical)

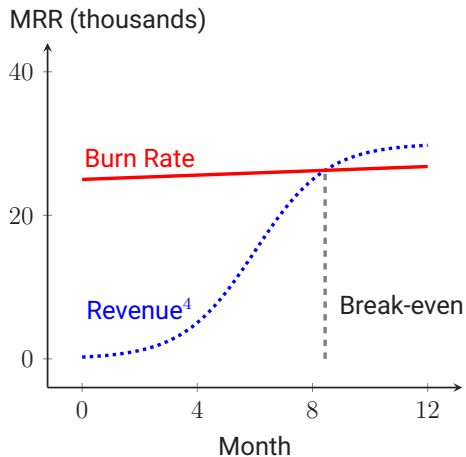
Advisors:

- Gregory Ray, PhD, Professor of Entrepreneurship, Cornell
- Joseph Habboushe, MD, Founder, MDCalc



Break-even with 834 Users

0.06% of TAM, 5% of SOM



Could break even
with individual subscriptions
In the Bronx

Assumptions:

Sales of \$30/user^{1,2}

Retention, 6 months³

Fixed costs, \$25k/month

Variable costs, \$3/user-month

Contribution margin, \$27 (90%)

Sources: ¹ CMS; ² McKinsey; ³ Ganetsky et al., 2025. ⁴ Nonlinear adoption with average of 40 new users per month (Pearson et al., 2023), ⁵ NYS DOH.



The Ask and Our Path to Market

Now  Prototype



6 months

MVP build, NYC pilot
early customer acquisition

\$ 220k NYC EDC



12-18 months

Clinical Validation

NIDA Challenge



24 months

Break-even from D2C
510k filing

 Seed Funding



FDA Approval



Competitive Landscape

	Ariadne	Ophelia	Boulder Care	reSET-O	Usual Care
Herbal, Dietary Supplements	✓				
Extra-Opioid Symptoms	✓				✓
Updates	✓				✓
EMR Integration	Not Yet				✓
Licensed					
Counseling			✓	✓	✓
Clinician Portal	✓	✓	✓	✓	✓

Ariadne doesn't compete with the standard of care. It makes it more attainable.

