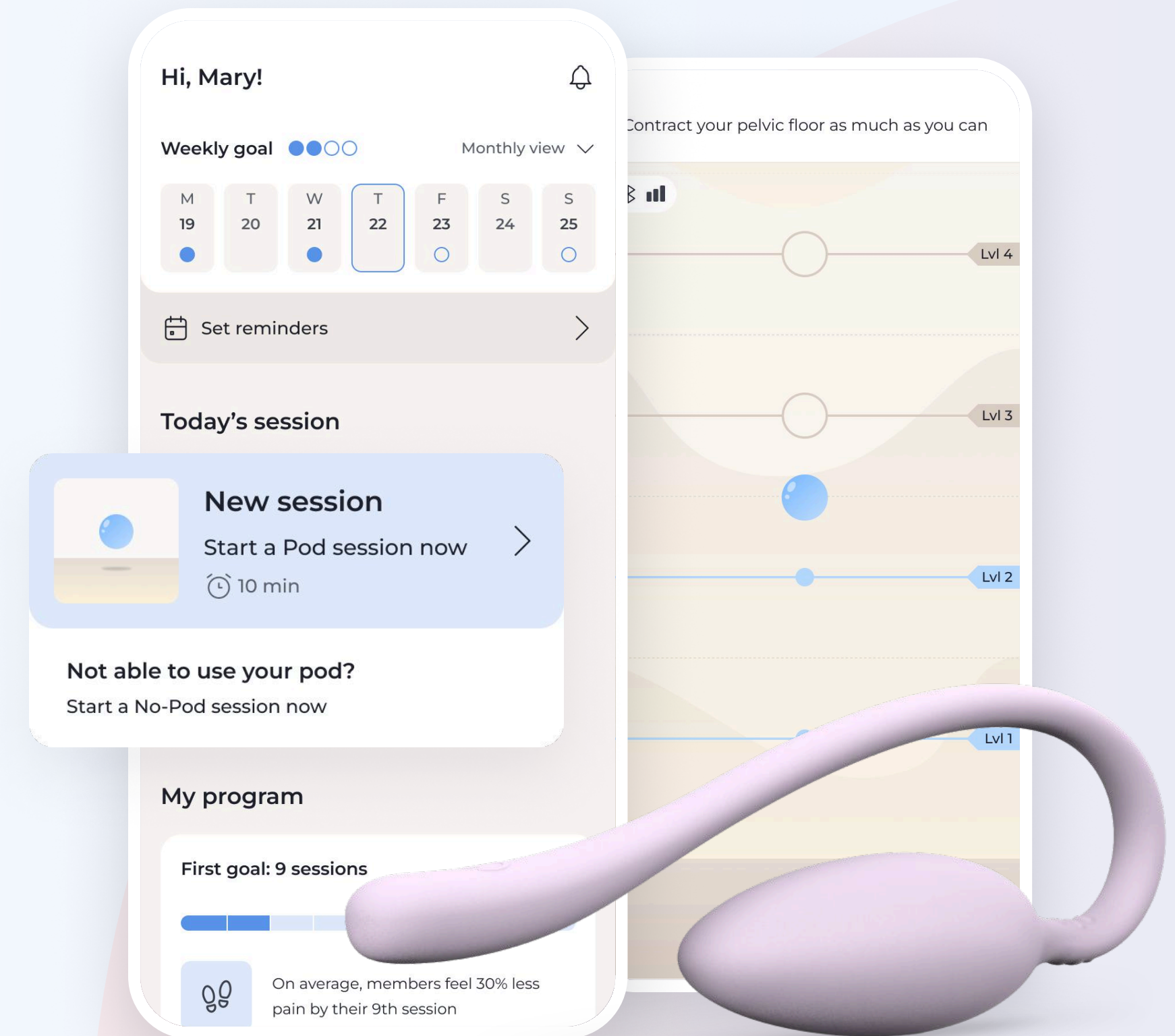




COST STUDY

Transforming Women's Pelvic Health: Bloom, a Sword Health Solution, Delivers up to a 2.9:1 ROI

National Consulting and Actuarial Services
Business Validated Study Methodology



Executive Summary

Bloom, a Sword Health solution, is transforming women’s pelvic health through an AI-driven, fully remote solution designed to increase access to high-quality, personalized care, all delivered by a Pelvic Health Specialist (PHS). To measure the financial impact of Bloom, Sword Health conducted a large-scale claims-based analysis, based on methodology reviewed and validated by Risk Strategies Consulting (RSC)—a national consulting and actuarial services business.

A claims-based analysis found that Bloom reduces avoidable spending for pelvic floor dysfunctions (PFDs)—including bladder and bowel issues, pelvic organ prolapse, pelvic pain, and those occurring during pregnancy, postpartum, perimenopause, and menopause — leading to a 2.9:1 gross return on investment (ROI).¹ On average, clients save \$2,276 per participant per year in pelvic care.² This study details the study methods, outlines the clinical and economic findings, and underscores Bloom’s ability to address a critical gap in women’s healthcare while delivering meaningful cost-savings.



2.9:1

Return on investment



\$2,276

Savings per member on average



1. Return on investment, calculated by Sword, is the gross medical savings (\$2,276) divided by program fees (\$781) as reported in the study.

2. The pelvic medical expenditure is truncated at \$20,000.

Background and Objective

Pelvic floor dysfunctions are a major source of disability, affecting approximately one in three women in the U.S.,³ with direct healthcare costs for urgency urinary incontinence reaching \$49 billion in 2012.⁴ Despite the high costs, women's health remains underserved due to limited access to evidence-based care, including a shortage of pelvic-trained physical therapists, geographic barriers, and misconceptions. This leads to a rise in low-value care and unnecessary, costly treatments.

Bloom addresses this gap with:



Convenient Digital Access

Short daily sessions
(~10-15 minutes)



Remote Oversight by Pelvic Health Specialists

Personalized exercise prescriptions and continuous monitoring.



FDA-Listed Biofeedback Sensor

Real-time feedback to improve technique and track progress.

By delivering early intervention and continuous guidance, Bloom helps prevent the escalation to high-cost, invasive treatments.

A claims analysis, based on methodology validated by RSC, assessed Bloom's cost-effectiveness and clinical impact, focusing on reduced healthcare spend and improved outcomes.

3. Kenne, et al. Sci Rep 12, 9878 (2022). <https://doi.org/10.1038/s41598-022-13501-w>

4. Coyne KS, Wein A, Nicholson S, Kvasz M, Chen CI, Milsom I. J Manag Care Pharm. Feb 2014;20(2): 130-40. doi:10.18553/jmcp.2014.20.2.130



Study Overview

Study Design

The study employed a retrospective cohort analysis, examining data from 4,397 Bloom members who received digital pelvic care and 4,397 control members who received traditional pelvic care.

Inclusion Criteria

To be included in the study, participants had to be 18 years old or older, have continuous enrollment for at least six months pre- and six months post-index date, and have a pelvic health condition. Participants in the treated group had to enroll and complete at least one Bloom pelvic session. Controls had to have at least one claim related to pelvic care and one of the following treatment events: office visit, physical therapy or evaluation, occupational therapy, or chiropractic services. Both groups had to have no evidence of ongoing cancer treatment, inflammatory bowel disease, dementia, or other conditions incompatible with safe participation in the digital pelvic program.



4,397

Bloom members
and control members



18+

Years old participants



Data Sources

1. Claims Data

De-identified medical claims and eligibility records obtained through PurpleLab Health Analytics for 56 employers.

2. Bloom Program Data

Engagement metrics (e.g., session counts, dates, etc.) and self-reported clinical assessments via the Sword Health mobile app.

3. Methodological Validation

Conducted by RSC, who confirmed the alignment of Sword Health's analysis with statistical common practice in matching and difference-in-differences methods.

Methodology

1. Propensity Score Matching (PSM)

- PSM was used to create matched sets of treated and control subjects with similar baseline characteristics. This method helps ensure comparability between the two groups by balancing covariates that could influence outcomes.
- Key covariates included age, geographical region, PFD, pre-index costs and utilization related to total cost of care, pelvic-related, and comorbid conditions. Exact matching on pre-index months was followed by nearest neighbor matching within a predefined caliper. Calipers were applied to limit the allowable distance between propensity scores in the matching variables for age, pelvic pre-spend, and total pre-visits.

2. Difference-in-Difference (DiD)

The DiD approach compared changes in medical costs between the treated and control groups before and after the intervention. This method accounts for time-related trends and external factors that could affect both groups, allowing for the isolation of the treatment effect of the Bloom program.

3. Baseline Balance Table (Mean ± SD)

Characteristic	Bloom	Control	p-value	SMD
Age	43.8 ± 10.6	43.8 ± 10.6	0.82	-0.005
Pelvic Spend	\$1008 ± \$3644	\$1004 ± \$3625	0.96	0.001
Comorbidity Index (≥1)	61.2% ± 0.5 %	59.6 % ± 0.5%	0.11	0.03
Pre-Index Eligibility	11.8 ± 0.78	11.8 ± 0.78	1.00	0.00

Results

Key Findings

The study identified significant gross and net savings for participants in Bloom's program:

1. Gross Savings⁵

Total Cost of Care (TCOC) Gross Savings



\$5,203

per engaged participant
per year (PPPY)⁶

Pelvic Care Gross Savings



\$2,276

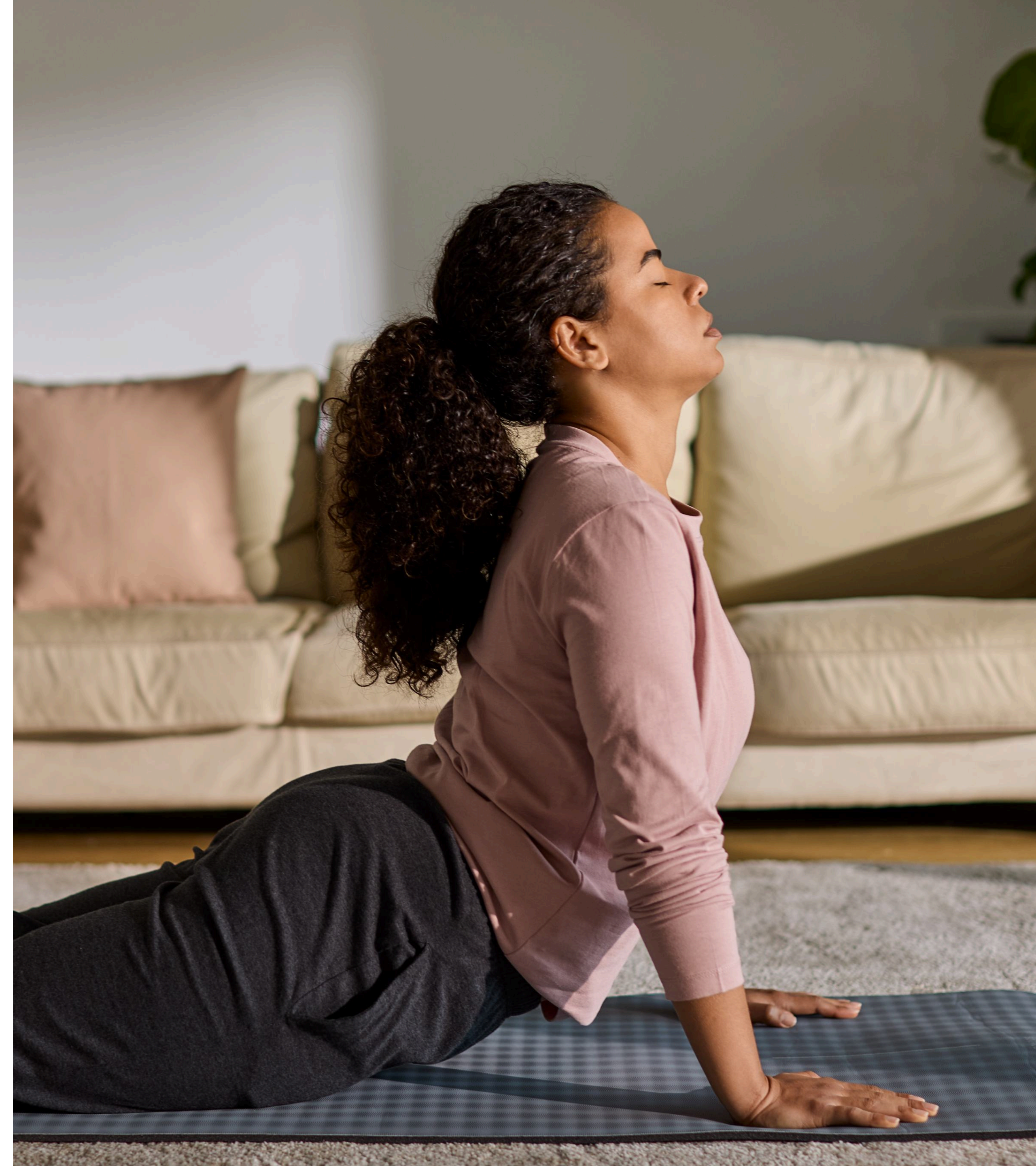
PPPY

2. ROI Calculation

Gross medical savings (\$2,276) divided by program fees (\$781) resulted in a **2.9:1 Gross ROI**, or \$2.9 saved in medical spend for every \$1 spent on Bloom's program.

3. Average Sessions


There were 15.3 pelvic sessions on average for individuals in Bloom, indicating strong participation in the program.




5. Study participants had 11.8 months of eligibility pre-index event and 9.9 months of eligibility post-index event on average. Calculated savings were annualized to provide PPPY values.
6. Total costs were truncated at \$40,000.

Breakdown of Savings

1. Pelvic Savings

 The greatest cost avoidance stemmed from preventing pelvic-related invasive surgeries. Participants in Bloom had 148 fewer pelvic-related pelvic health surgeries and procedures compared to the Control Group. Additional savings came from reducing office, specialist, physical therapy, and ER visits, as well as imaging utilization—ultimately producing a robust net impact on total cost of care.


2. Surgery Prevention

 Nearly \$1,466 PPPY saved per participant by lowering the rate of invasive pelvic health surgeries and procedures.

3. Reduced Outpatient & Therapy Visits

 Fewer office and physical therapy visits contributed \$406 PPPY in additional savings.

4. Decreased Imaging & ER Visits

 Imaging claims dropped significantly, saving \$202 PPPY; ER visits fell by \$91 PPPY.

Bloom's Book of Business Clinical Outcomes

After just 9 sessions, Bloom's members are already seeing improvements in their health and wellbeing.


1. Impact on Pelvic Health Conditions

 **Bladder Health:** 57% of members with urinary incontinence found relief.⁷


Pelvic Pain: 67% of members with painful menstrual cramps found relief.⁷

Bowel Health: 61% of members who struggle with bowel movements found relief.⁷


2. Mental Health Benefits

 51% of members recover to non-clinical anxiety levels and 47% recover to non-clinical depression levels, indicating the holistic impact of Bloom's program on both physical and mental health.⁸

3. Productivity Gains

 56% of participants report a significant improvement in workplace productivity after completing the program, highlighting the broader impact on quality of life and work.⁹

4. Intent to Seek Additional Care

 47% of participants no longer seek additional healthcare interventions for their pelvic health issues after completing the program, demonstrating the program's effectiveness in addressing concerns and minimizing the need for unnecessary medical procedures.¹⁰

7. Those that score 5 (out of 7) or higher on PGIC scale after 9 sessions

8. Those scoring 10 or above on GAD-7 or PHQ-9, who ended the program no longer reporting clinically significant

9. Those scoring moderate/high intention to seek additional care (>3/10), who ended the program below this threshold

10. Those with a clinically significant improvement in overall productivity levels (MID>7 pts)

Conclusion

This claims analysis demonstrates that Bloom, a Sword Health solution, generates significant cost savings—\$2,276 annually—by reducing pelvic care costs. In addition, Bloom consistently delivers strong clinical outcomes for women with pelvic floor dysfunctions, as evidenced by our book of business, highlighting its value as both a cost-effective and clinically effective solution.

By combining real-time biofeedback, targeted education, and clinical oversight from a Pelvic Health Specialist, Bloom provides a scalable solution that replaces or reduces the need for invasive procedures. Its user-friendly, remote format expands care accessibility, normalizes timely intervention, and lessens the stigma that often surrounds women's pelvic health. Employers and health plans looking to address the needs of their female populations can leverage Bloom to achieve a compelling 2.9:1 Gross ROI, while empowering women to reclaim their health and well-being.

Appendix – Study Limitations

- **Data Limitations:** De-identified data lacked details on employment, geography, education, and income.
- **Behavioral Factors:** Unmeasured cultural and other factors may have influenced care-seeking behaviors and cost patterns.
- **Pharmacy Data:** Not included in the analysis.
- **Population Scope:** Savings estimates may vary for participants outside the standard-of-care pelvic treatment.
- **Cost Distribution:** Right-skewed costs necessitated the use of average cost values.
- **Risk Strategies Consulting (RSC) Methodology Review and Attestation:** The RSC attestation is intended solely to attest to the reasonableness of the approach and methods employed by Sword in modeling potential savings and outcomes for the Bloom Study. In forming their opinion on the evaluation methodology used for the Bloom Study, RSC relied on the accuracy and completeness of the documentation materials provided by Sword. RSC did not independently audit or verify the information supplied by Sword, nor did RSC review or validate the clinical accuracy of reference tables. Their assessment assumes that these materials are accurate, appropriate, and informed by expert clinical guidance in determining the codes included in the reference tables. The complete RSC methodology review attestation should be reviewed in its entirety and can be found [here](#).



