



One-Year Clinical and Operational Outcomes After Frontline Combat Stress Care

A retrospective cohort of soldiers treated at Combat Operational
Stress Control (COSC) centers

MHSRS 2026

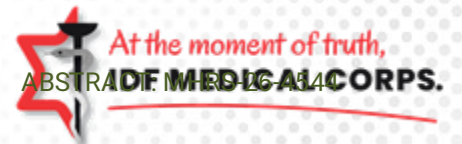
CONFLICT OF INTEREST DISCLOSURE

MHSRS 2026 • ABSTRACT MHSRS-26-4544



Daniell Agaev, MD has no relevant financial relationships to disclose.

OFFICIAL SCIENTIFIC DISCLOSURE



BACKGROUND & OBJECTIVE

IDF MEDICAL CORPS • MENTAL HEALTH CENTER • MHSRS 2026

COSC SYSTEM

Combat Operational Stress Control (COSC) is the primary frontline system for managing acute combat and operational stress reactions.

PIE PRINCIPLES OF CARE:

P

Proximity

I

Immediacy

E

Expectancy

KNOWLEDGE GAP

Evidence on longer-term clinical and operational trajectories following initial frontline care remains limited.

STUDY OBJECTIVES

Describe one-year outcomes and identify predictive characteristics for:

 **Return to Unit (RTU):** Successful operational reintegration.

 **Medical-Board Referrals:** Need for formal administrative review.

 **Profile Changes:** Shifts in medical eligibility and fitness for duty.

 **Psychiatric Diagnosis:** Persistence of clinical impairment (e.g., PTSD).

2023–2024 cohort • N = 996 • one-year outcomes



METHODS AND DATA

IDF MEDICAL CORPS • MENTAL HEALTH CENTER • MHSRS 2026



Study Design

Cohort N = 996

Retrospective cohort study of all soldiers soldiers attending COSC centers.

Timeframe: October 7, 2023 through through January 9, 2024.

Includes mandatory, career, and reserve reserve personnel.



Data Collection

15-Month Follow-up

Source: Computerized medical and administrative records.

Variables: Personal demographics, referral context, and clinical symptoms.

Main data extraction performed in **January 2025**.



Analytics

Statistical Rigor

Chi-square tests emphasizing Cramer's V and Odds Ratios (OR).

Survival analysis of time from COSC to medical-board decisions.

Data cleaning to harmonize equivalent formulations.



COHORT AT A GLANCE

IDF MEDICAL CORPS • MENTAL HEALTH CENTER • MHSRS 2026

SAMPLE SIZE

996

Total participants treated at COSC

Male (797) **80.0%**

Female (199) **20.0%**

SERVICE STATUS

Mandatory (707) **71.0%**

Reserve (263) **26.4%**

Career (15) **1.5%**

PRIMARY REASON

82%

The dominant driver for COSC clinical outreach and frontline intervention.

AGE DISTRIBUTION

Mean Age **22.8 yrs**

Standard Deviation: 5.3

Median Age **20.8 yrs**

Range **18.6 – 55.4**

MILITARY ROLE

Combat Role (622) **62.4%**

Rear / Support (369) **37.0%**

REFERRAL SOURCE

Medical / MH Officer **75.7%**

Commander **19.2%**

Self-Referral **5.1%**



Cohort predominantly consists of young, male mandatory-service soldiers in combat roles, referred by clinical staff following direct combat exposure.



ONE-YEAR OUTCOMES

IDF MEDICAL CORPS • MENTAL HEALTH CENTER • MHSRS 2026

65.2%

RETURN TO UNIT

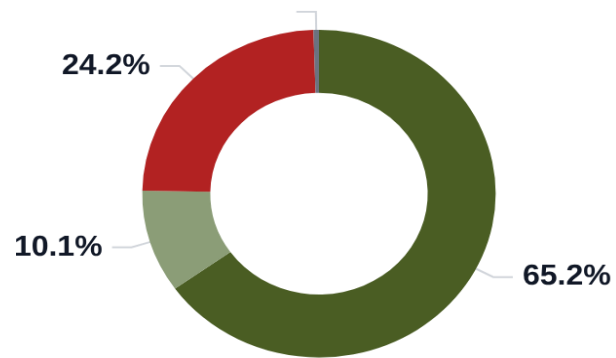
74.7%

NO PSYCHIATRIC CODE

24.2%

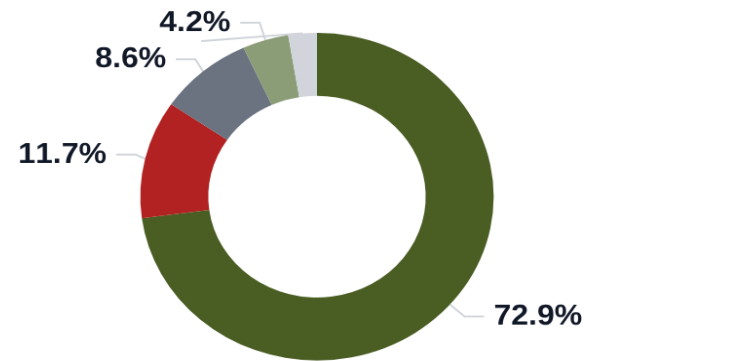
MED-BOARD REFERRAL

Operational Assignment Status



Returned to Unit Changed Assignmer Did Not Return Missing

One-Year Medical Profile



Unchanged Profile 21 Profile 64 Profile 45 Above 64



Central Message: Most soldiers returned to their units and retained an unchanged profile, while a clinically important minority (approx. 1 in 4) had persistent trauma-related or administrative consequences.



TIMING OF PROFILE CHANGES

IDF MEDICAL CORPS • MENTAL HEALTH CENTER • MHSRS 2026

⚡ Profile reductions are **front-loaded**: Analysis of 244 soldiers (Profiles 64, 45, or 21) shows that the majority of clinical and administrative decisions occur within the first 6 months.

📁 TRACK A: PROFILE 64 OR LOWER (GENERAL MEDICAL BOARD)



🚫 TRACK B: PROFILE 21 (UNFIT FOR SERVICE)



0M (Start) 3M 6M (Critical Window) 18M Follow-up

■ Cumulative Profile ≤ 64

■ Cumulative Profile 21

High-value follow-up window: First 6 months post-COSC attendance



PREDICTORS OF CLINICAL & OPERATIONAL OUTCOMES

IDF MEDICAL CORPS • MENTAL HEALTH CENTER • MHSRS 2026



STRONG SIGNAL

Service Status

Primary differentiator for nearly all longitudinal outcomes. Active-duty personnel show significantly higher administrative and clinical risk.

Med-Board OR=12.84 • Prof 21 OR=8.84



LIMITED SIGNAL

Combat Role

Predicts diagnostic pattern (PTSD overrepresentation) but does **not** predict return-to-unit status.

PTSD: $p=.043$, $V=.185$

Gender

Weak association with unit return; no significant differentiation in major diagnostic categories.

Return: $V=.11$ • Diag: $p=.126$

Referral Source

Statistically significant but practically negligible impact on final placement outcomes.

$V=.08$, $p=.010$



NO SIGNAL

Initial Referral Event

The specific nature of the combat exposure or referral circumstances did not predict one-year placement.

$p=.608$, $V=.039$

Combat vs. Support (Return)

Counter-intuitively, unit type (Combat vs. Rear) had no predictive value for whether a soldier returned to their unit.

$p=.675$, $\chi^2=0.79$



Note: Statistical significance (p) and effect size (Cramer's V) were prioritized to determine practical clinical utility.



CONCLUSIONS & IMPLICATIONS

IDF MEDICAL CORPS • MENTAL HEALTH CENTER • MHSRS 2026

✓ CORE OUTCOMES AT ONE YEAR

65.2%

Return to Unit Rate

72.9%

Unchanged Profile

The majority of COSC-treated soldiers maintained operational stability, though a clinically significant minority experienced persistent trauma-related consequences.

🕒 CRITICAL FOLLOW-UP WINDOW

Adverse profile outcomes are heavily front-loaded.

The first **6 months** post-event represent the highest-value window for clinical intervention and administrative decisions.

👤 KEY DIFFERENTIATORS

- **Service Status:** Strongest differentiator; active-duty personnel had markedly higher odds of medical-board referral (OR=12.84) and Profile 21 assignment (OR=8.84) than reservists.
- **Combat Role:** Primarily associated with diagnostic patterns (PTSD) rather than unit-return status.
- **Limited Signals:** Gender, referral source, and initial reason showed weak or negligible predictive power.

STRATEGIC ACTION

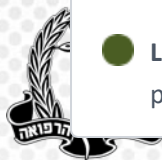
✓ PRACTICAL IMPLICATIONS

Pair frontline combat stress care with **risk-stratified follow-up** during the first six months.

- > Focus monitoring on active-duty and combat personnel.
- > Prioritize PTSD screenings for those in combat roles.
- > Avoid overinterpretation of gender or referral source.

⚠️ STUDY LIMITATIONS

- Retrospective observational design using medical records.
- Missing data causing variable cohort sizes (N).
- Associations do not establish direct causality.





WITH APPRECIATION

Thank you to the study contributors

Their collaboration and support made this work possible.



CONTRIBUTORS



Avishai Antonovsky



Adi Zamostiano



Zivan Aviad-Beer



Jacob Rotschild



Carmel Kalla





Thank you for listening!

