

Supplementary Table S1. Background rehabilitation dose accounting

S1 documents the background usual-care dose outside the fixed supervised study dose (3 sessions/week $\times$ 70 min = 210 min/week). HIIT had 11 inpatients and 4 outpatients (of whom 1 received outside sessions), MICT had 8 inpatients and 6 outpatients (of whom 3 received outside sessions). All supervised study sessions for both arms occurred in the same cardiopulmonary rehabilitation unit with identical supervision and continuous ECG.

For each arm, total additional sessions per week = $2 \times (\text{number of inpatients}) + (1-2) \times (\text{number of outpatients with outside sessions})$. Average additional sessions per week (bounds) = $(\text{that total}) \div N$ of the Group $\rightarrow$ HIIT 1.53-1.60, MICT 1.36-1.57. For unit harmonization across settings, Additional minutes per week are reported as 60-min standardized units = $(\text{average additional sessions/week} \times 60) \rightarrow$ HIIT 92.0-96.0, MICT 81.4-94.3. The Difference between arms (HIIT minus MICT) is shown as conservative bounds by contrasting arm-specific extremes (HIIT lower - MICT upper; HIIT upper - MICT lower): -0.04 to +0.24 sessions/week and -2.3 to +14.6 min/week (-1.1% to +7.0% of 210 min/week).

Exploratory statistical analysis (two-sided $\alpha=0.05$).

Categorical components (as per Statistical Analysis in the main text): chi-square tests were used to assess homogeneity.

1. Inpatient proportion (HIIT 11/15 vs MICT 8/14): Pearson χ^2 $p=0.359$; with continuity correction $p=0.599$. As a small-sample robustness check, Fisher's exact two-sided $p=0.450$ (all non-significant).

2. Among outpatients, prevalence of outside-session recipients (HIIT 1/4 vs MICT 3/6): Pearson χ^2 $p=0.429$; with continuity correction $p=0.895$. Fisher's exact two-sided $p=0.571$ (non-significant).

Between-group difference in average additional sessions per week was compared using independent-samples t-tests (Welch) under two bounding scenarios constructed from the manuscript counts:

1. Scenario A (all outside sessions = 1/week): mean difference = 0.18 sessions/week (HIIT minus MICT); $t(26.8)=0.566$, $p=0.576$; 95% CI -0.463 to 0.815 sessions/week. In minutes (standardized), 10.6 min/week, $p=0.576$; 95% CI -27.8 to 48.9 min/week.

2. Scenario B (all outside sessions = 2/week): mean difference = 0.03 sessions/week; $t(26.7)=0.091$, $p=0.928$; 95% CI -0.612 to 0.670 sessions/week. In minutes (standardized), 1.7 min/week, $p=0.928$; 95% CI -36.7 to 40.2 min/week.

Across all tests above, $p>0.05$ and the difference bounds cross zero; the maximum absolute imbalance is $\leq 7\%$ of the fixed study dose (and <0.25 session/week). Moreover, the component imbalances point in opposite directions more inpatients in HIIT but more outside-session recipients in MICT so a unidirectional background-dose bias is unlikely to account for the efficacy findings. This analysis is post hoc, exploratory, and does not alter the pre-specified primary/secondary outcome testing in the main text.

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Group	N	Inpatients (n)	Outpatients (n)	Outpatients with outside sessions (n)	Average additional sessions/ week (bounds)	Average additional minutes/ week (bounds)
HIIT	15	11	4	1	1.53-1.60	92.0-96.0
MICT	14	8	6	3	1.36-1.57	81.4-94.3
Between-arm difference (HIIT - MICT)						-2.3 to +14.6 (-1.1% to +7.0% of 210 min/ week)

All inpatients received two 60-min conventional sessions/week in addition to study sessions (both groups). A minority of outpatients obtained 1-2 outside sessions/week at other institutions (HIIT $n=1$; MICT $n=3$). Additional minutes/week" are 60-min-standardized units = $(\text{Average additional sessions/week} \times 60)$ for comparability; the primary exposure descriptor is sessions/week.