

# EXERT: Impact of COVID-19 on retention and intervention delivery of a large multisite exercise trial in adults with MCI

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## Abstract

**Background:** EXERT, a multisite 18-month RCT, is testing the effects of aerobic exercise vs. stretching on cognition and AD biomarkers in sedentary adults with MCI. In the first 12 months, participant exercise 2x/week under the supervision of YMCA trainers, and 2x/week on their own. In months 13-18, participants continue to exercise 4x/week but without supervision. Here we describe the impact of the COVID-19 pandemic on delivery of this support-intensive intervention that involved many challenges but also opportunities for innovation.

**Method:** In February 2020, EXERT met the recruitment goal with 296 enrolled. In March 2020 when COVID-19 incidence rates began to climb in the US, study assessments and per-protocol intervention delivery were paused. During the pause, all YMCAs were closed, and the majority of study-certified YMCA trainers were furloughed.

**Result:** At the time of the pause (March 23), 153 participants were in the supervised phase of the study, and 65 participants were in the unsupervised phase. To keep participants engaged and encourage adherence to the intervention, sites initiated weekly calls with active participants to provide support, address barriers to exercise and collect self-report adherence data. By September, 7 of 14 sites resumed study activities. Weekly call completion rates during the pause exceeded 85%, and participants reported completing a mean of 3.3 40-minute exercise sessions per week. On these calls, participants frequently expressed gratitude for the regular contact. By February 2021, all sites resumed activities despite COVID infection rates that have continued to climb across the US. In response, supervised exercise for the majority of participants was transitioned from in-person to web-conferencing. Even with this change that can be challenging for MCI, supervised session adherence rates are 72% for the aerobic group and 79% for the stretching group. Retention has remained high at 87%.

**Conclusion:** The COVID-19 pandemic presented unprecedented challenges, but it also provided unique opportunities to adapt intervention delivery so that a community-based exercise trial could continue – even during a debilitating global health crisis. EXERT's adaptations may ultimately impact resilience of the intervention to even the most challenging of circumstances that older adults with MCI will face now and in the future.