

## AB129. 168. A pre-operative community-based exercise programme for cancer and non-cancer patients scheduled for major surgery: a pilot study

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**Background:** Low physical fitness predicts poor outcomes after surgery. Exercise training optimises physical fitness. We investigated the feasibility with evaluation of a community-based exercise programme for patients planned for major surgery.

**Methods:** Between May 2017–November 2018, patients scheduled for prostate, colorectal and lung surgery were referred to MedEx facilitating rapid access. Exercise training (both supervised and home-based) involved combination aerobic-strength training (moderate to severe intensity) in

60 minutes sessions, 3–5 days per week using diverse exercise modes on a pragmatic basis. Physical fitness was assessed pre- and post-intervention, the latter shortly before surgery.

**Results:** One hundred and ten patients (23 female, 87 male), scheduled for prostate (36), colorectal (29), lung (41), and other (4) surgery started MedEx (89 supervised and 21 home-based). Median (IQR) age: 65 (16) years, BMI 26.9 (9) kg/m<sup>2</sup>. Of these, 68 completed the programme, 5 were lost to follow-up, 1 dropped out and the remainder are current. Results showed significantly increased leg strength and notably improved grip strength, aerobic capacity and flexibility within 1–8 weeks interval window before surgery.

**Conclusions:** Delivering a pre-operative exercise training programme is feasible. Physical fitness levels can be increased within short pre-operative time-windows.

**Keywords:** Pre-operative; exercise; feasible; outcome

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