

# Does mode of delivery (virtual vs face to face) affect outcomes from an intensive Pain Management Programme (PMP)?

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**Introduction:** The Scottish National Pain Management Programme (SNPMP) offers intensive pain management programmes (approximately 100 hours of group time). Prior to the pandemic, programmes were delivered face to face. Social distancing requirements necessitated development of a virtual programme. Content was consistent for both types of programme, only the mode of delivery changed.

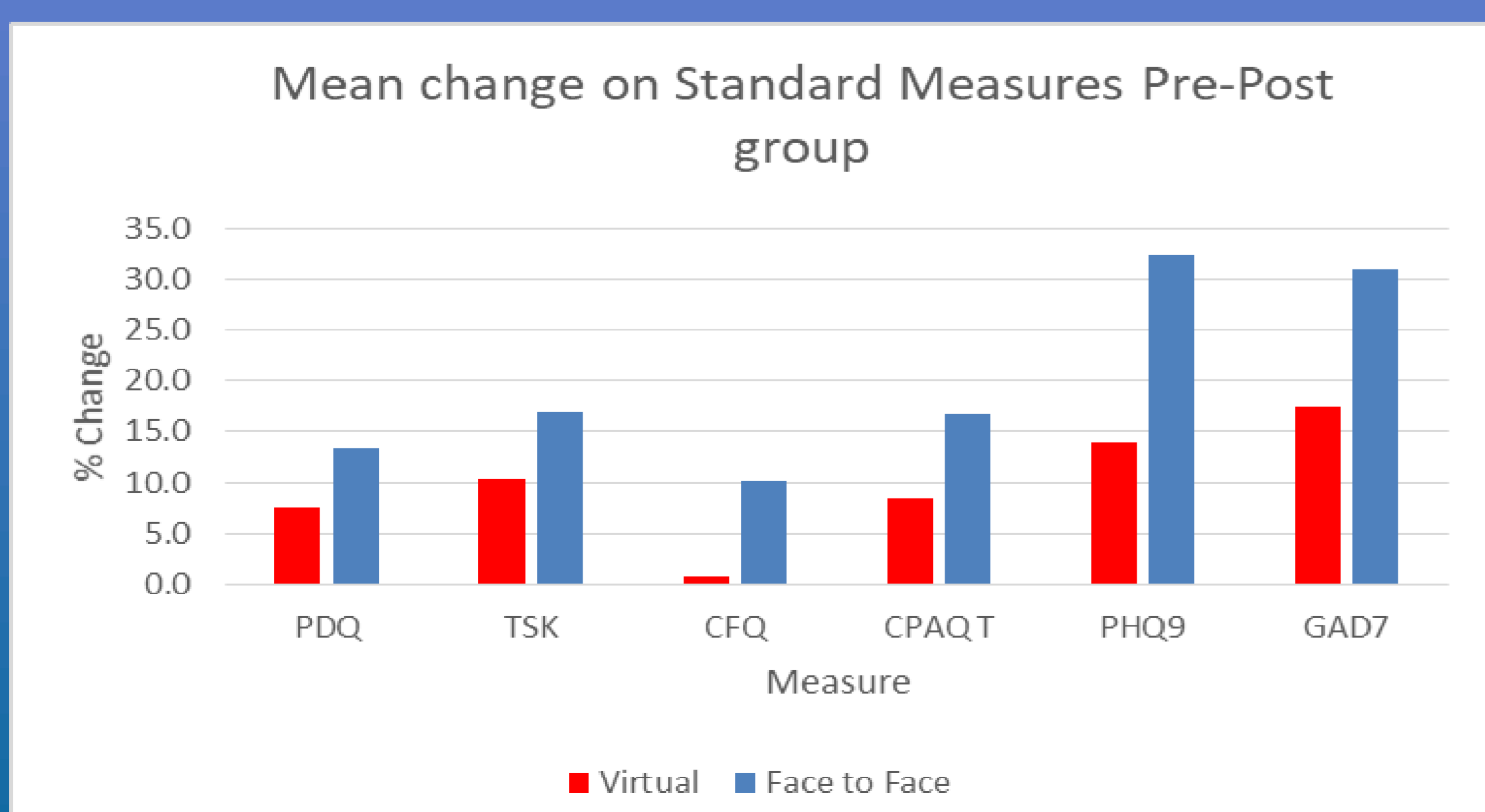
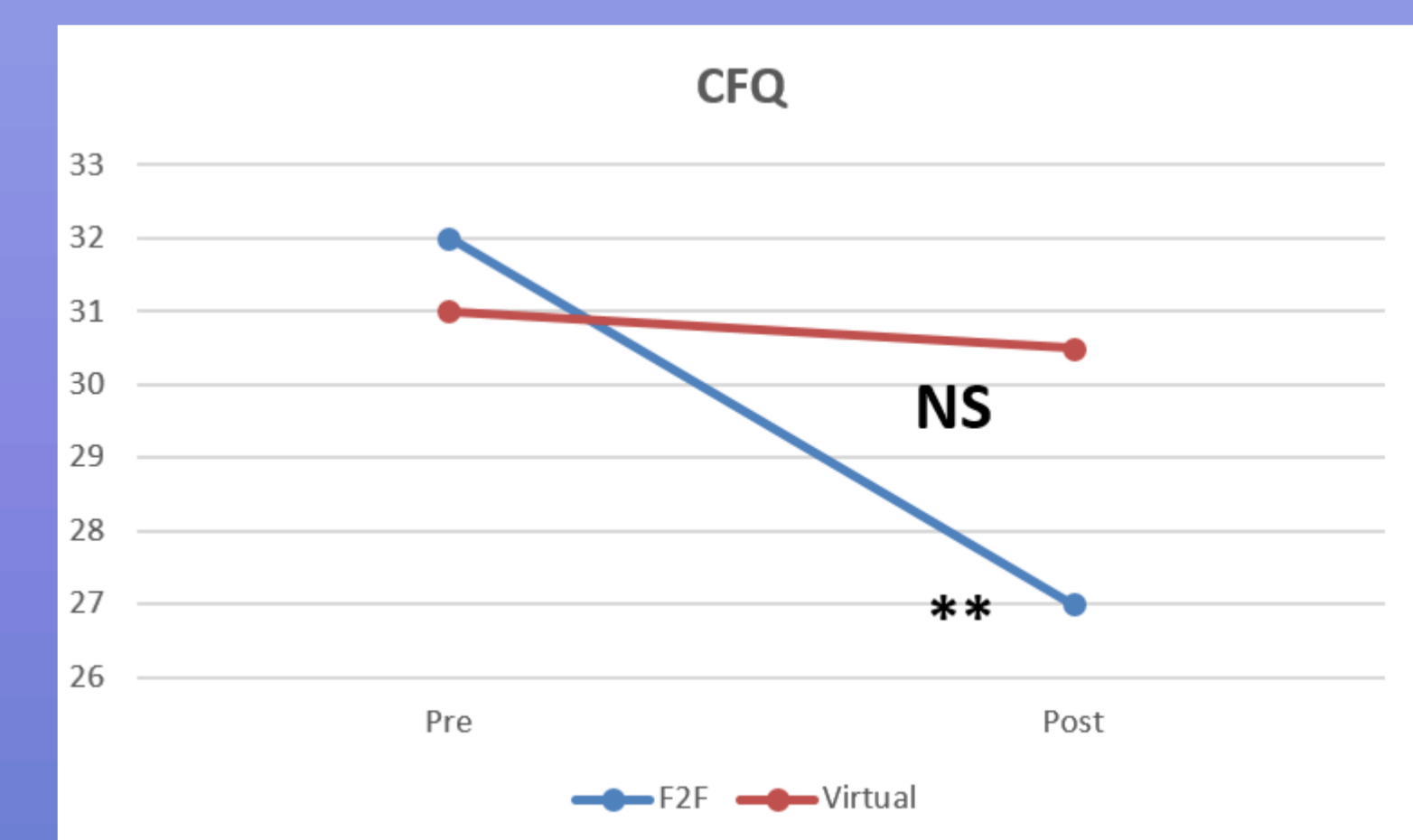
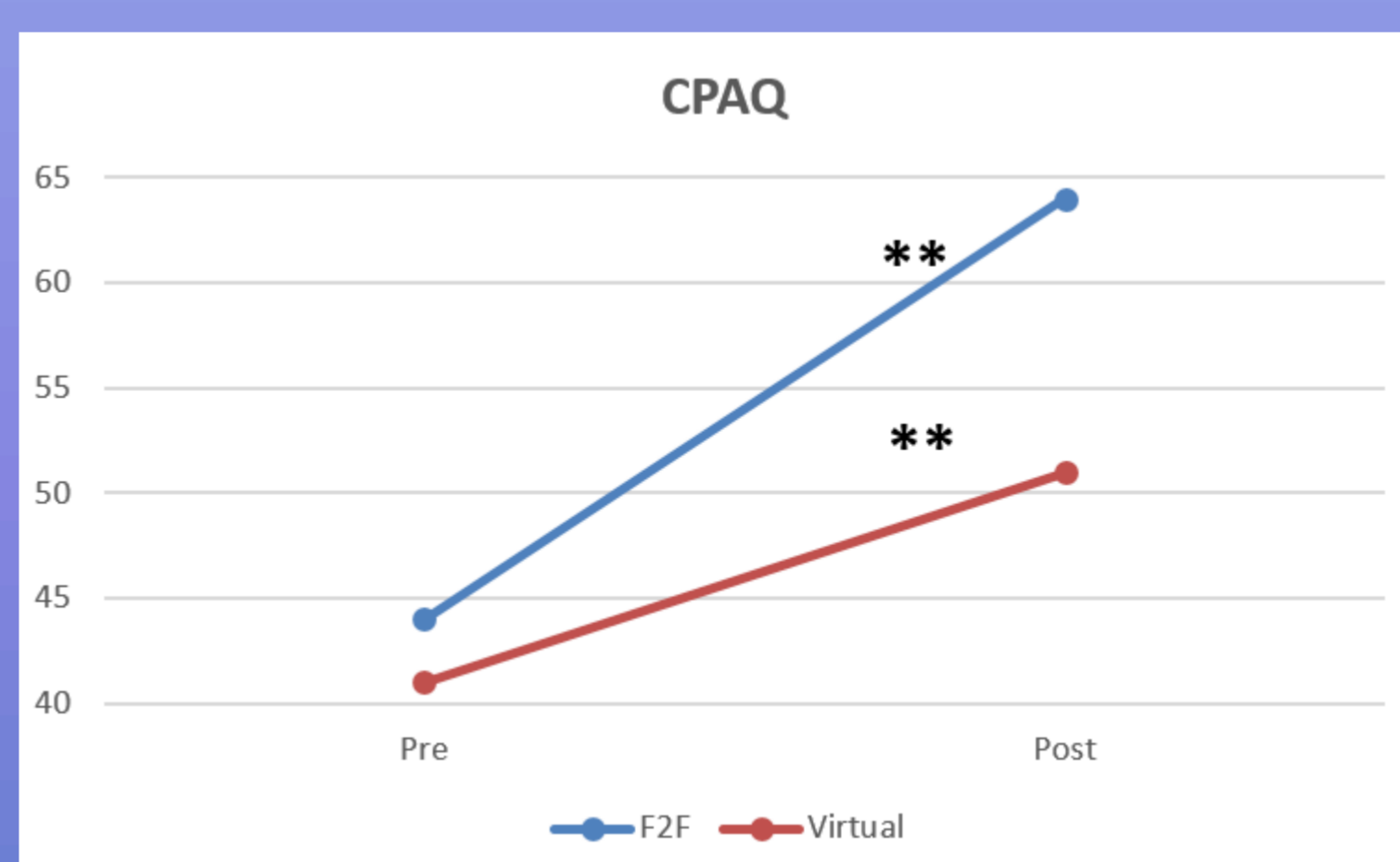
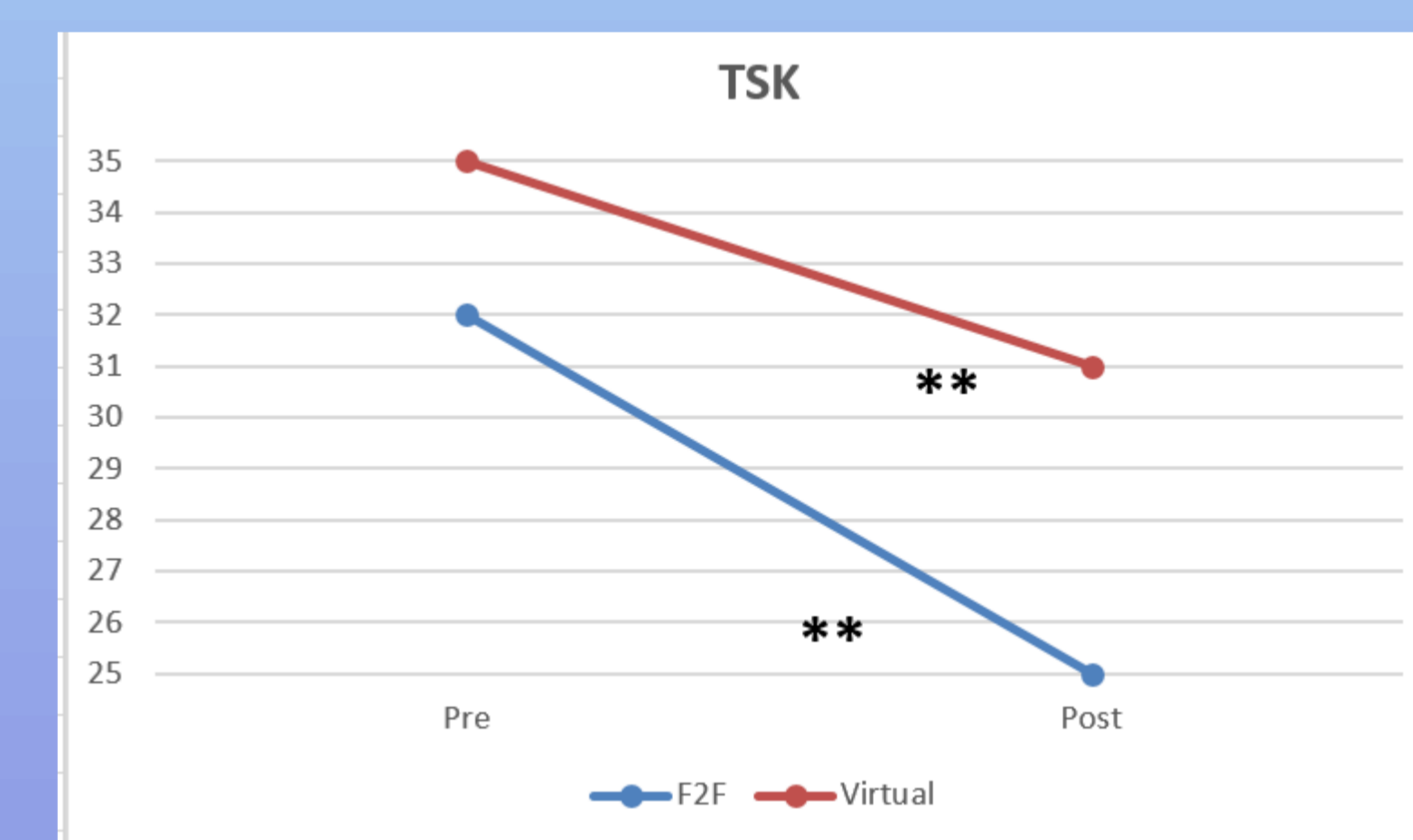
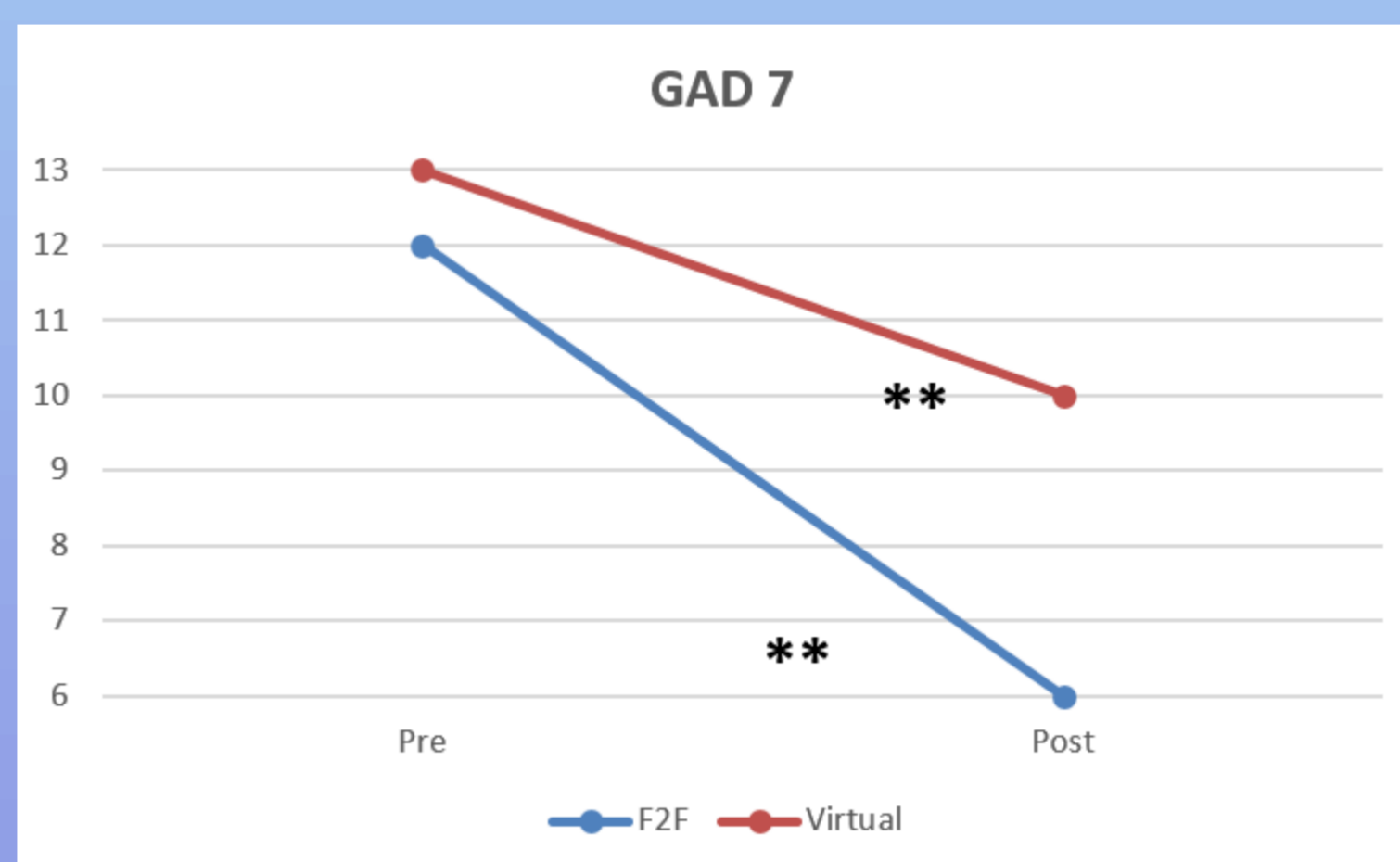
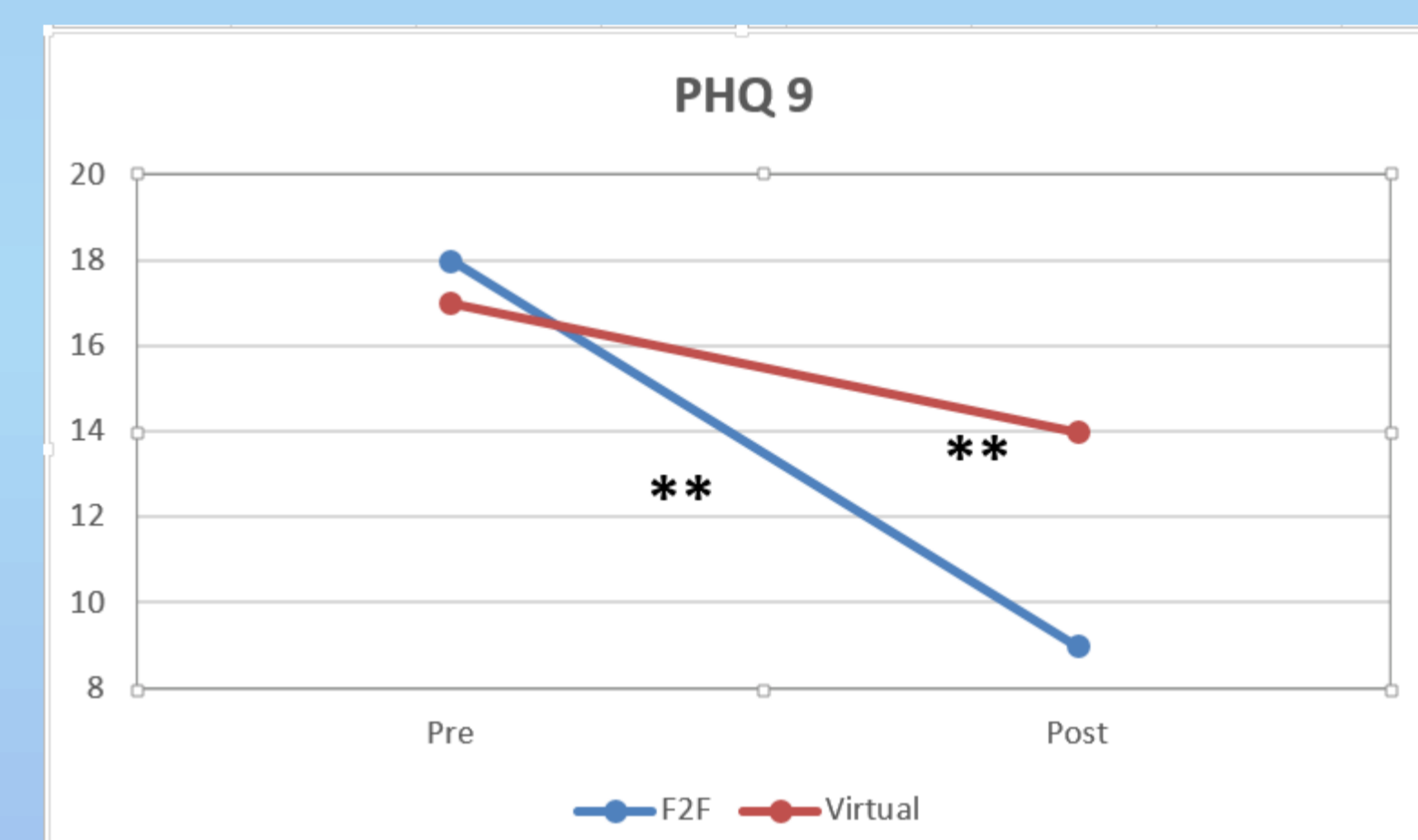
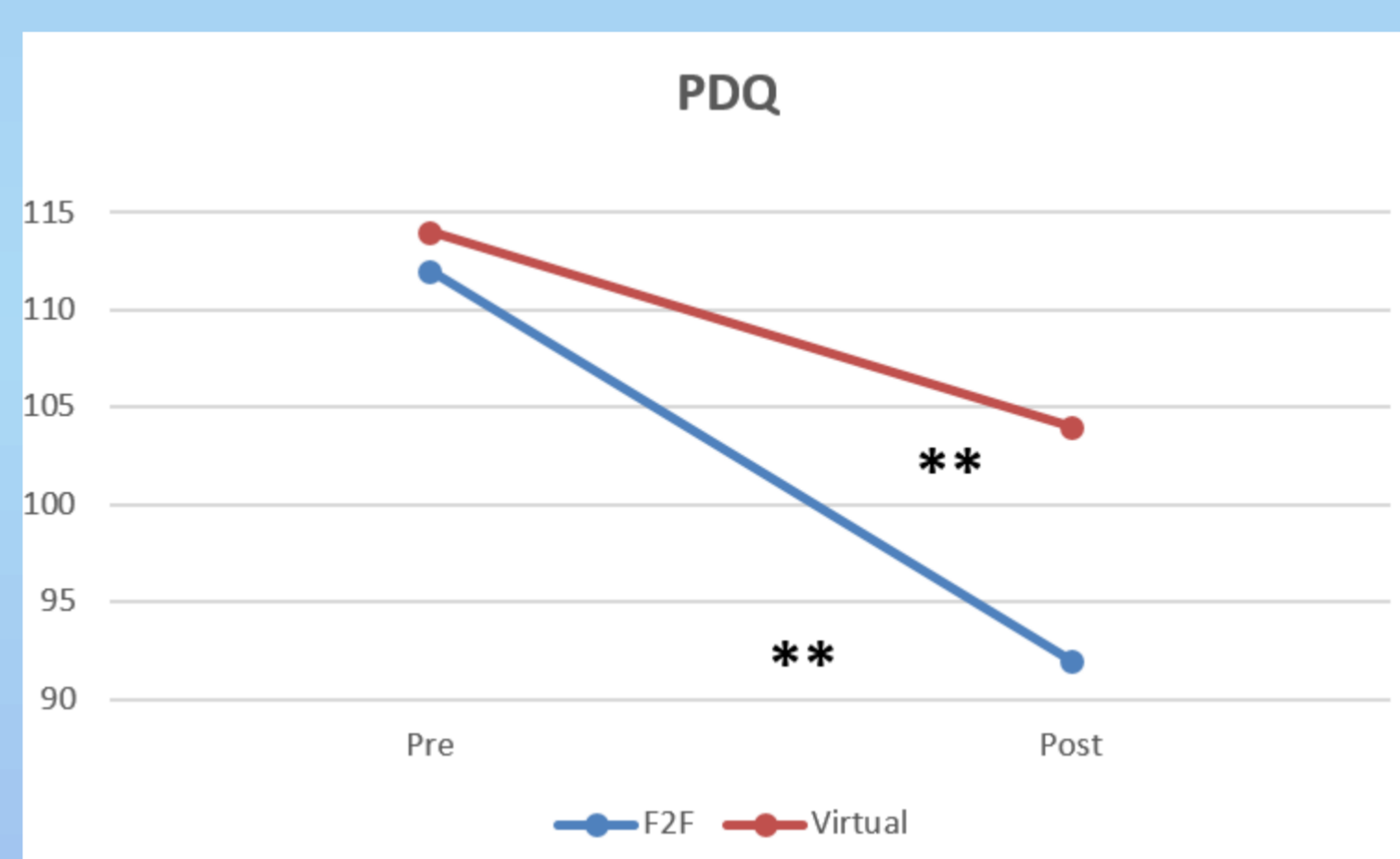


**Objective:** To compare baseline scores and pre-post changes in outcome measures for participants on face to face and virtual PMP groups.  
**Methods:** Participants on all programmes completed a range of standardised outcome measures (see table below), including measures of distress, disability, fear of movement and psychological flexibility. Measures were repeated at the start and the end of the programme block (ie Day 1 and Day 15 for residential and Day 25 for virtual). Complete pre- and post-group data (n=166 face to face, n = 48 virtual) were analysed using MS Excel (T-test, paired two sample).

Assessment domain	Measure
• Perception of own disability	• Pain Disability Questionnaire (PDQ)
• Level of Distress; – anxiety – depression	• PHQ-9 and GAD-7
• Fear – extent to which fear of pain impacts on movement and activity	• Modified Tampa Scale of Kinesiophobia (TSK 13)
• Psychological flexibility – ability of an individual to cope with change	• Chronic Pain Acceptance Questionnaire (CPAQ)
• Fusion - extent to which an individual's thoughts impact their engagement in valued activities.	• Cognitive Fusion Questionnaire (CFQ)

**Results** are illustrated in the graphs to the right, showing mean change in pre-post outcome measures for face to face (blue line) and virtual (red line) groups. The graph below illustrates mean change as a pre-post percentage change

- Baseline scores were similar in both cohorts, with the exception of fear of movement, which was significantly higher in the virtual cohort.
- Highly significant ( $p < 0.001$ , signified by \*\* on charts) pre-post improvements were found in all domains in both cohorts, with the exception of the CFQ, which didn't change significantly in the virtual cohort.
- The magnitude of pre-post change was greater for all domains for the residential programme.



**Conclusions:** Whilst both modes of delivery lead to improvement, the magnitude of change was greater following a residential programme.

However, caution is required in interpreting results due to small numbers, the novelty of online treatment, the unique circumstances of the pandemic and insufficient data for longer term comparison.

Provision of remotely delivered services increases access to services and previous work suggests high patient satisfaction, so we plan to continue to offer virtual groups in addition to face to face groups. We will continue to closely monitor outcomes of both methods of delivery.