

SHORT AND LONG-TERM OUTCOMES OF THE HEMODIALYSIS SELF MANAGEMENT RANDOMISED TRIAL (HED-SMART) A PRACTICAL LOW INTENSITY INTERVENTION TO IMPROVE ADHERENCE AND CLINICAL MARKERS

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OBJECTIVES

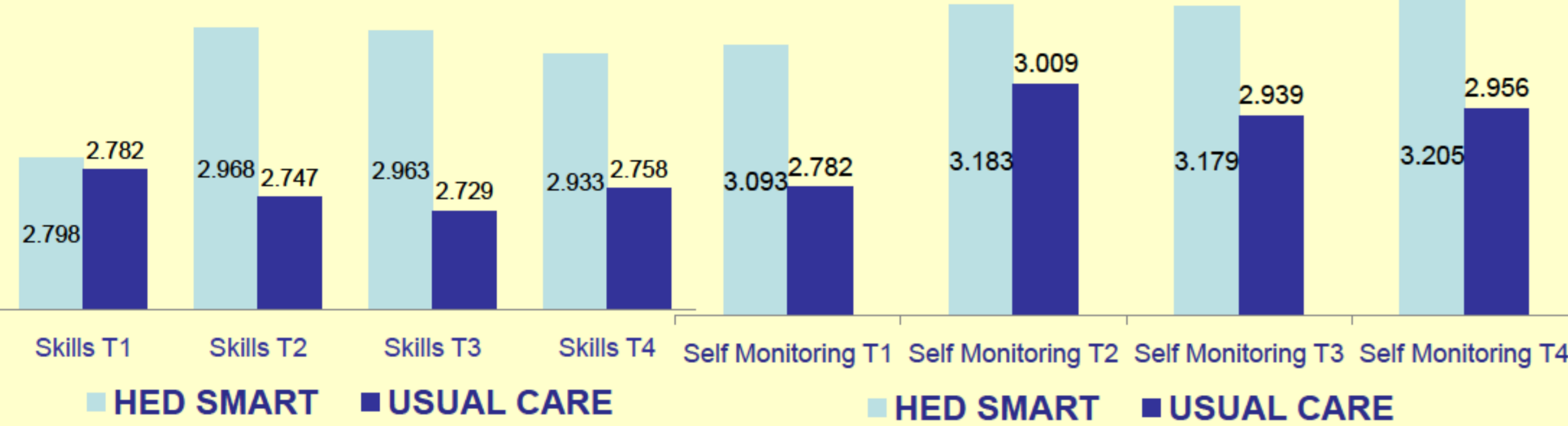
Adherence to diet, fluid and medication is important to maximize good clinical outcomes in Hemodialysis¹ yet it remains suboptimal and not well-understood². Prior interventions have shown to yield improvements in self-care knowledge, and behaviour yet are constrained by small samples, lack of control group and/or randomization, and short follow ups³⁻⁵.

This trial set out to examine the effect of the HED- SMART intervention on short and long-term treatment adherence indicators

What is HED SMART ?

- Designed for real world settings
- **Light touch** intervention by renal HCPs over 3 core sessions +1 booster
- Aims to enhance patients' motivation and capability for self management

- The sample N = 235 (58% male; 56.6 Chinese; mean age 53.4 years ; mean dialysis vintage 5.82 (4.76) years) was balanced across randomization conditions on all demographic, treatment, and clinical variables
- **Retention: 83% [T2]; 79.9% [T3]; 74.5% [T4]**
- **Self report adherence behaviours [fluid; diet and medication] significantly improved from baseline to T2, T3 and T4 follow ups in HED SMART condition (p <.01)**
- **HED SMART improved skills/technique acquisition, health service navigation and self monitoring skills (p <.001) [T2; T3; T4]**



METHODS

DESIGN: Multi-centre blinded randomised controlled trial⁶ [ISRTN 31434033]

SAMPLE: Prevalent HD patients randomised to either usual care (N = 133) or HED SMART intervention (N = 102)

MEASURES

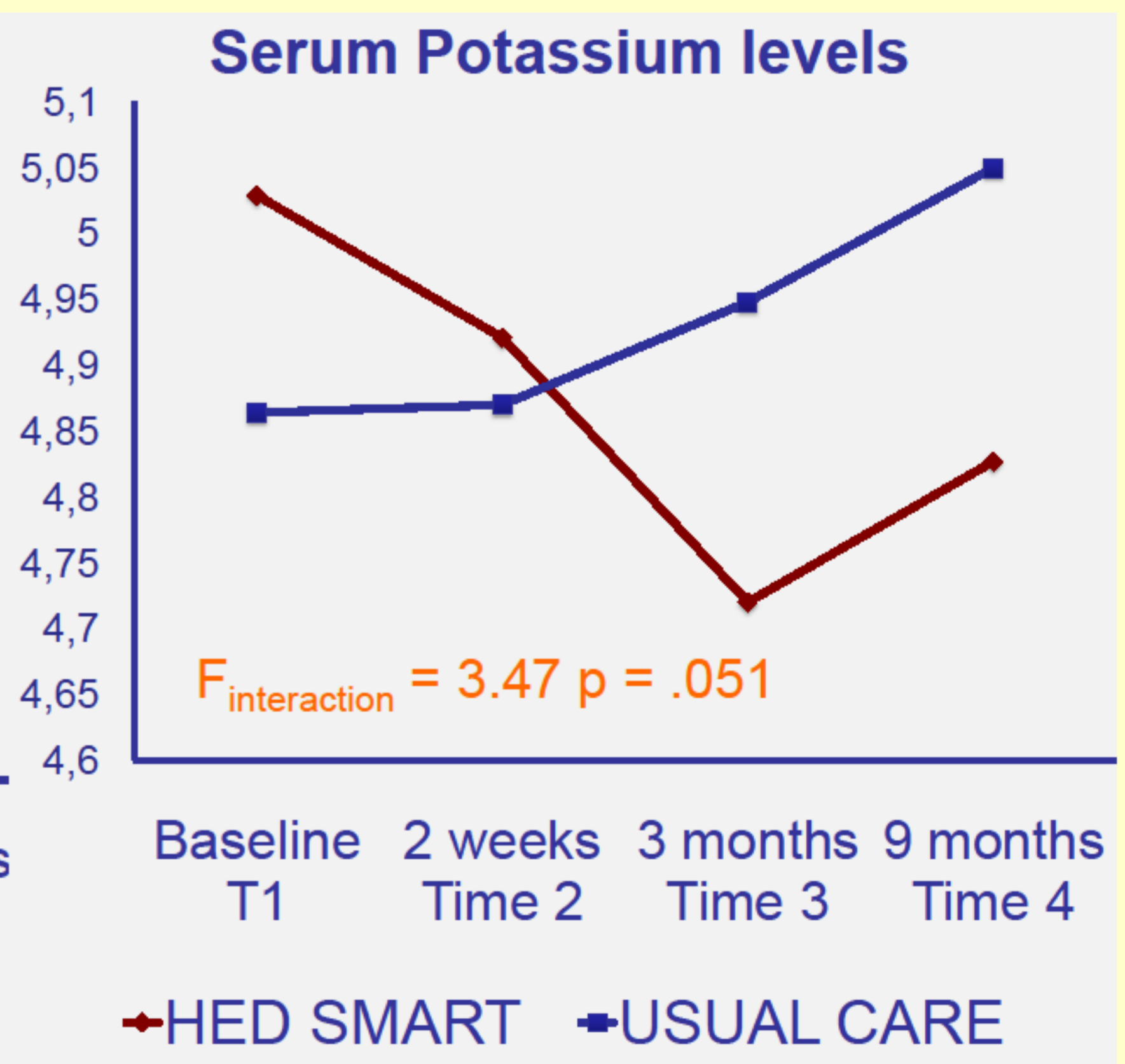
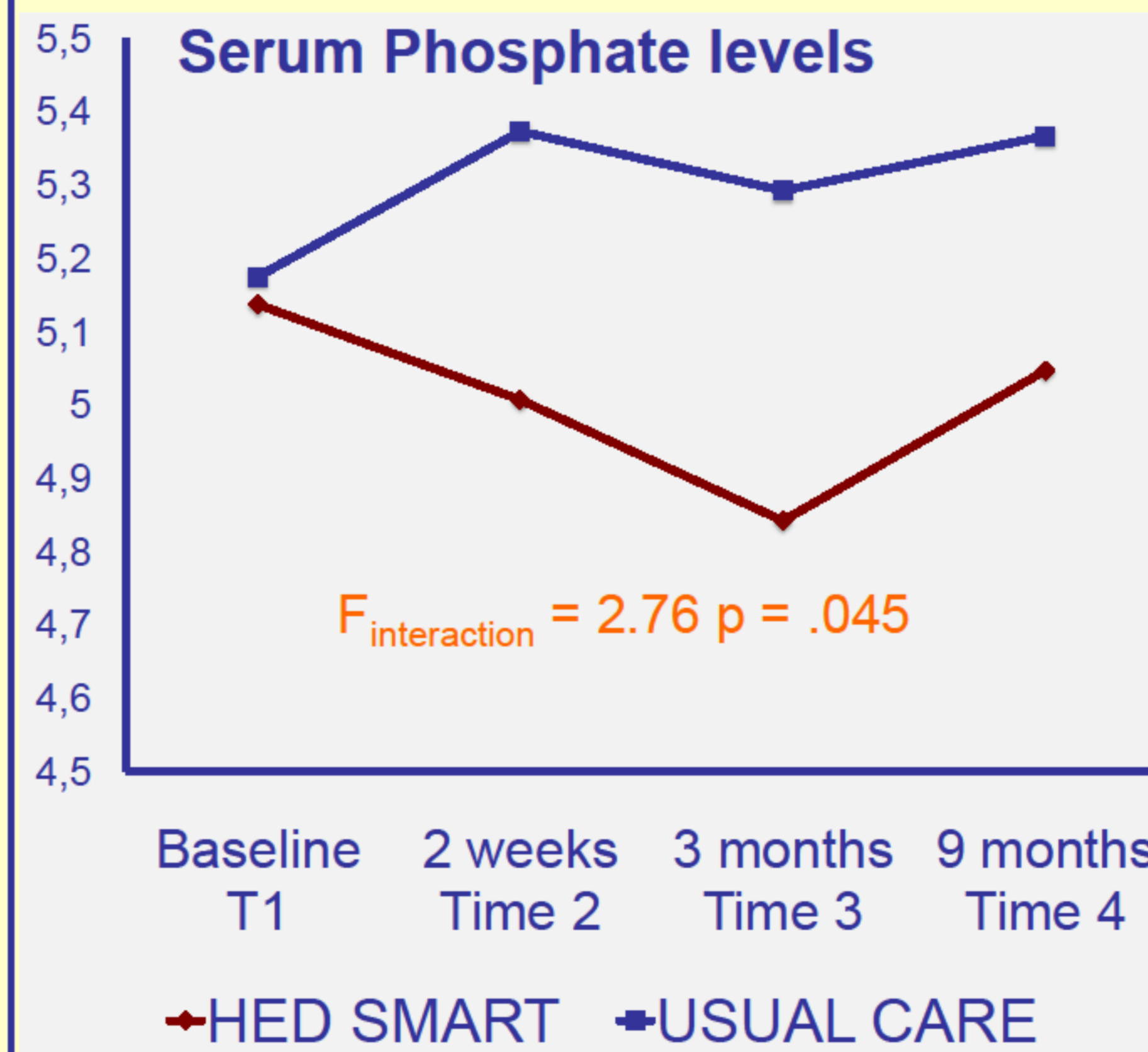
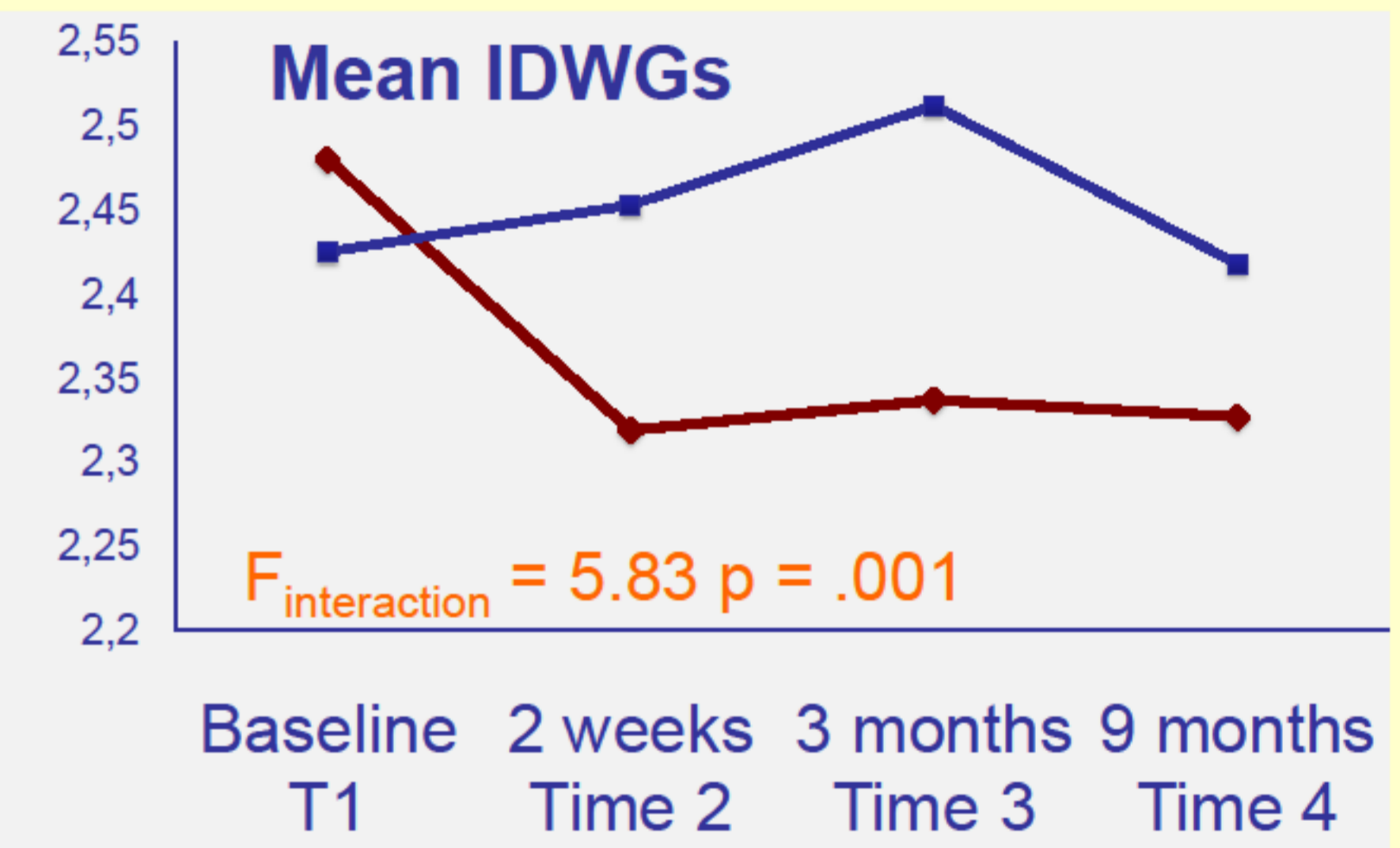
- InterIDWGs, biochemical markers (PO₄; K): recorded from 1 month prior baseline and throughout study window
- Self-report adherence [*Medication Adherence Self report*⁴; *Renal Adherence Behaviours Questionnaire*⁷]
- Self management skills [*Health Education Impact Questionnaire*⁸]



RESULTS

HED SMART and CLINICAL MARKERS

- HED SMART sign improved
 - IDWGs (T2; T3; T4)
 - Potassium levels (T3; T4)
 - Phosphate (T3)



CONCLUSIONS

- The HED-SMART program resulted in significant improvements in both clinical markers and self-report adherence which were in the main sustained at 3 and 9 months post intervention
- These observed improvements, if supported and maintained at the longer follow-up (18 months), could significantly reduce ESRD-related complications in the longer term
- Given the feasibility of this kind of program, it has strong potential for providing effective support to many hemodialysis patients in the future

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