Implementation of Clinical Practice Guidelines for Neck and Low Back Pain in Outpatient Physical Therapy: Impact on Clinician Behaviors and Perspectives

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Background

Physical therapists commonly treat patients with neck or low back pain (LBP) in outpatient settings, however unwarranted variation in clinical practice is widespread potentially resulting in suboptimal patient outcomes.[1-3]

Research Question

Determine if multifaceted implementation interventions (Figure 1)[4] for neck[5] and LBP[6] CPGs positively impact physical therapist behaviors and perspectives over time.

Significance

System level implementation of APTA clinical practice guidelines (CPGs)[5,6] provides a practical strategy to limit variability for highly prevalent musculoskeletal pain conditions, however requires processes to promote a shift in organizational culture.

Methods

- A cross-sectional stepped wedge design was used to allocate 9 physical therapy clinics to one of 4 sequences that differed in CPG implementation timing.
- Over a 12-month timeframe, 764/1994 (38.3%) of outpatient records from participating clinics were assessed for documentation of neck and LBP CPG initial classification.
- Initially classified cases were randomly selected (n=90) to assess for CPG intervention concordance categorized as:
  - **Non-concordant** (not providing any recommended interventions),
  - **Partially-concordant** (providing at least 1 recommended intervention),
  - **Concordant** (providing ≥2 recommended interventions).
- Clinician CPG perspectives (awareness, viewpoint, confidence, knowledge, and impact on patient outcomes) were assessed (0 to 10 scale) before, 8, and 16 weeks after implementation.

Physical Therapist Questionnaire Item Example

In general, rate your **level of confidence** in applying recommendations from APTA Orthopaedic Section Clinical Practice Guidelines for neck and low back pain into your practice with (0) indicating "not at all confident" and (10) indicating "completely confident".

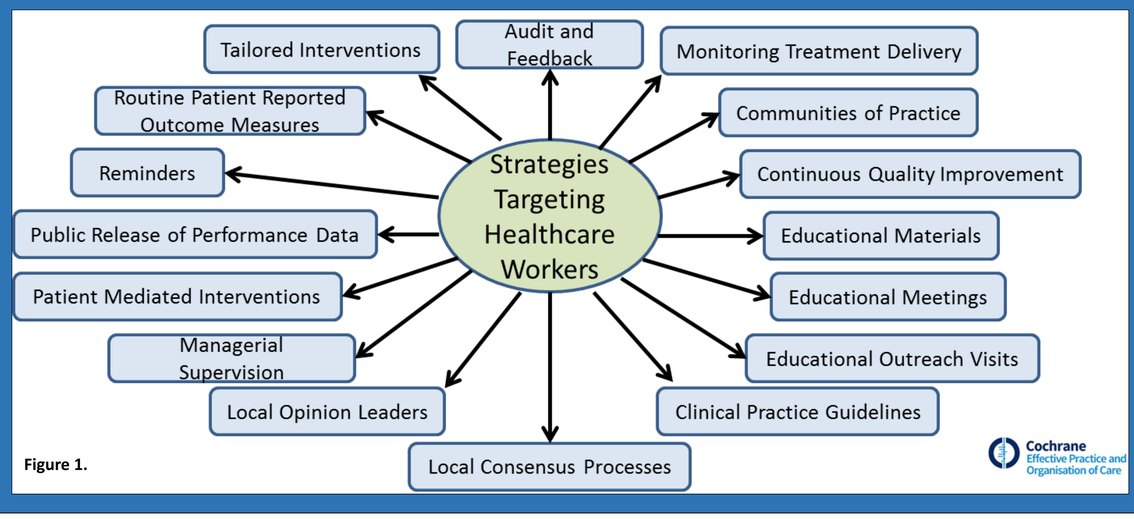

Figure 1.

Findings

- Initial CPG classification documentation rate was 60.3% with classified patients receiving 'non-concordant' (1.1%), 'partially-concordant' (6.7%), or 'concordant' (92.2%) CPG interventions.
- Improvements in CPG awareness (1.9±1.8) and viewpoint (1.0±1.8) were observed at 8 weeks (P<.01), however remained stable at 16 weeks (P>.05) (Figure 2).
- Improvements in CPG confidence (1.4±2.0; 0.8±0.8) and knowledge (1.7±1.8; 0.8±1.4) were observed at 8 and 16 weeks (P<.05) (Figure 3).
- Clinician self-perceived impact on patient outcomes remained stable at 8 and 16 weeks (P=.40) (Figure 4).

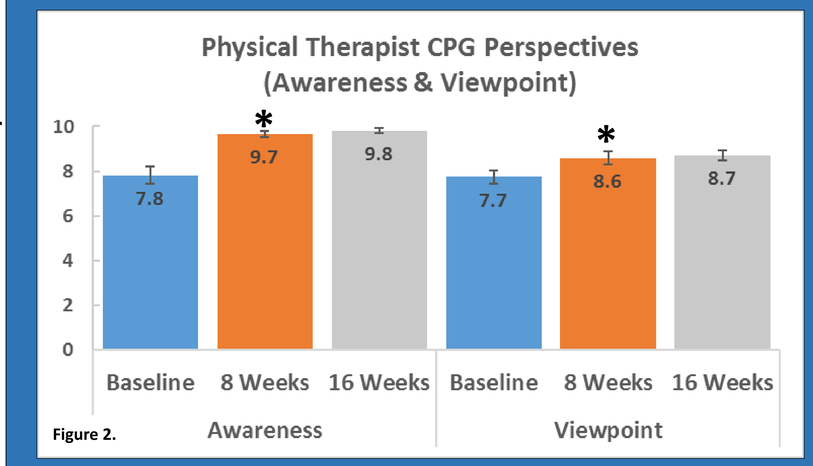

Figure 2.

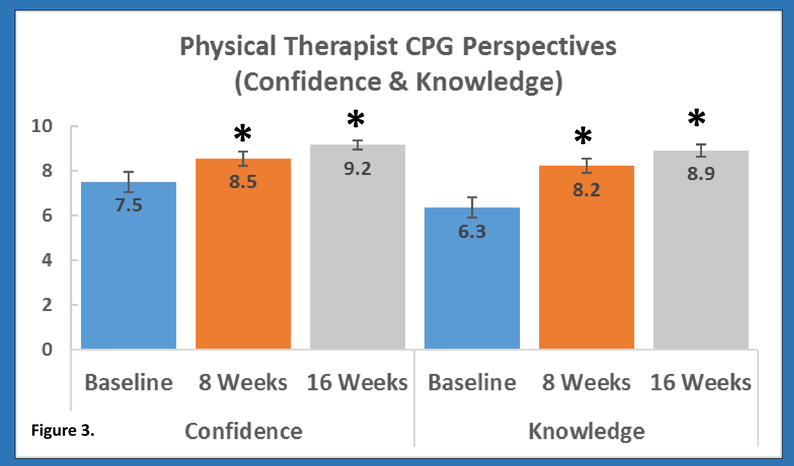

Figure 3.

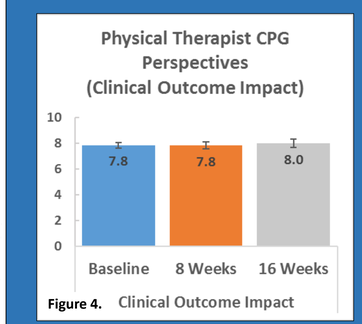

Figure 4. Clinical Outcome Impact

Conclusions

- CPG implementation positively impacted physical therapist behaviors (documentation, intervention concordance) and perspectives over time.
- Changes in physical therapist perspectives about CPGs need to be interpreted with caution as questionnaire item responsiveness has not been tested and there was potential for ceiling effects.
- Future analyses will determine impact on patient outcomes.

References

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