

Using feedback on patient health outcomes to improve orthopaedic Physical Therapist practice: a quality improvement study

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Background

Measuring health outcomes can play an important role in patient-centered healthcare.

When aggregated across patients, outcomes provide data for quality improvement (QI).

However, most physical therapists are not familiar with QI methods based on patient outcomes.

Purpose

To develop and evaluate a QI program in outpatient physical therapy care based on routinely collected health outcomes of patients with low-back pain and neck pain.

Methods

Three teams of 5-6 physical therapists from outpatient offices of UPMC Centers of Rehab Services

Online training program and PDSA cycles based on self-selected goals in a collaborative approach with the researchers

Monthly feedback reports of process and outcomes of care, including pre-post treatment changes in Oswestry Disability Index (ODI) and Neck Disability Index (NDI)

Primary outcomes were pre- and post-QI changes in knowledge and attitudes toward outcome measures and use of ODI and NDI.

Semi-structured interviews and a focus group were conducted to evaluate the perceived value of the QI program.

Results

	Pre-QI			Post-QI		
	Episodes	Intake	Discharge	Episodes	Intake	Discharge
Low back pain (ODI) ¹						
Team 2	146	91.1%	14.2%	196	88.3%	66.1%
Neck pain (NDI)						
Overall	256	75.4%	32.4%	236	83.9%	49.6%
Team 1	104	63.5%	16.7%	43	79.1%	32.5%
Team 2	51	88.5%	66.7%	79	86.3%	71.4%
Team 3	101	80.2%	42.0%	114	83.3%	56.8%

Table 1. Pre and post results

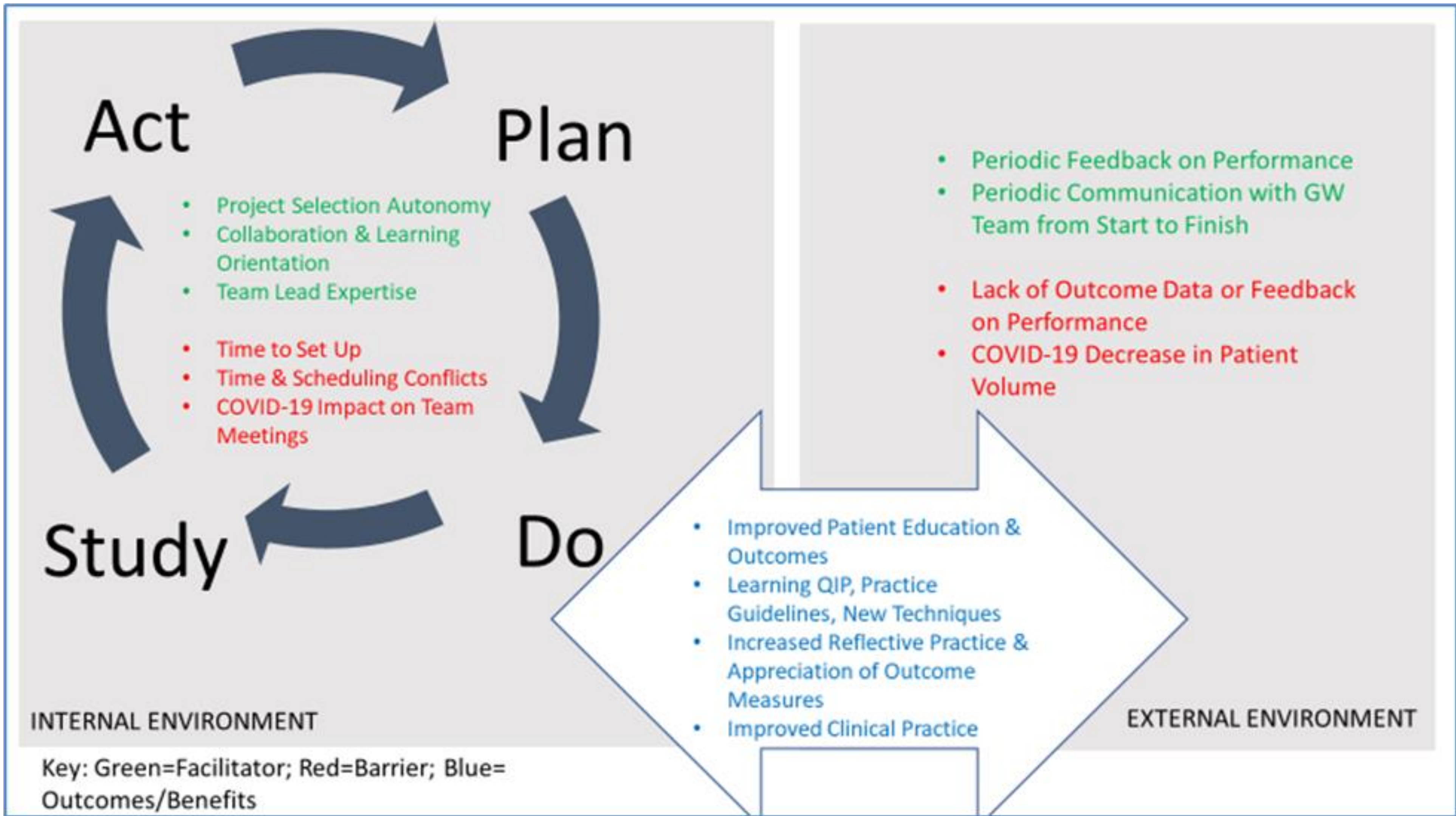


Figure 1. Barriers, facilitators, and outcomes

Implications

- QI program based on feedback of routinely collected health outcomes is feasible and well accepted by pilot teams of physical therapists.
- Clinician active participation in developing the program supported the use, feasibility, and value of outcome measurement for clinical practice.
- QI program improved the use of outcome measures, allowing for comparing treatment outcomes over time within and between practices.
- Results are promising for further evaluation and implementation of using treatment outcomes for QI efforts in physical therapist practice

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