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"IT WAS A GAME OF MATH": EVALUATION OF A QUALITY IMPROVEMENT PROJECT THAT REDESIGNED PHYSIOTHERAPY SERVICES FOR PLAGIOCEPHALY AND TORTICOLLIS

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Background:

Rates of infant plagiocephaly and torticollis (head flattening and tilt) have been increasing since implementation of the Back to Sleep campaign. As a result, referrals to paediatric physiotherapy (PT) have increased. To keep pace with demand, a quality improvement (QI) project (2017-2019) introduced a PT clinic model of care for plagiocephaly/torticollis.

Objective:

The purpose of this study was to evaluate the impact of the QI project on efficiency of services, PT wait times and parent experience.

Methods:

The clinic model aimed to improve efficiency through cluster scheduling, optimizing the rehabilitation assistant role and reducing scheduled therapist time/patient. Quantitative data were compared for the pre- and post-QI periods (May/16-Feb/18; Mar/18-Mar/19). Efficiency was measured as therapist time/patient. Wait times (from referral to first appointment) were evaluated for i) infants with plagiocephaly/torticollis, ii) all children referred to PT, iii) children referred within each clinical priority code (1-4). Segmented regression modelling was used to control for referral trends over time. Parent satisfaction was assessed through semi-structured telephone interviews and analyzed using directed content analysis.

Results:

Efficiency improved for infants with plagiocephaly/torticollis (53.4 to 35.6 minutes, $p < 0.0001$) and wait times for this group decreased from 25 days ($n=618$) to 12 days ($n=231$, $p=0.007$). When all PT referrals were combined, children received their first appointment nearly a month earlier (pre-QI wait: 60 days (range 0-779; $n=1673$), post-QI wait: 34 (range 0-433 $n=650$, $p=0.03$)). Secondary analyses indicate this was driven by improved wait times for "priority 2" referrals (79-38 days, $p=0.04$). Preliminary analyses of interview data suggest high levels of parent satisfaction with the clinic model.

Conclusion:

Implementing a PT clinic model of care for plagiocephaly/torticollis significantly improved efficiency and wait times. Preliminary analyses suggest that parent satisfaction remains high. The impact of the project extended beyond the plagiocephaly/torticollis population, facilitating earlier access to PT for children referred for other conditions.