**Additional file 1:** Initial and sustained implementation strategies, organized with the Expert Recommendations for Implementing Change (ERIC; Waltz et al 2019). Bolded sustainment strategies indicate those continued to present (2021).

| Implementation Strategy | Initial Implementation Strategies (2015-2016) | Sustainment Strategies (2017-2019) |
|---|---|---|
| ERIC Cluster 1: Use evaluative and iterative strategies | **Assess for readiness and identify barriers and facilitators** | |
| | • Small group of stakeholders informally discussed their views | • Stakeholder meetings with entire clinical team at one site and interview off-site champions and managers<br>• Periodic assessment in monthly meetings with champions<br>• **Plan to continue gathering input from PDMD clinical champion meetings.** |
| | **Audit and provide feedback** | |
| | • Two therapists compared performance | • Provide one page document of feedback after initial three sessions with participant within 3-5 days.<br>• **Champions to perform three audits/year.** |
| | **Purposefully reexamine the implementation** | |
| | • Informally with communication between two therapists | • **Facilitator &/or program manager attend to feedback at champion meetings allowed for dynamic changes while maintaining the fidelity of the program.**<br>• **Utilization of Sustainability Assessment Tools with stakeholders to assess the program** |
| | **Develop implement tools for quality monitoring** | |
| | • Two therapists compared documentation of physical activity<br>• PAPT user survey<br>• Clinical outcomes manually reviewed | • PAPT user survey repeated<br>• **Clinical outcomes manually reviewed**<br>• **Development of documentation for PA for easy clinician review .** |
| | **Develop and organize quality monitoring systems** | |
| | • Two therapists develop survey for PAPT users | • Survey updated for PAPT users by clinicians<br>• **Program managers plans to use organizational survey data** |
| | **Develop a formal implementation blueprint** | |
| | • Care path developed | • Continued care path<br>• Grid created to aid in scaling to other disciplines & in the development of PAPT at additional sites. |
| | **Conduct local need assessment** | |
| | • Informal discussions with stakeholders | • Focus group, interviews with stakeholders.<br>• **Multiple stakeholder groups meet regularly, some institutional processes already in place (e.g. regular PDMD** |

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| (continued)<br>ERIC Cluster 1: Use evaluative and iterative strategies | | **champions meet, leadership meetings meetings)** |
| | Obtain and use patients/consumers and family feedback. | |
| | • Interview performed with Year 1 PAPT users | • Interviews performed with those PAPT users seen during Year 3 |
| ERIC Category 2: Provide interactive assistance | Facilitation | |
| | • Two therapists worked together | • Formal facilitator role created<br>• Program manager to continue to engage this population, work with champions |
| | Provide Local Technical Assistance | |
| | • Informal | • Informal |
| | Provide Clinical Supervision | |
| | • Limited supervision, mostly self- review | • Chart audit on first three sessions<br>• Periodic review or support when requested<br>• **Institutional mentorship programs to support clinicians** |
| | Centralize Technical Assistance | |
| | • Informal | • Informal |
| ERIC Cluster 3: Adapt and tailor to context | Tailor strategies | |
| | • Strategies tailored to some stakeholders | • Tailor strategies to multiple stakeholders, multiple sites with input from a variety of stakeholders<br>• Strategies to be updated by champions with input from program manager as needed. |
| | Promote adaptability | |
| | • With only two therapists, change could be discussed and implemented | • Feedback taken with initial interviews, monthly meetings.<br>• Regular communication allowed for a flexible time table based on clinic volumes<br>• Utilized electronically shared resources<br>• Review of patient outcomes, quality improvement interviews aid in process improvement. |
| | Use data experts | |
| | • Knowledge broker | • Knowledge broker |
| ERIC Cluster 4: Develop stakeholder interrelationships | Identify and prepare champions | |
| | • Managers identified therapist | • **Leadership identify champions** |
| | Organize clinician implementation team meetings | |
| | • Informal | • Monthly meetings set<br>• **Champion meetings** |
| | Recruit, designate, and train for leadership | |
| | • One PT identified by lead researcher & manager | • Team of three attend Knowledge Translation summit, other attend PD-related course<br>• **Plans champion orientation, webinars, and journal club participation**. |
| | Inform local opinion leaders | |

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| (continued) ERIC Cluster 4: Develop stakeholder interrelationships | • Interviews with key referrers, OP manager, therapist | • Interviews/focus groups before implementation, intermittent updates to team<br>• **PAPT updates included in physician leader's monthly updates.** |
| | Build a coalition | |
| | • Attended meetings with referrers | • Engaged stakeholders of the entire OP team<br>• **Network of champions at each site, engaged with leadership.** |
| | Obtain formal commitments | |
| | • Not applied | • **Champion role commitment** |
| | Identify early adopters | |
| | • Manager identified one staff | • **Managers and implementation identified champions**<br>• **Champions worked with managers to identify other therapists to be trained** |
| | Conduct local consensus discussions | |
| | • Discussions with referrers at collaborative meetings | • Focus groups with therapists, managers<br>• Quality Improvement interviews with PAPT users<br>• **Monthly meetings with champions** |
| | Capture and share local knowledge | |
| | • Not applied | • **Champions provide insight and contributions.** |
| | Use an implementation advisor | |
| | • Knowledge broker involved. | • Knowledge broker facilitates team attendance to Knowledge Translation Summit<br>• Support from knowledge translation mentors |
| | Visit other sites | |
| | • Not applied | • Planned, but not accomplished by our immediate team.<br>• **PD program manager visits to assess & support settings.** |
| | Develop an implementation glossary | |
| | • Not applied | • Informal, general protocol developed<br>• Dissemination toolbox |
| | Develop academic partnerships | |
| | • Researcher from academic center collaborates with clinical team | • **Collaboration with research & clinical team**<br>• **Team engaged with organization internal staff development.** |
| ERIC Cluster 5: Train and evaluate stakeholders | Train and educate stakeholders | |
| | • Referral development: Targeted academic medical center neurologists | • Referral Development: Developed new materials to target community neurologists<br>• **Share materials and highlight key statements for marketing material in dissemination toolbox** |
| | Provide ongoing consultation | |

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| (continued) ERIC Cluster 5: Train and evaluate stakeholders | • Two therapists discussed regularly | • Knowledge broker, facilitator available for questions, attended meetings regularly<br>• **Champions meet regularly**<br>• **Access to mentoring** |
| | Develop educational materials | |
| | • Materials for PAPT Users: Shared decision making handout<br>• Materials for therapists: evaluation plan for therapist | • **Materials for PAPT Users: shared decision making handout (updated every two years), progression handouts**<br>• Material for therapists: presentation, **training resources**, **webinar for therapist** |
| | Make training dynamic | |
| | • One co-treatment session | • **Presentation converted to webinar**<br>• Shadowing<br>• Questions for therapists |
| | Distribute educational materials | |
| | • Two therapists shared materials | • Shared folder<br>• Tool box with important materials |
| | Use train-the-trainer strategies | |
| | • Two therapists collaborated | • **Trained champions train other staff at home site** |
| | Conduct educational meetings | |
| | • Informal | • Monthly PAPT meetings<br>• Planned champion meetings |
| | Conduct educational outreach visits | |
| | • Not applied | • **Presentations at affiliate hospital** |
| | Shadow other experts | |
| | • Two therapists co-treat | • Shadowing is part of the training<br>• Plan to continue to shadow with training, happening with OT & SLP teams |
| | Work with educational institutions | |
| | • Affiliate medical center team | • Knowledge Translation Summit<br>• Internal staff development, clinical programs at organization and affiliate medical center. |
| ERIC Cluster 6: Support Clinicians | Facilitate relay of clinical data to providers | |
| | • Clinicians assisted with quality improvement data collection | • Clinician champions worked on implementation materials, monthly meetings provided opportunity for information, clinicians presented data at national conference platform and poster<br>• **Champions and leaders will now do this.** |
| | Remind clinicians | |
| | • Informal | • **Monthly meetings provided an opportunity for champion discussion and reminders.**<br>• |
| | Develop resource sharing agreements | |

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| (continued) ERIC Cluster 6: Support Clinicians | • Not applied | • Staff collaborated on resources (no formal agreements) |
| | Revise professional roles | |
| | • Not applied | • Manager role developed by the organization who acted as an advocate for the program. |
| | Create new clinical teams | |
| | • Not applied | • **Champion team**, clinical teams |
| ERIC Cluster 7: Engage consumers | Involve patients/consumers and family members | |
| | • Interviewed 2016 attendees for feedback | • Interviewed 2018 PAPT users and shared quality improvement feedback with clinicians<br>• **Informal reflections from trained clinicians at monthly meetings.** |
| | Intervene with patients/consumers to enhance uptake and adherence | |
| | • Evaluations & relationship with patients/consumers foster better adherence | • **Evaluations & relationship with patients/consumers** |
| | Prepare patients/consumers to be active participants | |
| | • Strong relationship | • **Strong relationship** |
| | Increased demand | |
| | • Educate referrers | • Marketing resources for individuals with PD, external referrers |
| ERIC Cluster 8: Utilize Financial Structures | Fund and contract for the clinical innovation | |
| | • Internal department funds<br>• Parkinson's Foundation Grant | • Grant funding through Academy of Neurologic Physical Therapy.<br>• General clinic specific organizational funds<br>• Marketing department<br>• Internal Academy |
| | Access new funding | |
| | • Parkinson's Foundation Grant | • Knowledge Translation Summit Grant |
| ERIC Cluster 9: Change Infastructure | Mandate change | |
| | • Not applied | • Applied with support from organizational leaders |
| | Change record systems | |
| | • Not applied | • **Outcome Measure added: Mini-BESTest**<br>• In process: Physical Activity |
| | Change service sites | |
| | • Not applied | • Three additional locations added to increase reach |

*PDMD: Parkinson's disease and Movement Disorders, PAPT: ProActive Physical Therapy, Parkinson's disease (PD)