Final Findings from Interviews of Four UNC Physical Therapists

Interview Questions for UNC UPT Physical Therapy Questions – Otago Exercise Program

1) How have you implemented the Otago program (part, whole, group, etc)?
    - Follow-up questions:
        - How many times have you prescribed the OEP?
        - How many times has a patient been referred for OEP or balance concerns and you perceived them as inappropriate for OEP?

Across the experiences of the four UNC clinicians interviewed, the total number of patients for whom the OEP has been used appears to be fairly low. One clinician stated that "in the last couple years," he started "six to twelve" patients on the OEP, adding that only one finished the program. Another estimated that he has initiated the program with "half a dozen" patients, of which three actually progressed in the program, though none finished. The third clinician interviewed has not been OEP-trained long enough to have attempted the program with any patients, though he has discussed potential OEP use recently with "a couple" of patients and/or their family members. All four clinicians interviewed over the course of this project had either discussed or implemented the OEP as part of individual patients' plans of care.

More commonly reported were patients who match the description of the second follow-up question: those who were, for one reason or another, inappropriate for the OEP. The first clinician interviewed works primarily with patients referred for treatment of musculoskeletal issues, though he highlights the Purple Belt Project [from an IHQI Study] as having increased the referrals for gait and balance concerns in UNC outpatient clinics. When working with patients who have been referred for gait and balance deficits, he states that he often finds that they need "more than a home program-based intervention," though he acknowledges that his concern is typically with patient compliance or accurate completion of the OEP exercises, not with the program itself. A second PT highlighted the role of musculoskeletal conditions on balance and gait, indicating that he has typically treated issues like chronic pain or joint issues prior to working into balance deficits. The fourth PT interviewed describes the "appropriate" patient as being in the middle of a sort of spectrum, where at one end are patients functioning at a high level and may require "more challenging sorts of exercises" than those featured in the OEP. On the other hand, patients at the lower end of such a spectrum may not be ready to participate on their own, at home, safely. As with the first PT quoted above, the issue is in finding an appropriate challenge for the individual patient seen in the clinic. One PT did state that some of the patients he has seen for balance concerns were appropriate for the OEP, with only one specific patient mentioned as being inappropriate for the program due to a vestibular issue.

The fourth PT interviewed has used the OEP for "two or three" patients in an outpatient clinic but has also used the OEP as part of a falls prevention program in Western NC. She was best able to recount the specific circumstances surrounding each instance of her having used the OEP in an outpatient setting, as she maintains a list of exactly such patients. This list also included other recent uses of the OEP at the UNC UPT clinic at Hillsborough, by other clinicians. With the addition of the other therapists' experiences, she was able to provide information on seven total patients' PT history and specifically relate how the OEP was used in their plans of care:

1) An 86-year-old female patient was seen for balance deficits while also receiving palliative care for metastatic lung cancer, necessitating a reasonably-intense, home-based intervention like the OEP. This patient was able to attain the following improvements within a span of 2 months in the fall of 2017:
    a. TUG (with rollator): 22.9 seconds → 12.1 seconds
    b. Four Stage Balance Test: 18.8 seconds out of a total of 40 → 33.6/40
    c. 30 second chair stand: 2 repetitions → five repetitions

    This patient's PT plan of care was discontinued due to her overall health progressively worsening. The patient was seen for a total of three visits before her plan of care was discontinued. The PT states that the OEP was appropriate in this case because it "wasn't a burden," by allowing the patient to exercise at home and improve her functional mobility without the undue commitment of having come into the clinic during a time when she was receiving cancer treatments regularly.

2) A 68-year-old grandmother for whom the OEP was deemed appropriate because this patient was a primary caregiver of several of her grandchildren, and the OEP could reduce the number of trips to the clinic that this individual would have to take. This patient participated for a short period of time then discontinued her PT care, making it impossible to derive meaningful conclusions from her performance data.

3) A 93-year-old female patient was documented as having received OEP exercises at her first visit as part of a home exercise program, but was also seen for a more standard, intensive outpatient plan of care instead of the home-based OEP. Before she was able to progress to a level at which the PT felt comfortable transitioning to the full OEP, this patient experienced a fall during which she sustained an injury, was hospitalized, and was subsequently seen by home health PT upon discharge.

4) A 67-year-old female patient ambulating without an assistive device but with a history of falls and a reported fear of falling. Her PT, after taking initial performance measurements, determined that the OEP was not challenging enough to be used in her plan of care:
    a. TUG: 10.2 seconds
    b. Four Stage Balance Test: 30 seconds out of a total of 40
    c. 30 second chair stand: 11 repetitions

5) A 72-year-old male seen without an assistive device, with a recent history of 3-5 falls. While this patient was seen for 12 visits and demonstrated improvements in his functional mobility, his PT decided that the OEP was inappropriate for him because he had never learned to read or write, making an at-home and written plan challenging.

6) A 74-year-old female patient ambulating with a rollator. This patient was a good candidate for the OEP due to moderate initial performance on functional outcome measures (Four Stage Balance Test = 32/40 seconds), limited access to transportation, and financial constraints to pay her copays. However, after two visits, she did not return to PT and was not seen by UNC physical therapy again, as she could not be reached.

7) An 86-year-old female patient also walking without an assistive device. This patient was seen for 2 months while completing the OEP and demonstrated some improvement:
    a. TUG: 10.2 seconds → 9.6 seconds
    b. Four Stage Balance Test: 31.7 seconds out of a total of 40 → 35/40
    c. 30 second chair stand: 10 →16

    However, the PTs lost contact with this patient for two months, during which time the patient experienced a fall while climbing up a flight of stairs – the patient reported that her flip-flops caught on the edge of a step. The patient did arrive for her 5-month check-in and attained a Four Stage Balance Test score of 34.9 seconds out of 40, and made a slight regression to 14 repetitions on the 30 second chair stand test. However, she was ultimately referred out of the PT clinic due to chest tightness, shortness of breath, and an elevated heart rate. The patient was ultimately treated for atrial fibrillation, which interrupted her plan of care.

This short list of patients evaluated for use of the OEP at UNC clinics highlights some of the concerns brought up by the physical therapists in the interviews recounted above: issues with falls or hospitalizations and other health conditions like cancer and fractures, issues with drop-out or difficulties following-up, and issues with the appropriateness "spectrum" of patients – for example when OEP exercises are too easy and do not present a sufficient challenge. In the case of the 5th individual, there is even an example of an individual-specific barrier that PTs must be discerning of with their patients: completion of the OEP is heavily dependent on following written instructions and maintaining a written exercise and falls calendar.

2) Have you encountered any particularly positive aspects of using the OEP, have you seen benefits to using this program?

One clinician cited limited experience with the OEP when answering this question. The other three PTs mention a couple of benefits to the design of the program. One clinician claims that when a patient has the requisite balance deficits that make them a good, safe, fit for the program and when they are motivated to "take ownership" of their participation and adhere to their exercises while at home with limited supervision, they can make noticeable improvements. Another discussed the pre-designed, or prescribed, nature of the exercises as a "double-edged sword," as a set list of exercises both improves the ease of use of the program for patient and PT but also limits allowable modifications to the program. A fourth PT commented on the overall increased emphasis on falls prevention that came with the introduction the program, citing the regular use of the TUG, the use of STEADI questions (i.e. "are you afraid of falling"), and the EPIC SmartPhrases physicians have, like "consider Otago," all producing an "uptick" in patients referred for balance help. Another positive of the design of the program discussed was the "reduction in the use of the healthcare system" that the OEP allows, with spread-out visits and at-home use promoting efficient use of resources.

3) Have you encountered any barriers to implementing the OEP that are based on the referral process of patients at risk for falls?
    - If so, what are some examples?

- Previously provided examples of barriers include:
  - Low numbers of purely falls risk-specific patient referrals, with referrals more likely to also pertain to musculoskeletal concerns (which may contribute to a patient's increased falls risk).
  - Concerns over the accuracy with which the TUG/30s STS/4 Stage tests are used by non-PT professionals, i.e. CMAs at the Family Medicine Center (FMC).
  - Cost of PT (i.e. Patients' copays) may be a perceived barrier to referring physicians, who may not refer patients at risk for falls without other underlying areas for PT to address.

The clinician who most recently trained in the program states that he should be making sure that providers at his facility know that he's completed the training and can begin accepting OEP referrals. Two of the other three PTs interviewed spoke to the perceived cost of PT, both in general and in reference to the OEP specifically, in answering this question. While one PT again emphasized the overall trend points to an increased willingness of providers at his clinic to refer for falls prevention, he notes that he has second-hand knowledge pointing to a perception of PT as an additional cost for patients with "perceived high copays" (though he notes they typically do not have high copays for many patients). A second PT agreed with the assessment of this physician perception, "particularly with reference to Medicare," and further agrees that most Medicare patients are unlikely to pay much of anything when referred for PT services. The fourth clinician also discussed perceptions, both of physicians and of PTs. She says that, on the whole, UNC physicians are improving with referrals to physical therapy for patients "at risk for falls," or with instructions to "consider Otago." She recognizes that it may be hard for all physicians to consistently recognize which of their patients would benefit most from physical therapy, only focusing on, for example, the injury sustained during a fall while never circling back to address why the patient fell in the first place. She concludes by noting that therapists themselves can improve their clinical decision-making with regards to patients at risk for falls, in deciding whether a more intense 2-3 times per week plan of care is more appropriate than the longer-duration, lower-frequency nature of the Otago program.

As to the other examples of perceived barriers, one PT acknowledged that it's unlikely that the staff at his medical facility are performing a perfect TUG when screening older adults for fall risk. The incidence of "purely falls risk-specific patient referrals" were discussed throughout the interviews, with vestibular or musculoskeletal concerns cited as *generally* taking primary importance when working with patients.

4) Have you encountered any barriers to implementing the OEP that are based on the design of the program or its recommended use?
   - Previously provided examples of barriers include:
     - PT lack of familiarity with the Otago program.
     - Low frequency, high duration of the program.
     - Applying a set of prescribed exercises may be less rewarding to PTs than creating patient and impairment-specific exercise programs.

    - It is challenging to perform the regularly scheduled checkups: PTs working at faculty clinics may not be consistently available to talk when patients need help, and PTs don't want to/shouldn't give out their cell phone numbers.
        - However, there was not previously a concern from PTs regarding lack of reimbursement for check-in calls.
    - Concerns regarding the dosing of exercise with Otago (frequency, duration, intensity, or some combination thereof).

As mentioned previously, at least one of the PTs mentioned the clinical decision-making that accompanies a prescribed program, stating that he usually feels the need to make *individualized* treatment decisions when a patient is sitting in front of him. This is exacerbated by the navigation of communication that is required by the OEP. At UNC, therapists are supposed to call patients using the OEP at months 3 and 4 to check in on their progress. The three PTs interviewed by midterm are working in faculty clinics, are not in the clinic every day of the week due to their schedules, and are alone/without support staff. One PT describes the resulting challenge of communicating with patients about the OEP: patients may not be home/available when he calls, or may not have a message system set up, or have no convenient way of returning his call when he is not in the clinic (besides his personal phone, which he does not open to use by patients). This creates a game of "phone tag," which makes monitoring patient progress difficult between the in-clinic visits at week 8 and at month 5. The third PT interviewed discussed scheduling in a similar vein, pointing to the juggling of teaching, administration, and working with other patients as barriers to the months 3 and 4 phone calls with patients (though he does specifically mention that the "think Otago" sign in his office is a positive tool/reminder). The third PT actually pointed to the phone calls as a positive of the program, as a means of keeping patients accountable, though he also acknowledges the inherent logistical challenges phone calls present. The fourth PT interviewed agreed with this assessment stating that it's becoming more and more "accepted to just be able to contact folks by phone or MyChart," easing the process of contacting patients. She was also able to speak to potential barriers with Medicare reimbursement, and states that early implementation of the OEP at UNC clinics came with a process of ensuring the program would be reimbursed.

Three of the clinicians specifically mentioned that their own *unfamiliarity* or lack of habitual use of the OEP has influenced, to some degree, the limited degree to which they have used the OEP.

5) Have you heard any specific feedback from patients about their experience with the OEP?
    - If PT is able to speak to this, from what they have heard from patients.
    - Previous patient-centered factors listed to consider:
        - The OEP requires self-monitoring.
        - Patients could benefit from Tiffany Shubert's exercise videos to help with concerns over accuracy with which patients perform exercises.
        - The OEP features a relatively long duration.

This question received the least amount of input from the four PTs interviewed. One PT cited the low numbers of patients he's used the OEP with, which he also attributes to a potential

misperception of the program: he may not feel comfortable sending his patients home with balance interventions to perform on their own, for example, a theme already mentioned above. Another also commented on this aspect, recognizing that most patients end up with some variation to their HEP borne of unilaterally changing the exercises they've been given, or forgetting how to perform an exercise, or losing their handout. This clinician mentioned that one positive he's heard from patients is the independence of the program: those he's talked to are glad they can reduce their frequency of PT visits while improving their balance. The fourth clinician built on this answer, saying patients find the exercises "easy to do," while also being impressed with the fact that they're "getting stronger and able to balance better." Finally, one PT mentioned the duration of the program as a positive- "if you're trying to get long term carry over, you really need something at least, that six months to a year," with a 5-month UNC program hopefully carrying over to a patient making longer-term lifestyle changes after discharge

6) Do you have any suggestions for improving the process of intervention for older adults at increased risk for falls who utilize UNC PT services?

Ideas for improving the use of the OEP that the PTs interviewed discussed:

- Several PTs mentioned the feasibility of incorporating OEP into a group setting. This was proposed in groups of 3-5 to improve camaraderie and ease of implementation for PTs.
- Some also encouraged ensuring that patients are being referred for balance and gait challenges along with MSK conditions, increased use of "falls risk" as a "definitive diagnosis."
- Another recommendation was improving site-specific capacity for following up with patients. One PT highlighted the lack of support staff for phone management at the FMC making it a difficult site at which to use Otago.
    - Along similar lines, a second PT mentioned that producing change among clinicians like himself is difficult when operating in a fairly isolated clinical setting. He points to previous experiences in facilities with more PTs as promoting change: PTs could encourage one another and discuss the improvements in their practice/learn from one another. He recognizes that adding additional structure/obligations to UNC faculty members may be difficult without spreading people too thin.
    - The fourth PT interviewed echoed this statement by proposing an inservice to reboot OEP use at UNC outpatient clinics, by gathering UNC PT faculty trained in the OEP together to review the program, its implementation, and its benefits.
        - As of April 2020, this idea is not feasible due to the effects of the Coronavirus pandemic limit group gatherings and even limit the number of patients UNC PTs are currently seeing.
- This PT also recommended an alternative to a larger in-person meeting: a reminder or check list-type document posted in UNC PT clinics to help PTs who *want* to use the OEP improve their use by building the habit and improving their confidence in using the OEP.
    - As part of this idea, the fourth PT interviewed proposed that PTs be reminded about or encouraged to more consistently use the falls and exercise calendars included in patient OEP binders, as a means of checking compliance, safety, and appropriately progressing OEP exercises.